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## Oxford Conference Series | October 2017

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2nd Academic International Conference on Interdisciplinary Business Studies- AICIBS 2017

7th International Conference on Trade, Business, Economics and Law- ICTBEL 2017

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## **POLITICAL POLICIES AND THEIR EFFECT ON FDI: CASE STUDY FROM ARGENTINA AND BRAZIL**

DR. WISSAM B. FAHED<sup>1</sup> AND RAYAN N. AKILL<sup>2</sup>

### **ABSTRACT**

The purpose of this study is to better understand the link between FDI and development. We have chosen to explore with two Latin American democracies, Argentina and Brazil, in order to try and identify which democratic context best attracts foreign investment in Latin America. The paper identifies that increased government involvement on its own is not sufficient. Governments need to enforce the appropriate mechanisms through sound institutions and enact policies that are conscious of investor interests if they wish to attract FDI.

**Key Words:** Policies, FDI, Political Economy, Development, Political Systems

### **INTRODUCTION**

The forces of globalization have determined and been determined by a great flow of investments. The global expansion of multinational corporations (MNCs) has become more widespread following government action aimed at removing barriers to entry and creating policies that are favourable to foreign investments. The growing importance of foreign direct investment (FDI) is related to the beneficial impact on both the host-country's economy and to firms' performance and profitability. FDI can have a long-term beneficial impact on a country's development and may also assist developing countries through the provision of capital, the inflow of managerial know-how, the inflow of technology, the development of marketing skills, and through their impact on the development of efficient markets (Fahed, 2013).

FDI is thus important for economic growth as well as the productivity and performance of businesses, yet there is strong agreement that economic and political freedom are key factors to economic growth. Political freedom has been promoted as a key factor of a country's development. It is widely accepted that political and economic freedom in a country greatly impact development potentials. Given the importance of FDI and the prominence of political and economic freedom, it is critical for policy makers to have a complete understanding of the determinants of FDI and the relationship between political freedom, policies and international investments.

However, research pertaining to FDI and political freedom has usually been conducted using empirical studies analyzing the effect of political freedom, in general, on foreign direct investment. Most studies examined the importance and influence of political freedom and democracy on FDI. In addition, studies and research concerning FDI have used statistical techniques to analyze the effect, determinants, and motives of FDI on a macroeconomic level, ignoring case studies on policy determinants.

The purpose of this study is to better understand the link between FDI and development. We have chosen to explore with two Latin American democracies, Argentina and Brazil, in order to try and identify which democratic context best attracts foreign investment in Latin America. Although little difference exists in the level of democracy in Argentina and Brazil as

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<sup>1</sup> Department of Business and Economics, Lebanese American University, Byblos, Lebanon. E-mail:- wissam.fahed@lau.edu.lb

<sup>2</sup> MSc Candidate, London School of Economics, Department of International Development, London, UK. E-mail:- r.akill@lse.ac.uk

per the Democratic Index of the Economic Intelligence Unit (2015), Argentina has received significantly lower foreign investment than Brazil. This study will therefore examine what policies are hindering FDI in the respective countries, arguing the relationship between democracy and inflow of FDI is not linear and is mediated by the policies adopted by the respective regimes. In assessing this relationship, we will look at policies enabling and disabling FDI in order to understand how such policies mediate between democracy and FDI. By doing so this paper will argue that it is not solely about the regime per se but rather the policies that these states enact to attract investment.

## CONCEPTUAL FRAMEWORK

Most studies looking into determinants of FDI have highlighted democracy and political freedom as being a positive determinant of FDI, however they lack an in depth analysis and sufficient case studies pertaining to policies that act as enablers to the inflow of FDI. This study aims to fill a gap on the debate of the determinants of FDI in Argentina and Brazil.

Dunning (1993) developed the eclectic or ownership, locational, internalization (OLI) framework. According to Dunning's eclectic paradigm there are certain necessary conditions that should co-exist for a MNC to engage in FDI. Building on this theory several motives of FDI were identified by which MNCs engage in FDI. Dunning (1993) identified four main types of MNC activity; resource seeking, market seeking, efficiency seeking, and strategic asset or capability seeking. Accordingly, political policies might work with or against certain motives and therefore favourable policies applied in one country might not contribute to inward FDI if the policy does not contribute to the motives that MNCs are seeking.

Most studies pertaining to the effect of political policies on FDI have tried to explain the relationship using quantitative data looking at the relationship between political risk, political freedom, democracy and inward FDI in general. MNCs usually assess political risk before investing in a certain country. There are many forms of political risk but the extreme form is nationalization. The more common forms of political risk include negative attitude of host government to MNCs, blockage fund transfer, currency inconvertibility, war, bureaucracy and corruption.

Corruption is a major deterrent to investment and trade. In the recent past there have been various studies that have reported quantitative results on the impact of corruption on economic variables. Mauro (1995) found that corruption lowers investment and thereby economic growth. A later study by Tanzi and Davoodi (1997) further extended this line of causality by showing that corruption increases public investment while reducing its productivity. Moreover, in regard to FDI, studies have shown that there exist economic consequences of corruption such as its effect on the composition of FDI (Smarzynska and Wei, 2000). Smarzynska and Wei (2000) reveal that foreign investor's choice of entry mode may be affected by the extent of corruption in a host country. Corruption makes dealing with government officials for example, to obtain local licenses and permits less transparent and more costly particularly for foreign investors. When corruption level is sufficiently high no investment will take place.

In addition, FDI requires supportive domestic public policies and adequate economic and institutional infrastructure in the host country. A domestic policy setting that aims to harness the developmental potential of FDI should include well functioning financial markets, product markets and labour markets.

To build on the above, this study uses two case studies from Latin America, Argentina and Brazil. We aim to demonstrate that in order to promote FDI, policy makers have to devise enabling policies that cater to the motives of MNCs, rather than assuming that general favourable political freedom is enough. The policies in discussion will focus on policies aimed at reducing corruption as well as those aimed at promoting the institutional infrastructure of the respective countries, including financial, educational and legal institutions. This study

argues that political policies influence the local environment by shaping institutions. Countries with a regulated banking sector and economic system provide the basis for a good investment climate that favours FDI. There is a tendency for investors to avoid countries where governments do not establish a legal regime that provides for an equitable enforcement of contracts and the protection of property rights. As such it would be expected that if a country builds institutions consistent with economic freedom, investors would come.

## **METHODOLOGY**

This paper will study policies and how they contribute to FDI inflow in the context of Argentina and Brazil, in hope of better understanding the relationship between democracy and the inflow of FDI. We selected these two countries given that both countries have experienced similar levels of political freedom in the last thirty years, as well as similar developments in their political institutions. Albeit variations exist, yet we find that these differences are beneficial to this study and to testing our hypothesis. We will begin with the assumption that the relationship between democracy and FDI is not linear; instead it is mediated by the policies adopted by respective governments.

We will be analysing government decisions pertaining to the blockage of transfer of funds, currency inconvertibility, government intervention, and fiscal irresponsiveness, among other policies that may be highlighted in the literature, for the period 2000-2015. By studying these policies we hope to understand the impact of legislation on MNCs wanting to invest abroad, given that our argument is that a certain friendly environment has to be created and sustained for FDI flows to flow inwards. As such, in studying this set of policies, we will also assess the continuity of these policies to check for any irregularities that may deter the inflow of FDI.

This study will rely on qualitative data consisting of secondary resource materials. In order to analyse the impact of policies on FDI inflow, we will begin by gathering and studying the official policy publications of both governments. Since many policies are issued throughout the year, we will only study those directly linked to FDI and investment. To study the second set of independent variables, which are political freedom, and the level of democracy, we will rely on the Democracy Ranking of the Economist Intelligence Unit (2015). The importance of this index is linked to proving that both Argentina and Brazil have shared similar patterns of political freedom and democracy. Published research papers will be the basis of the theoretical argument of this paper.

## **LITERATURE REVIEW**

### **Determinants of FDI**

Given that FDI is gaining both momentum and relevance, analysing the determinants of FDI and identifying the key factors taken into account by investors when deciding whether or not to invest in a foreign country, is crucial for policy makers working to increase FDI inflows.

The theory of FDI compares the costs and benefits of producing in different locations. The profitability of producing in a specific location depends on the economic environment, the general level of technological development, the industrial structure, the level of human and the more general business environment. Literature on the subject has suggested several explanatory variables that affect FDI (Fahed, 2013).

These variables include market size and growth (Zhao and Zu, 2000; Dunning, 1993; Caves, 1971) infrastructure (Gutierrez, 2015; Walsh and Yu, 2010), factor costs (Globerman and Shapiro, 1999; Lucas, 1993; Wheeler and Mody, 1992; Schenider and Frey, 1985; Flamm, 1984), and openness of the economy (Erdal and Tatoglu, 2002; Singh and Jun, 1995). In addition, democracy and political freedom were found to play an important role in FDI.



### ***Democracy & Political Freedom***

There is a consensus among FDI scholars that a favourable environment needs to exist in order to attract FDI. However there is a lack of agreement among scholars on what in particular incentivizes the inflow of FDI. O'Donnell (1978) argued that authoritarian states are more conducive to foreign investment because authoritative leaders are held less accountable and thus have more freedom to protect the interests of foreign investors from unfavourable regulations. Li and Rensick (2003) studied the effect of democracy and property rights on FDI and found that while democratic governments are more restricted in their ability to offer financial and fiscal incentives, the protection of property rights serves as an incentive for investors.

Olson (1993) and Harms and Upsprung (2002) found that democracy attracts FDI. Jensen (2005) argued that democratic institutions are better able to guarantee property rights while reducing the risks for foreign investors, thus providing the stability that MNCs seek. Research on investments by MNCs in democracies for the period 1970 -1990 revealed that MNCs tend to invest in more democratic countries, yet this did not hold true for the 1970s. Busse (2003) provides two reasons to try and account for increased investment in democracies. The first argument is linked to a change in the sectors that MNCs choose to invest in; in other words, investment has shifted from the agricultural sector to the manufacturing sector. The second factor is tied to the rising pressure from civil society, which influences the conscience of MNCs when choosing to invest.

Studies on MNC preferences in 29 countries from 1980-2000, found that MNCs give more weight to the degree of economic freedom than political freedom when deciding to invest (Mathur and Singh, 2013). When controlling for corruption levels, the authors found that countries with lower levels of democracy were more likely to received higher levels of FDI than countries with better ranking democracies. As such, this study counters other research that suggests an inverse relationship between higher levels of democracy and increased FDI. On the other hand, Smarzynska and Wei (2000) find that an increase in the tax rate or the level of corruption in a given country reduces the inflow of FDI. Corruption, in this instance, can be taken as a measure of the quality of governance. Wheeler and Mody (1992) and Hines (1995) have also studied the relationship between corruption and FDI.

The effect of political instability on FDI, as studied by Daude, Mazza, and Morrison (2003) and Tuman and Emmert (2004), is found to have a significant effect on FDI coming from the US. Tuman and Emmert (2004) also found that coup d'états by the military and a poor human rights record also impacted the flow of FDI from the United States. Moreover, Nasser (2007) emphasized the effect of socio-political stability and an effective legal system on the level of FDI for both Latin America and Asia. Finally, a recent study by Dreher, Mikosch, and Voigt (2010) found that membership in an international organization may give the impression of lower levels political risk for investors since member states are less likely to adopt harmful policies towards investors.

## **DISCUSSION**

### **Policies: The Financial System**

There is a wide range of government policies that affect firms' decisions to invest abroad. The variability in government policies need to be identified in order to understand fully the effects of government policies on FDI flows. Some policies may have more impact on an international firm's decision to engage in FDI, depending on the motive these firms are seeking. Therefore, while some policies might help in promoting the inflow of FDI in certain countries, these same policies might not have a significant effect in other economies. Part of the causes of the lack of financial development in Latin America can be attributed to poor regulation pertaining to

foreign exchange, restrictions on capital flows, exchange rates and tax treatment (Avellaneda, Besanson Tuma and Caneva, 2011).

Argentina in particular has better economic and political freedom than Brazil. Nevertheless, this has not translated into higher FDI flows for Argentina. This is because policies governing the financial system are considered unfavourable to FDI and thus fall short in comparison to Brazil's more favourable policies.

Argentina and Brazil experienced financial crises in 1999 and 2001, respectively, impacting the degree of financial freedom within both countries (Avellaneda, Besanson Tuma and Caneva, 2011). However, both countries reacted differently to the crisis. Argentina opted for increasingly restrictive regulations whereas Brazil, in its attempt to attract higher investment, liberalized its financial system. In an attempt to curtail capital flight, controls were enacted in 2002 in Argentina to limit the flow of capital in and out of the country. In addition, new foreign exchange regulations limited the ability of individuals and firms alike, be they residents or non-residents, to acquire foreign currencies, in particular the dollar. We will now illustrate our argument by analysing the respective policies in more detail.

### ***Flow of funds***

In 2005, Argentina enacted Decree 616 under the Presidency of Nestor Kirchner. The decree introduced three major restrictions to the flow of funds in and out of Argentina (US Department of State, 2015). The first restriction required that funds entering Argentina's financial system be converted into the local currency through a local financial institution. The second restriction necessitated that these earnings not be transferred outside Argentina until 365 days after their initial entry. The third and final restriction imposed a 30 per cent retainer on the total value of these proceeds, which had to be deposited in foreign currency into a local account for the period of 365 days. During this period, account holders could neither benefit from interest on the retainer nor could the account be used as collateral (US Department of State, 2015).

Depositing the retainer in dollars meant that individuals and firms had to incur foreign exchange losses since when earnings entered the country they were automatically converted into peso, but were converted a second time when the retainer was deposited. This was especially problematic since the peso fluctuated during the period of 2009-2015. The 365-day wait posed a problem especially since the local currency devaluated significantly since 2010. In the case of the mining and energy sector, all earnings derived from export could not be repatriated outside the country (Avellaneda, Besanson Tuma and Caneva, 2011). Two consequences of this regulation were (1) it impacted firms' ability to remit earnings and (2) required individuals and companies to incur unnecessary foreign exchange losses.

### ***Controls on Foreign Exchange and Importation***

Similarly, limits on the acquisition of foreign currency were introduced alongside controls on the flow of funds. Individuals and companies were restricted on the amount of dollars they could obtain for foreign exchange transactions and this amount was determined individually by the federal tax agency (AFIP) based on a firm's revenue stream (US Department of State, 2015).

More controls were introduced in 2011, requiring banks and foreign exchange bureaus to play an investigative role on income of those wishing to acquire dollars in order to cross check that the amount being purchased coincided either with the amount in the individuals saving account or income. In the case of 'investors purchasing companies or real estate will be required to deposit the full amount of the sale in the country and individuals purchasing more than \$250,000 per calendar year will need to demonstrate the origin of the funds used' (Avellaneda, Besanson Tuma and Caneva, 2011).

Gaining access to foreign currency through the Central Bank became challenging with most firms receiving amounts lower than they requested (US Department of State, 2015). The US State Department (2015) found that by April 2015, the Central Bank had 5 billion requests pending, demonstrating not only the inefficiency of the system but also the huge operational burden on local and foreign firms. The shortage of dollars eventually fuelled the creation of an unofficial market. Before 2014, the unofficial dollar was valued at 80 per cent more than the official rate. As such, while the official dollar rate in September 2014 stood at 8.5 Argentinean Pesos, the unofficial rate peaked at 16 Argentinean pesos to the US Dollar. The high discrepancies between the informal dollar and official dollar led the government to investigate and limit the unofficial dollar markets in 2014. The gap between the official and unofficial rate was eventually halved, but it remained significant with a 40 per cent difference in the two rates (US Department of State, 2015).

Consequently, importation was greatly affected since firms often found difficulty in accessing the foreign currency required for foreign transactions. This impacted production heavily since local production relied significantly on foreign imports.

Importation was further compromised in Argentina by the new regulations aimed at making Argentina more self-reliant. The new regulation required entities wishing to import to first secure certificates of origin for the products they wished to import, which they were later obliged to notarize at the Argentine embassy (US Department of State, 2015). If the product was made up of parts from several countries the same process applied to each of these parts. Once an import license was secured, individuals or companies could petition for foreign currency at the Central Bank, but as stated above a lag of 5 billion requests was recorded in 2015 demonstrating the inefficiency of this system and its impact on economic activity (US Department of State, 2015). In addition, US companies complained that import licenses were many times not approved unless they were supported by ‘a plan to export from Argentina goods of equivalent value to those being imported or a plan to invest in local production’ (Office of the United States Trade Representative, 2016). This particular regulation was not codified; instead the Argentine government undertook the responsibility of notifying companies informally.

On the other hand, Brazil shifted from a restrictive financial system to a more liberalized one after 2000, with less limits placed on the flow of funds, foreign exchange and importation (Avellaneda, Besanson Tuma and Caneva, 2011). Part of this shift was part of Brazil’s desire to simplify foreign trade for both Brazilian and foreign firms existing in the country. New regulations as of 2005 integrated the foreign exchange market and removed certain restrictions of the ‘transfer of reais’. As such foreign exchange transactions became less controlled and both individuals and companies could purchase foreign currency without prior approval with the Central Bank, unlike in Argentina where the Central Bank and federal tax agency had to approve the acquisition of foreign currency and transfers (funds or goods and services) for values exceeding \$10,000 (ibid). In addition, cross border transactions could now take place in foreign currency, which was not the case previously.

### ***Foreign Trade Payments and Trade of Foreign Currency***

Additional policies were adopted to regulate the repatriation of funds earned through the export of goods and services. The Argentine Government required all entities taking part in foreign trade transactions to convert all earnings derived from exports to be sold into the foreign exchange market and to be sold for the local currency (Avellaneda, Besanson Tuma and Caneva, 2011). A limit was instated by which foreign exchange receipts had to be settled, ranging from 60 to 360 days depending on the product traded, although some exceptions to this regulation applies to most sectors. Moreover, both export and import payments exceeding the value of \$10,000 have to be approved by the Central Bank.

Regulations are also present in Brazil, however they are targeted at fixed income investments. A 2 per cent tax applies to funds entering Brazil for the purpose of investing in ‘equities and fixed income instruments’, however this tax does not apply to FDI (ibid). Thus although both Argentina and Brazil have regulations controlling capital inflow and outflow, Brazil was more weary in how it enacted its policies in order to ensure that FDI was not affected and that its policies did not act as disablers.

### ***FDI***

Argentina and Brazil, like all countries, have both restricted foreign investment in certain sectors. In Argentina these activities include but are not limited to fishing, owning real estate on the borders, nuclear energy production, the aviation industry and mining of uranium. Similarly, in Brazil restrictions also apply to fishing, aviation and nuclear energy but also include ‘health services, media, mail and telegraph’ (Avellaneda, Besanson Tuma and Caneva, 2011).

Nevertheless, we argue that Argentina has introduced implicit restrictions on FDI through increased controls whereas Brazil, as explained by Avellaneda, Besanson Tuma and Caneva (2011) has attempted to liberalize its financial system and ensure that local and foreign investors are at par. The consequence of these restrictions on the Argentine economy are evident in the capital flight experienced in 2011, Raszewski (2013) notes that ‘capital flight totalled \$8.4 billion in the July-to-September period compared with \$6.1 billion the previous quarter. Outflows rose to \$18 billion in the first nine months of 2011 from \$9.2 billion a year earlier’. Thus the same policies that the Argentine Government enacted in order to curb capital flight backfired and as a consequence affected investor confidence and the inflow of FDI.

All regulation pertaining to restriction of transfer of funds impacted importation and exportation and also affected the inflow of FDI even if they were not explicitly aimed at regulating foreign investments. Brazil on the other hand enacted policies with FDI in mind and this is evident in the regulations that were adopted after the financial crisis in 2000. Brazil has succeeded in attracting over 60 per cent of FDI coming to Latin America because it has been careful not to impact FDI when designing policies that regulate the financial system (Economic Commission for Latin America and the Caribbean, 2015).

### ***Tax Regulations***

Argentina and Brazil have diverse tax rates as well as different tax regimes (Avellaneda, Besanson Tuma and Caneva, 2011). In Argentina, for instance, an asset tax needs to be paid yearly, separate from income tax, whether one is a resident or not. Tax rates in Argentina are generally higher than those in Brazil, however the most relevant tax in relation to FDI is that pertaining to non-residents. In Argentina it is as high 35 per cent whereas in Brazil is it relatively lower, at 25 per cent. In addition, Argentina is the only country in Latin America that imposes VAT on financial income (ibid).

### **Weakness of Political and Legal Institutions**

#### ***Corruption***

Corruption is defined as “the misuse of entrusted power for private gain” and it has become an increasingly important element of a country’s business environment because of the various implications on the investment climate (Gutierrez, 2015). To begin with, corruption adds uncertainty to the decision of investment and high levels of corruption can cause investment to decrease. Moreover, corruption can lead to political instability, which as explained above has been associated with lower FDI. Finally, corruption is considered an additional cost for investors wishing to enter a new market (Gutierrez, 2015).

Argentina has ranked poorly on corruption indices. In 2001 Transparency International ranked Argentina 57 out of 91 countries, worse than other countries in the region including Brazil and Colombia (Lindsey, 2002). Brazil also ranked better on the Global Corruption Barometer, with 50 per cent of respondents believing that the judicial system is corrupt, 46 per cent believing that public officials and public servants are corrupt and 35 per cent of respondents finding the business environment to be corrupt or extremely corrupt (Transparency International, 2013).

Hence, Argentina's poorer rankings in corruption indices has also contributed to lower FDI, this idea is further developed in section below.

### ***Political and legal institutions***

The 2000 Global Competitive Report interviewed top management from firms in 59 different countries on their perceptions of the business environment in these respective countries. Argentina was among the 59 countries and again ranked poorly, ranking "40th for the frequency of irregular payments to government officials; 54th in the independence of the judiciary; 55th in litigation costs; 45th for corruption in the legal system; and 54th in the reliability of police protection" (Lindsey, 2002). The weakness of the Argentine legal and political system can be attributed to the Peronist era when corruption became institutionalized through the conversion of the Supreme Court from an independent judicial body to "a puppet of the executive power" (ibid). Election of the judges was initially undertaken by the President of the opposition; however, Peron eventually came to ensure his political immunity through the reconfiguration of the Supreme Court election process. Such practices were continued by later presidents including Carlos Menem who was placed under house arrest for allegations of corruption but was soon freed by his "hand-picked Supreme Court" (Lindsey, 2002).

Problems of corruption in Argentina are not bound to the capital or to high ranking positions, Lindsey (2002) gives the example of Tucuman where a very corrupt bureaucracy is present alongside an ineffective legal system. The public sector is used by politicians to fund patronage in Tucuman and Formosa where half of the formally employed workers collect their salaries from the government without showing up to work (ibid). These elements make the Argentina business environment hostile to investment, dynamism and growth (Lindsey, 2002). According to Ignacio Colombres Garmendia, the owner of a law firm in Tucuman, reforming the legal system is the key to economic development of the region (ibid). He added that investors are boundless with opportunities to invest and thus have various alternatives to Tucuman so long as legal risks persist.

Lindsey (2002) therefore concludes that the problem in Argentina does not lie in the structure of the market per se but rather in the absence of statist controls. He argues that in order for Argentina to be more conducive to investments and growth, there is a need for the establishment of sound political and legal institutions.

### **CONCLUSION**

Latin American governments operate differently than governments in the West in the level of government intervention in the economy and in the predictability of future regulations. Over the last fifteen years Argentina has increased government intervention on matters of importation, foreign exchange and flow of currency while maintaining a free market system, however as Lindsey (2002) explains, the absence of statist controls alone are not enough to increase growth and to improve the economy.

When institutional mechanisms are underdeveloped or missing, transaction costs rise, and the economy's scope for growth is limited accordingly. The existence of this soft infrastructure to serve a country's capital, labour, and product markets is just as important to a modern economy as a hard physical infrastructure, such as roads, ports, and telecommunication systems. In the long run, the absence of a soft infrastructure depresses a country's standard of

living and restricts its access to international capital and management talent. As such, increased government involvement on its own is not enough, governments need to enforce the appropriate mechanisms through sound institutions and enact policies that are conscious of investor interests if they wish to attract FDI.

Building this soft infrastructure poses a significant challenge for emerging countries. Unfortunately, many governments, including that of Argentina, do not recognize the importance of a soft infrastructure and have invested heavily in physical infrastructure but have made virtually no progress in creating a strong institutional infrastructure. Until Argentina is able to reform its financial, legal and political system, FDI trends are unlikely to reverse. However all hope is not lost given the change of Presidency in Argentina in December 2015. Regulations on importation and flow of funds have already been relaxed and a single foreign exchange market has been adopted. Yet, even when the political will exists to build an effective soft infrastructure, the process is far from straightforward and this is evident in the challenges that Argentina is currently facing to stabilize its economy.

### LIMITATIONS TO THE STUDY

This study does not aim to generalize based on the case study of Argentina and Brazil since the policies that acted as enablers or disablers in Argentina and Brazil may not have the same effect when applied to a different setting given the different motives and interests of firms for investing in different economies. Moreover, it is important that quantitative studies are undertaken in order to provide empirical evidence to test for the significance of the above findings. Finally, qualitative studies including primary research need to be conducted to provide stronger supporting evidence.

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## MODELLING OF ENTREPRENEURIAL INTENTION AMONG POLITEKNIK MALAYSIA STUDENTS USING PARTIAL LEAST SQUARES – STRUCTURAL EQUATION MODELLING (PLS-SEM)

ROZITA MOKHTAR<sup>1</sup>, MOHD RASHID AB HAMID<sup>2</sup>, AND MUHAMMAD AIMAN ZULKIFLI<sup>3</sup>

### ABSTRACT

This study explores entrepreneurial intention from psychological perspectives. By adopting the psychological characteristic, Need for Achievement by McClelland (1961) and Ajzen's Theory of Planned Behaviour (TPB), the study is to investigate the factors influencing Entrepreneurial Intention among polytechnic students in Malaysia. A survey method was employed to collect the data, resulting 372 usable data. The respondents are the final year diploma students studying accountancy, civil engineering, and electronic engineering from seven polytechnics in Malaysia. PLS-SEM technique was run, with the application of bootstrapping method, to test the relationship between research models constructs; Need for Achievement, Attitudes, Subjective Norms, Perceived Behavioural Control, Self-Efficacy, and Entrepreneurial Intention. The measurement (outer) model and the structural (inner) model of the latent constructs are examined. The findings found that all seven hypotheses are supported. It is suggested for future studies to adopt this model and replace Need for Achievement with other psychological characteristics.

**Keywords:** Entrepreneurial Intention, Theory of Planned Behaviour, Polytechnics Malaysia, PLS-SEM

### INTRODUCTION

Entrepreneurship has always been an interest of the Malaysian government, especially the Ministry of Higher Education. It is promoted to solve graduates' unemployment issue. The Department of Polytechnics Education Malaysia shares this same aspiration as constituted in the Polytechnic Transformational Agenda 2010 – The Second Outcome in which polytechnics are to produce employable or entrepreneurial graduates (Department of Polytechnics Education, 2009).

Unemployment among Malaysian graduates is not new, especially with the non-static unemployment rate. Trading Economics (2016), envisages a fluctuation of the unemployment rate in Malaysia from the year 2016 till 2020, with 3.7% by the end of 2016 before continuing to increase to 3.8% in 2018 and 3.7% in 2020. Although the real rate in July 2017 is only 3.5%, still, the rate recorded throughout the year is changing; 3.4% in May 2017 while 3.5% in January (Department of Statistic Malaysia, 2017). In February 2016, Malaysia's unemployment rate reached 3.4% for the third consecutive month, the highest percentage since November 2013 (The Star Online, 2016). In November 2013, the unemployment rate was 3.4% with a total of 484600 jobless people (Department of Statistic Malaysia, 2013). Malaysian polytechnic students did not escape this unfortunate environment. In 2015, 20.54% out of 22,541 graduates were unemployed (Department of Polytechnics Education, 2016). The figure remains similar to the year 2011 with 23.9% of unemployed graduates after six months of convocation.

<sup>1</sup>Commerce Department, Politeknik Sultan Haji Ahmad Shah, Malaysia. E-mail:- rozita1803@gmail.com

<sup>2</sup>Faculty of Industrial Management, Universiti Malaysia Pahang, Malaysia. E-mail:- rashid@ump.edu.my

<sup>3</sup> School of Law, University of Leeds, United Kingdom. E-mail:- iman3010it@gmail.com

In 1969, polytechnics were established by the government to provide training in the technical and vocational area (Wong and Hamali, 2006). After 41 years of operation, Polytechnics Transformation Plan was introduced in 2010, establishing new three premier polytechnics, new five metro polytechnics and 26 existing and new conventional polytechnics (Department of Polytechnics Education, 2016). This programme has enlarged the students' intake, increased the students' enrolment and expanding the numbers of polytechnic graduates, resulting in an indirect higher competition among the graduates. In October 2016, the number for full-time programme students' intake recorded is 35,455 students; while the academic enrolment is 99,551 students; and the output for the year is 24,522 students (Department of Polytechnics Education, 2016).

Following the competitiveness of job market, entrepreneurship is actively promoted. The fruit outcome can be seen with the increasing numbers of graduates who choose entrepreneurship. In 2011, less than 20% of graduates became entrepreneurs. Meanwhile, there were more than 50% entrepreneur graduates in 2015. In 2013, 1832 graduates became entrepreneurs, while 2347 graduates in 2014 and 2833 graduates in 2015 (Ministry of Higher Education, 2016). However, Malaysian entrepreneurial intention rate is the second lowest among six ASEAN countries, with only 11.6% indication, a contrast to the highest rate of 42.8% in Philippines (UNIRAZAK, 2015). Hence, entrepreneurial intention is still relevant to be studied to improve the status quo.

Despite the numerous studies on entrepreneurial intention, the knowledge on the mechanisms and the temporalities that affect how entrepreneurial intentions lead to behaviour is still poor (Kautonen, Van Gelderen and Tornikoski, 2013). Most studies were fundamentally focusing on the factors affecting entrepreneurship rather than delving into personal factors (Kamariah, Yaacob and Wan Jamaliah, 2004). In Welter (2011), it is suggested that "economic behaviour can be better understood within its historical, temporal, institutional, spatial and social context." This study explores entrepreneurial intention from psychological perspectives and adopts the psychological characteristic namely Need for Achievement by McClelland (1961) and TPB with the objective to investigate the factors influencing Entrepreneurial Intention among Polytechnic students in Malaysia, by using PLS-SEM. SEM is chosen due to its popularity to confirm a theoretical model, as SEM models hypothesise how sets of variables define constructs and how these constructs are related to each other (Schumacker and Lomax, 2016). Researchers like Zampetakis et al. (2009) had also used SEM in conducting a test on entrepreneurial intention.

## **LITERATURE REVIEW AND RESEARCH MODEL**

### **Entrepreneurial Intention (EI)**

The TPB is used in intention studies (Armitage and Conner, 2001), outlining intention is a function of three basic determinants: Attitude, Subjective Norms and Perceived Behavioural Control. In this study, intention is referring to the entrepreneurial intention. A study by Bird (1988) defined EI as an individual' conscious awareness and conviction intending to set up a new business. Another definition on EI is the degree of inclination towards entrepreneurial behaviours, such as the keenness to work as an entrepreneur (Mokhtar, Zulkifli and Zainuddin, 2016). As intention is the best predictor of behaviour, then EI is a best predictive tool to sort out entrepreneurs among graduates. Intention is considered as the most powerful predictor of entrepreneurial behaviours (Autio et al., 2001) and new venture creation (Chrisman, 1997).

### **Need for Achievement (NA)**

In this study, psychological characteristic is adopted from the psychological characteristic school of thought. Generally, there are six; Need for Achievement, Locus of Control, Tolerance of Ambiguity, Risk Taking, Self-Confidence (Begley and Boyd, 1987) and Innovativeness (Schumpeter, 1934). Past literature shows certain psychological characteristics are motivational to be an entrepreneur and could distinguish them from non-entrepreneurs. However, only NA by McClelland (1961) is discussed. This is due to its importance (Habaragoda, 2013) and its popularity (Shaver and Scott, 1991). This variable refers to an individual's level of achieving, and could be explained as; independent problem solver, targets setter who strives for goals on their own efforts, people with higher performance in challenging tasks, and innovative in improving their own performance (Littunen, 2000). This motivational achievement has the most important effect on EI (Dinis, Jorge, and Belinha, 2008). If the average level of NA is relatively high, then a great amount of entrepreneurship is expected (McClelland, 1961). Study by Yusof et al. (2007) proved NA is positively significant on EI. Thus, it is hypothesised that:

- H1: NA has a significant positive influence on ATT
- H2: NA has a significant positive influence on PBC
- H3: NA has a significant positive influence on SN

### **Attitude towards Entrepreneurship (ATT), Subjective Norms (SN), Perceived Behavioural Control (PBC)**

Attitude is the most relevant TPB's construct in influencing intention. Attitude refers to the degree to which an individual has favourable/unfavourable assessments of a particular behaviour (Ajzen, 1991), which also depended on the positive/negative evaluation on the personal impacts resulting from the behaviour. A negative belief about behaviour will end up with an unfavourable attitude and vice versa. While attitude towards entrepreneurship (ATT) could be defined as the degree a person has a favourable/unfavourable appraisal of entrepreneurial behaviour (Ajzen, 2002). A study such as Norasmah and Salmah (2009) found ATT was moderately related to behaviour and Zampetakis et al. (2009) concluded ATT had a significant effect on EI.

SN is a social factor; referring to the perceived social pressure to perform or not, a specific behaviour (Ajzen, 2001). It is a perception on others' opinions of approval on a performance of a behaviour, for example, "my reference personnel" would approve my decision, and in this context, my decision to be an entrepreneur. A previous study shows SN is positively related to intention (Wu and Wu, 2008).

PBC is the perception of the easiness or difficulty to carry out a specific behaviour, or feasibility (Peterman and Kennedy, 2003). This construct reflects a personal control over the behaviour. The greater the PBC, the stronger the intention to perform a behaviour. Several studies have shown a significant association between PBC and EI (Iakovleva and Kolvereid, 2009). In Malaysia, Ariff et al. (2010) showed PBC is the most important factor influencing accounting students' EI. Following this literature, it is hypothesised that:

- H4: ATT has a significant positive influence on EI
- H5: SN has a significant positive influence on EI
- H6: PBC has a significant positive influence on EI

### **Self-Efficacy (SE)**

SE is the individual personal judgement of their ability to perform a specific behaviour (Krueger and Brazeal, 1994). Cromie (2000) stated SE affects a person's beliefs regarding

whether or not certain goals may be attained. It is similar to PBC, yet this distinct antecedent by Bandura (1986) is more important on intentions and actions, especially in EI studies. Ajzen had further clarified the concept of behavioural control and highlighted the importance of incorporating SE and controllability items into intention measures to improve behaviour prediction. Many researchers have dealt SE and PBC as synonymous constructs. SE has been found as an important antecedent of both EI and behaviour (Souitaris, Zerbinati, and Al-Laham, 2007), but some researcher claims SE only concerns on PBC (Rotter, 1966). Therefore:

H7: SE has a significant positive influence on PBC

## FINDINGS AND ANALYSES

### Data Collection

420 questionnaires were mailed to the directors of seven selected polytechnics. The questionnaires then distributed and completed by the students studying diploma of accountancy, civil engineering, and electrical engineering, based on the provided guidelines. 374 responses were obtained, but only 372 questionnaires were usable. Noticeable that the response rate of 89% is quite high. Therefore, the representatives are accepted for this study. This enables generalisation of the obtained results (Sekaran, 2003).

### Measures and Assessment of Goodness of Measures

Five-points Likert scale (from 1 = strongly disagree to 5 =strongly agree) were used to measure all items. The questionnaire was designed using intensive literature. Items measuring the EI and SN were adapted from Linan et al. (2007) and Ramayah and Harun (2005); ATT were adapted from Linan et al. (2007) and Autio et al. (1997); PBC adapted from Linan et al., (2007); SE adapted from Shcwarzer and Scholz (2000); NA adapted from Ramayah and Harun (2005) and Yusof et al. (2007).

### Partial Least Squares Path Modelling (PLS-SEM)

The confirmatory factor analysis (CFA) tool used in this study is PLS-SEM. This technique has two components when examining latent constructs which are; measurement (outer) model that is related to indicator loadings and structural (inner) model which is related to path coefficient measures.

### Assessment of Measurement (Outer) Model

The first step in PLS analysis, the analysis of the measurement model is used to determine the fit between the factor and the theoretically defined construct (Hair et al., 2014). It is examined to ensure the survey questionnaires do determine the variables that it was supposed to measure; simultaneously making sure that the instrument is reliable. Smart PLS M3 version 2.0 (Ringle et al., 2005) was used to analyse the data with the application of bootstrapping method to fix the significant level of factor loading, composite reliability (CR) and average variance extracted (AVE). Bootstrapping method, is used to simulate the drawing of several random samples from the target population (Kline, 2011).

### Construct Validity

The construct validity of specific indicators can be assessed by examining the respective cross loading and factor loading, where it has been recommended by Hair et al. (2011) that a loading of 0.50 or higher on two or more factors is considered significant. In Table 1, it is observed that all the indicators measuring a particular construct are greater than 0.50 on the particular construct but are less than 0.50 on the other constructs, thus, confirming construct validity.

**Table 1:** Loadings and Cross Loadings

	ATT	EI	NA	PBC	SE	SN
ATT3	<b>0.874</b>	0.580	0.380	0.434	0.404	0.500
ATT4	<b>0.880</b>	0.556	0.382	0.378	0.405	0.514
ATT5	<b>0.889</b>	0.600	0.413	0.400	0.421	0.452
EI1	0.579	<b>0.839</b>	0.358	0.457	0.398	0.553
EI2	0.562	<b>0.850</b>	0.307	0.453	0.378	0.529
EI3	0.539	<b>0.850</b>	0.294	0.460	0.372	0.528
EI4	0.530	<b>0.836</b>	0.303	0.495	0.398	0.522
EI5	0.516	<b>0.799</b>	0.346	0.377	0.378	0.434
EI6	0.330	<b>0.618</b>	0.108	0.356	0.227	0.400
EI7	0.527	<b>0.826</b>	0.317	0.412	0.387	0.513
EI8	0.561	<b>0.846</b>	0.322	0.438	0.379	0.474
EI9	0.571	<b>0.736</b>	0.297	0.432	0.371	0.400
NA1	0.305	0.281	<b>0.755</b>	0.310	0.510	0.262
NA2	0.383	0.314	<b>0.860</b>	0.285	0.539	0.337
NA3	0.357	0.229	<b>0.860</b>	0.277	0.517	0.245
NA4	0.416	0.367	<b>0.865</b>	0.363	0.528	0.321
NA5	0.384	0.348	<b>0.829</b>	0.336	0.588	0.276
PBC3	0.306	0.435	0.247	<b>0.838</b>	0.347	0.355
PBC4	0.475	0.498	0.396	<b>0.898</b>	0.455	0.543
SE1	0.322	0.390	0.501	0.414	<b>0.809</b>	0.310
SE2	0.396	0.404	0.513	0.412	<b>0.853</b>	0.365
SE3	0.405	0.366	0.595	0.425	<b>0.865</b>	0.369
SE4	0.389	0.359	0.470	0.328	<b>0.779</b>	0.320
SE5	0.409	0.359	0.555	0.308	<b>0.785</b>	0.299
SN1	0.378	0.466	0.186	0.381	0.219	<b>0.768</b>
SN2	0.386	0.444	0.200	0.387	0.261	<b>0.797</b>
SN3	0.462	0.519	0.328	0.446	0.337	<b>0.826</b>
SN4	0.483	0.476	0.328	0.423	0.377	<b>0.814</b>
SN5	0.494	0.537	0.287	0.447	0.361	<b>0.821</b>
SN6	0.464	0.483	0.329	0.459	0.399	<b>0.825</b>

Note: Bold values are loadings for items which are above the recommended value 0.50

### Convergent Validity

Convergent validity is the degree to which multiple items that measure the same concept are in agreement. Factor loadings, CR and AVE, can be used to assess convergent validity (Hair et al., 2011). CR was obtained from the factor loadings of the constructs and its value in the observed variable that was accounted by the latent variables. In Table 2, all the CR values obtained are in the range of 0.860 to 0.942, which exceeded the recommended value 0.70. CR values of 0.70 to 0.90 are considered reliable (Hair et al., 2011). Other measurement to be examined is AVE that reflects the complete amount of variance in the observed variable accounted by the latent variable relative to measurement error (Ramayah et al., 2013). Again, in Table 2, all AVE values lie between 0.645 to 0.776, which is higher than the minimum recommended value of 0.50 (Barclay et al., 1995). This means all the constructs used are valid measures of the respective constructs according to the parameter estimates and statistical significance.

**Table 2:** Result of Measurement (Outer) Model

Constructs	Items	Loadings	CR <sup>a</sup>	AVE <sup>b</sup>
Attitude	ATT3	0.874	0.912	0.776
	ATT4	0.880		
	ATT5	0.889		
Entrepreneurial Intention	EI1	0.839	0.942	0.645
	EI2	0.850		
	EI3	0.850		
	EI4	0.836		
	EI5	0.799		
	EI6	0.618		
	EI7	0.826		
	EI8	0.846		
	EI9	0.736		
Need for Achievement	NA1	0.755	0.920	0.697
	NA2	0.860		
	NA3	0.860		
	NA4	0.865		
	NA5	0.829		
Perceived Behaviour Control	PBC3	0.838	0.860	0.755
	PBC4	0.898		
Self-Efficacy	SE1	0.809	0.910	0.670
	SE2	0.853		
	SE3	0.865		
	SE4	0.779		
	SE5	0.785		
Subjective Norms	SN1	0.768	0.919	0.654
	SN2	0.797		
	SN3	0.826		
	SN4	0.814		
	SN5	0.821		
	SN6	0.825		

Note: <sup>a</sup>Composite reliability (CR)=(square of the summation of the factor loadings)/{(square of the summation of the factor loadings)+(square of the summation of the error variances).  
<sup>b</sup>Average variance extracted (AVE)=(summation of the square of the factor loadings)/{(summation of the square of the factor loadings)+(summation of the error variances)}.

### Discriminant Validity

Discriminant validity is the degree to which items differentiate among constructs or measure distinct concepts, and this was conducted by calculating and investigating the associations among the measures of possibly overlapping variables (Ramayah, Rouibah, and May, 2011), and can be assessed by examining the correlations between the measures of potential overlapping construct. The AVE for each component should be greater than the squares of the correlation between the components and all other components (Christmas, 2005). On the other hand, the research model is considered to have a good discriminant when the correlation among

the components is lower than the square root of the AVE (Fornell and Larcker, 1981). Table 3 shows that all of the AVE are greater than the recommended value, and the correlations for every latent variable are less than the square roots of AVE (shown in bold). Thus, discriminant validity is acceptable.

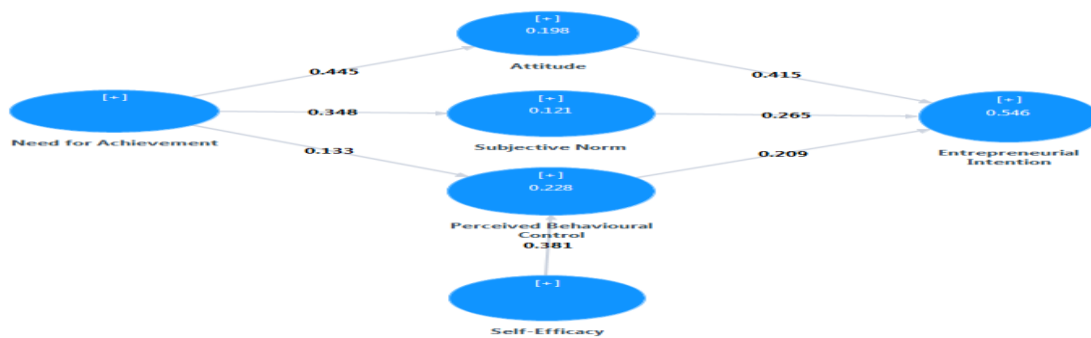
**Table 3: Discriminant Validity**

Constructs	A	B	C	D	E	F
Attitude (A)	<b>0.881</b>					
Entrepreneurial Intention (B)	0.658	<b>0.803</b>				
Need for Achievement (C)	0.445	0.373	<b>0.835</b>			
Perceived Behavioural Control (D)	0.459	0.539	0.378	<b>0.869</b>		
Self-Efficacy (E)	0.466	0.459	0.643	0.467	<b>0.819</b>	
Subjective Norms (F)	0.554	0.605	0.348	0.526	0.408	<b>0.809</b>

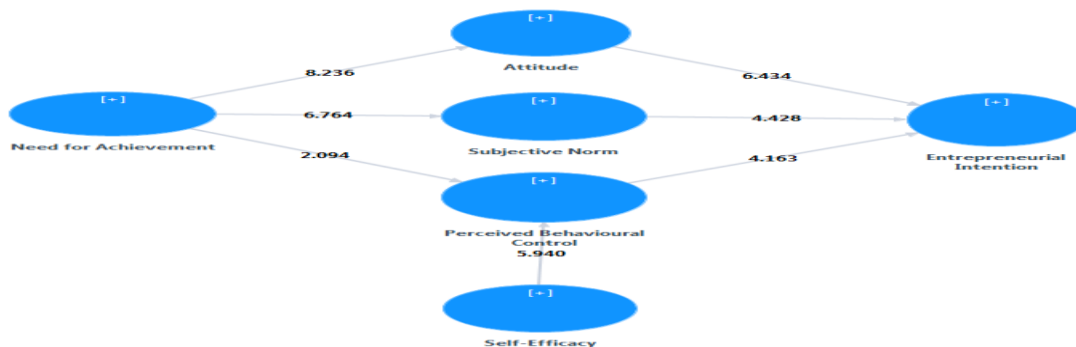
Note: Diagonal represents the square root of the AVE, while the off-diagonals represent the correlations among the variables.

**Assessment of Structural (Inner) Model**

As a whole, the measurement model demonstrated adequate convergent validity and discriminant validity. Therefore, the next step in PLS analysis is to develop a structural model by analysing the inner model, which can be used to assess the relationships between construct,  $R^2$  and significant values of the research model. The loading among the components was tested for the significance of path parameter coefficient using  $R^2$  for endogenous variables and t-statistics. To test the significance, all the data were run using 5000 bootstrapped samples, through 372 cases. For a specified PLS model, the  $R$ -squares for each dependent latent variable in the structural model provided by PLS are firstly calculated, in which case the values of the latent variables are determined by the weight relations (Vinzi, 2010).



**Figure 1: Assessment of Structural (Inner) Model on the Hypothesised Framework**



**Figure 2: Bootstrapping Analysis of Structural (Inner) Model**



## Path Coefficients

The path coefficients are also used to evaluate the structural (inner) models. The path coefficients or model loadings are evaluated in terms of sign, magnitude, and significance; are interpreting as in regression analysis and equivalent to the standardised beta weights ( $\beta$ ) (Henseler et al., 2009). The path coefficients indicate the strength and the direction of the causal links between latent constructs. Thus, the path coefficients that do not match to the algebraic sign of the theoretical expectations do not support the hypotheses.

The path coefficient significant level is determined by examining the path loadings between construct; that is identified by using the t-statistics. The t-statistics were estimated using the bootstrap resampling procedure. The bootstrapping procedure is a non-parametric approach for estimating the precision of the PLS-SEM estimates (Henseler et al., 2009). Bootstrapping results suggest the stability of the PLS-SEM estimates. In this study, all the data was run using 5000 bootstrapped samples, with the same number of cases as original sample, following the method conducted by Navarro et al. (2000).

From Figure 1 and Figure 2, it is revealed that all regression weights values are of practical importance (beta values  $> 0.2$ ) and statistically significant at 0.01 significance level. Also, the direction of the hypothesis is positive and in tandem with the proposed hypotheses as discussed in the literature review.

## Coefficient of Determination ( $R^2$ )

Regarding the amount of variance in each construct which are described by the model, the squared multiple correlation ( $R^2$ ) coefficients of determination for each construct were examined. The coefficient of determination ( $R^2$ ) of the endogenous latent construct explains the predictive power of the structural model and the effect level of the latent constructs. The  $R^2$  is to assess the proportion of the variance in the endogenous constructs that can be accounted for by the exogenous constructs (Hair et al., 2011) and are interpreted in the same manner as  $R^2$  values obtained from the regression analysis (Casey and Wilson-Evered, 2012). As a rule of thumb, in marketing research studies,  $R^2$  values of 0.75, 0.50 or 0.25 can be described as substantial, moderate, or weak, respectively (Hair et al., 2011).

In general, the hypothesised model describes the statistically significant amount of variance for each construct. In this study, the  $R^2$  value for EI is 0.546, which implies that 54.6% of EI is predicted by ATT, SN, PBC, and SE. Also, the  $R^2$  for PBC is 0.228, which means that 22.8% of this construct is explained by latent constructs of SE and NA. In addition, 20% of Attitude and 12.1% of SN are explained by NA respectively. Overall, the proportion of variance explained by each endogenous constructs from exogenous constructs is acceptable.

## Hypotheses Testing of PLS-SEM

In many research situations, the advantageous properties of variance-based PLS-SEM method were to estimate SEM (Lohmöller, 1989). In short, the hypothesised relationships in the SEM were tested using PLS estimation. It is shown clearly that all hypotheses were supported (refer Table 4). All relationships were significant at  $p < 0.01$ .

**Table 4:** Path Coefficient and Hypotheses Testing of PLS-SEM

Hypotheses	Relationships	Beta	S.E.	t-value	p-values	Decisions
H1	NA -> ATT	0.445	0.054	**8.236	0.000	Supported
H2	NA -> PBC	0.133	0.064	*2.094	0.036	Supported
H3	NA -> SN	0.348	0.051	**6.764	0.000	Supported
H4	ATT -> EI	0.415	0.065	**6.434	0.000	Supported
H5	SN -> EI	0.265	0.060	**4.428	0.000	Supported



H6	PBC-> EI	0.209	0.050	**4.163	0.000	Supported
H7	SE -> PBC	0.381	0.064	**5.940	0.000	Supported

\*\*p<0.01 (2-tailed), \*p<0.05

## CONCLUSION

This study is to investigate the factors influencing Entrepreneurial Intention among polytechnic students in Malaysia. As discussed, there is an improvement in the number of graduates who became entrepreneurs, yet Malaysian graduates' level of entrepreneurial intention is the lowest as compared to other regional neighbours. This is perhaps due to graduates' dependency on the government and private organisations for jobs. It is still relevant to further examine whether Malaysian polytechnic students are inclined and oriented towards the entrepreneurial sphere.

The study had used PLS-SEM to test the hypothesised framework. The seven hypothesised relationships were tested using PLS estimation. All relationships are significant, and the entire hypotheses are supported. This method validated the results in the final model as suggested in the analysis of the impact of exogenous latent variables, i.e., Need for Achievement and Self-Efficacy onto Attitude, Subjective Norms, Perceived Behavioural Control on the Entrepreneurial Intention. The use of a latent variable in SEM provides a strong test for the relationship between Attitude toward Entrepreneurship, Subjective Norms and Perceived Behavioural Control and Entrepreneurial Intention. The variables achieve very good reliability of indicators to measure the latent variables. Moreover, all coefficient paths are significant at level  $p < 0.001$ . In conclusion, the results show that the proposed factor structure provides an adequate statistical fit and sufficient for the data. In akin to Gird and Bagram (2008), this study showed that Attitudes, Subjective Norms and Perceived Behavioural Control revealed a significant statistical influence on Entrepreneurial Intention. This finding is in line with Ramayah and Zainon (2005) in which the variable, Subjective Norm is significant on intention. The finding, therefore, suggests TPB is a valuable tool for predicting entrepreneurial intention. The study also pointed out that Need for Achievement has a significant positive influence on Attitudes, Subjective Norms and Perceived Behavioural Control. This is in line with Nayyar and Nishantha (2010) who posited that individuals with high need for achievement are more likely to have a positive attitude toward entrepreneurship. It is also concluded that Self-Efficacy has a positive and significant impact on Perceived Behavioural Control. A similar conclusion reached by Krueger, Reilly, and Carsrud (2000) who tested Entrepreneurial Intention model adapted from Ajzen (1987).

In conjunction with this research results, it is recommended for the Department of Polytechnic Education to offer more entrepreneurship programmes and courses to the students. This would help the students to gain the knowledge and skills required in entrepreneurial activities; indirectly building up their confidence to start owning a business. This will improve the students' perceived behavioural control towards entrepreneurship which might subsequently influence their intention to become entrepreneurs. It is suggested for future studies to adopt this model and replace the variable Need for Achievement with other psychological characteristics, such as Self-Confidence.

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## LABOUR TURNOVER AND ORGANISATIONAL PERFORMANCE IN SELECTED HOSPITALITY FIRMS IN AWKA METROPOLIS

DR. DIM ETHELMARY<sup>1</sup>, OKOYE ANTHONY CHUKWUMA<sup>2</sup> AND OKOYE OGOCHUKWU JOY<sup>3</sup>

### ABSTRACT

This article examines labour turnover and organisational performance in selected hospitality firms in Awka metropolis. The broad objective of the study is to determine the effects of labour turnover in the performance of an organisation. The study worked with total population of 40. Mean and chi-square (X<sup>2</sup>) were used for data analysis at 0.05 level of significance. Survey research design was adopted for the study. The findings reveal that compensation packages influence employee satisfaction. This implies that when organisations consider some variables such as training, development and compensation, they enhance employee retention. The study recommends that organisation should structure their compensation packages, especially fringe benefits, in such a way that will take care of the general needs of the employees as well as their retention.

**Key Words:** Labour turnover, organisational performance, employee retention, employee satisfaction

### BACKGROUND

There is general consensus regarding the managerial problem of finding a successful mechanism for retaining employees, especially in a job environment characterised by constant yearnings for a pay rise (Beach, (1990). Job dissatisfaction is widespread and employees are observed to work well when they are adequately trained and have been in a job long enough to reap the benefits of their training.

Labour turnover measures the movement of workers in and out of employment with a particular firm.

Labour turnover is a common phenomenon in business organisations, particularly now the Nigerian economy is in recession. In view of the economic realities in the country, there is a tendency for business organisations to lose their employees. According to Benedict and Ogungbenle (2012), labour turnover is the rate at which an employer gains and loses employees, and that turnover is measured for individual companies and their industries as a whole. Moreover, Mabindisa (2013) notes that staff turnover includes employees who retire and employees who are discharged. Employees leaving the department over a set period are usually expressed as a percentage of total workforce numbers (Molefakgolla et al., 2014). Employees tend to leave an organisation as a result of certain factors, including salary (pay) dissatisfaction, absenteeism, lack of training and development, lack of motivation, work environment, and so on. Labour turnover has many implications for the organisation, employee and society. Organisations with a high labour turnover are bound to incur higher costs in recruiting and training new staff, as well as to experience reduced productivity. Employees who leave their job without having found a new one are bound to remain unemployed and without pay until new jobs are found. This leads to hardship and frustration, and may lead

<sup>1</sup> Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University Igbariam Campus, Anambra State, Nigeria. Email: - ethel4god@gmail.com

<sup>2</sup> Department of General Studies, Anambra State Polytechnic Mgbakwu, Anambra State, Nigeria.

<sup>3</sup> Email: ogochukwujoy93@yahoo.com

individuals affected to social vices like armed robbery, kidnapping, substance abuse, prostitution and child trafficking.

It is relatively rare for workers to leave jobs in which they are happy, even when offered higher pay elsewhere. In fact, most staff have a preference for stability. EmkaHotel, in Amawbia, Awka South Local Government, started operating in the 1980s with very few workers. It is one of the oldest hospitality firms in Awka. They offer services including lodgings, a conference hall and a bar. Now the company has up to 15 workers working with them.

Trig-Point Hotel in Nibo, Awka South Local Government, started operating in 2012 with over 20 workers. They offer services such as a gym, a laundry, a swimming pool, a bar, comfortable bedrooms, and a conference hall.

## **THE ROBLEM**

The Nigerian economy is currently in full-blown recession. This has serious consequences for the economy, including a high rate of foreign exchange relative to the Naira, resulting in high inflation, cuts in salaries and wages, non-payment of salaries and labour turnover. The harsh economic environment in Nigeria adversely affects business organisations, including the hospitality firms in Awka.

The highest rate of labour turnover tends to be among those who have recently joined the business. Workers may leave after their first morning or day at work, or resign within a few months of employment to develop their career or seek variety. Because new starters are more likely to leave, turnover is often higher in expanding organisations, which have a higher proportion of new starters. Turnover may also be high in organisations that hire contract workers, who will leave when they are offered better jobs elsewhere.

Lack of training and developmental opportunities may also increase the turnover rate of employees. Low or no compensation packages or a poor relationship with the line manager can also increase employee turnover. To judge from the literature reviewed, no study had been undertaken on hospitality firms in Akwa regarding labour turnover and organisational performance.

Against these odds, the current researcher wants to find out how labour turnover affects organisational performance, mostly in hospitality firms.

## **OBJECTIVES**

The general objectives of this study are:

- to determine the extent to which compensation influences employee retention; and
- to determine the relationship between training/development and employee satisfaction.

## **RESEARCH QUESTIONS**

The following research questions have been designed in an attempt to achieve the objectives of the study. They include.

- What is the extent of the relationship between compensation and employee retention?
- What is the relationship between training/development and employee satisfaction?

## **HYPOTHESES**

The hypotheses are:

- Ho: compensation packages have no significant influence on employee retention; and
- Ho – there is no significant relationship between training development and employee satisfaction.

## CONCEPTUAL REVIEW

Organisations rely on the expertise, knowledge, skills, capital resources and capacity development of their employees to compete favourably and gain competitive advantage in the international market. Recent studies, however, have shown that the retention of highly skilled employees has become difficult for managers, as this category of employees is being attracted by more than one organisation at a time with various incentives (Michael, 2009). Management should create an enabling and sustainable critical culture and strategies to work out retention systems and structures for their existing core employees in contemporary organisations. This is pertinent because, according to Czkan (2005), the motivational strategies used to attain retention in the past are not (or may no longer be) appropriate to motivate critically talented and mobile employees to remain, thereby increasing the turnover rate. Escalation of the rate of employee turnover is a major concern for businesses, and it clearly has an impact on organisational performance (Gavrea et al., 2011). Labour turnover refers to how many employees in an organisation leave their position during a designated time, usually one year (Mabindisa, 2013). Labour turnover is costly as it reduces the schedule, and disruptive as it requires that both schedule and programmes must be modified.

Okoye (1999) says that labour turnover is referred to as the rate at which employees that must be replaced leave the enterprise. It is the movement of employees in and out of employment. It is also the ratio of the number of employees leaving to the average total number of employees in a given period.

Cotton and Turtle (1986) aptly conceptualise turnover intention as an individual's perceived probability of staying or leaving their employing organisation. Hom and Griffeth (1991) also define turnover intention as the relative strength of an individual's intent towards voluntary permanent withdrawal from an organisation. It is reckoned that the achievement of objectives can only be realised through efficient management and retention of human resources in organisations. Efficient management of human resources of the firms could be achieved through identifying and intervening in factors that could minimise an employee's turnover intention and enhance their retention and performance. When organisation objectives are integrated with those of employees, it also enhances employee satisfaction and retention and leads to better performance.

### Causes of labour turnover

A high level of labour turnover could be caused by many factors. They include the following:

#### *Poor motivation*

Motivation is what causes an individual to change his or her behaviour towards a directed end (Onwuchekwa, 2002). Motivation is a human psychological characteristic that contributes to a person's degree of commitment. It includes factors that cause, channel, and sustain human behaviour in a particular committed direction. The question is how motivation affects an individual, and how it relates to performance. When an employee is motivated, that motivation increases performance and commitment (Steven, 1981). Motivation is a general term applying to the entire class of drives, desire, needs wishes and similar forces, and managers do what they hope will satisfy these drives and desires and induce subordinates to act in a desired manner. Different kinds of motivation positive motivation, negative motivation, intrinsic motivation and extrinsic motivation, and each will surface according to the performance of an employee.

#### *Fringe benefits*

Fringe benefits, also known as supplementary compensation, are benefits workers get from their organisations apart from basic salary and variable compensation. Fringe benefits are designed



to retain workers, becoming important instruments in settling industrial relation's disputes with respect to salary and wages (Onwuchekwa 1995).

Major categories of fringe benefits include:

- a) payment for time not worked, e.g. a lunch period;
- b) hazard protection, e.g. illness, old age, injury;
- c) employee services, housing, food, etc.; and
- d) legally required payments: minimum expenditure for protecting employee against hazards, unemployment compensation, worker compensation, insurance, Medicare, etc. (Onwuchekwa1995).

### ***Grievance settlement procedure***

Mehrota (1965) defines grievance or dispute as any difference between employers and employees, between employers and workmen, or between workmen and workmen, which is connected with employment or non-employment and the physical conditions of the work of any person.

Grievance corrects mistakes and highlights problems that may not be apparent during collective bargaining negotiations.

There are two types of grievance:

- a) individual grievance, caused by problems relating to the denial or breach of an employee's rights; and
- b) collective grievance, caused by problems relating to a group of workers or a union.

Grievance can be expressed through the following: go-slow, strike, sabotage, ban on overtime, lock-out, etc.

There are two ways of settling grievances: voluntary and statutory.

### **Measuring labour turnover**

According to Cayman (2003), the simplest and most common way of measuring labour turnover is to measure the number of leavers over a period as a percentage of the number employed during the same period, usually on a quarterly or annual basis. This is sometimes called the separation rate, and is expressed as follows:

$$\frac{\text{Number of leavers} \times 100}{\text{Average Number working}} = \text{Separation rate}$$

Unless there are special circumstances, such as a sudden large increase in the size of the workforce, the average number working is usually taken to be the number working at the period added to the number working at the end, the total then being divided by two. For example, if there are 210 workers at the start of the period being studied and 222 at the end of the period, and 72 workers leave during the period, the separation rate is:

$$\frac{72 \times 100}{222} = 32.4\%$$

This simple index is useful in comparing one organisation's labour turnover with that of another local employer, or with the industry as a whole. If calculated by department or section, it can be a useful guide.

### **How to reduce employee turnover**

Organisations that want to reduce the labour turnover of new starters should pay particular attention to job analysis, description and specification, and then:

1. **recruitment and selection:** most employers develop some kind of recruitment and selection process to determine whether applicants are suitable for the job. Where the job involves practical skills, it can serve as test to them at the time of interview;



2. **induction:** when new workers start, there is a good deal of information, they will require apart from training for the specific job) before they can properly settle down and feel part of the organisation. This induction is often shared between the personnel or administration department and those employed; and
3. **training/development:** training a new entrant for a job naturally varies in length and complexity according to the organisation and the job itself. Training may be on or off the job, and even small organisations may make use of off-the-job facilities, particularly where the job is complex or cannot be taught satisfactorily on the job. A training scheme ensures that the new starter is gradually introduced to each stage of the job, and can do each task satisfactorily before moving on to the next. Those that have been on the job for a long time can also develop their skills for greater performance.

### **Benefits of labour turnover**

Some employee turnover positively benefits organisations. This happens when an ineffective employee is replaced by a more effective employee, such as when senior retirement allows the promotion or acquisition of welcome 'fresh blood'. Carter and Savoca (1992) assert that moderate levels of staff turnover can also help reduce staff cost in organisations where business levels are unpredictable month by month.

### **Cost of labour turnover**

Higher labour turnover can be expensive, although the actual costs are difficult to estimate. To get some indication, organisations can start by adding up the most obvious expenses: advertising, recruitment and training and the cost associated with management and supervising.

**Recruitment cost:** the management at the beginning of any financial year comes up with the workforce plan of the organisation. This plan, or budget as it is generally called, states the category of personnel required in each department and the expected salaries to be paid to them. As need arises, heads of departments advise the personnel department to recruit staff and the personnel department does so according to the policies of the organisation. When new personnel are recruited, the organisation undoubtedly starts to incur labour costs (Ekwezie, 2007).

**Pay:** labour turnover also affects pay if bonus schemes are in operation and targets are not met. Workers and their representatives will understandably feel resentment unless they can see that remedial action is being taken (Cayman, 2003).

**Loss of long-term workers or expertise:** long-term workers becoming unsettled and leaving; although more workers will leave during the induction period, the loss of trained and experienced workers may be more costly to the organisation in terms of increased hiring and training expenditures (Douglas, 1998).

### **Employee satisfaction**

Employee satisfaction means employees are contented with their work and position; they likely enjoy much of their work, feel management is fair and cares about them, and they are comfortable in their work environment, happy both with other staff and with the resources they have to undertake their job. It is closely tied with employee turnover, since unhappy staff are more likely to seek a position elsewhere.

### **Employee retention**

Employee retention refers to the ability of an organisation to retain its employees. Employee retention can be represented by a simple statistic; for instance, a retention rate of 80% usually indicates that an organisation kept 80% of its employees in a given period. However, many

consider employee retention as relating to the efforts employers use to retain employees in their workforce. In a business setting, the goal of employers is usually to decrease employee turnover, thereby decreasing training costs, recruitment costs and the loss of talent and organisational knowledge. Employers can improve retention rates and decrease the associated costs of high turnover. Employers can also seek 'positive turnover', whereby they aim at maintaining only those employees they consider to be high performers.

Employee retention can also be seen as an effort by a business to maintain a working environment that supports current staff to remain with the organisation. Many employee retention policies are aimed at addressing the various needs of employees to enhance their job satisfaction and reduce the substantial costs involved in hiring and training new staff.

### **Organisational performance**

According to Slater and Narver (1995), organisational performance reflects an organisation's understanding and knowledge regarding customer needs and expectations. Razalli (2008) finds that hotel performance could be improved through good leadership practices and the provision of customised service design for select clientele in the service sector. Business organisations can therefore maximise their customer satisfaction for better profitability and increased sales volume, which ultimately improves overall performance (Baker and Sinkula, 1999). Organisational performance encompasses three specific areas of organisational outcome: (1) financial performance (profits, return on assets and return on investment); (2) market performance (sales and market sales); and (3) shareholder returns (total shareholder returns and economic value added).

Organisational performance is the most important criterion in evaluating the performance of an organisation, its actions and its environment. Organisational performance is one of the most important variables in management research, because continuous performance is the focus of any organisation: it is only through performance that organisations are able to grow and progress. We agree that an organisation performs when it accomplishes its goals, and profit is one of the indicators of performance. When an organisation is performing, this leads to an increase in profit, a large market share, international recognition and sustainability, etc. Performance is highly needed in service organisations, of which hospitality firms form a part.

### **Theoretical framework**

This study is anchored on the equity theory of motivation put forward by Adams (1963) and the expectancy theory of motivation put forward by Vroom (1964). Equity theory is based on the assumption that a major factor in job motivation is an individual's evaluation of the equity or fairness of the reward received. It emphasises the role played by an individual's belief in the equity or fairness of rewards and punishments in determining his or her performance and satisfaction. According to equity theory, individuals are motivated when they experience satisfaction with what they receive in proportion to the effort they apply:

Outcome of a person = outcome of other person(s)

Input of other person = input of other person(s)

Expectancy theory states that working individuals are motivated to make choices between different behaviours, which they believe will lead to a preferred reward that will be attractive to them.

The implication of these theories is that managers must ensure from the outset that employees are equitably treated by ensuring that a reward system is carefully administered. They should also let individuals know the level of performance expected of them beforehand, and the reward that may follow.

**RESEARCH METHODS**

**Research design**

The study employed the survey research method. In this method, data is collected directly from the respondents. Survey research is the systematic gathering of information from the participants for the purpose of understanding and/or predicting some aspect of the behaviour of the population of interest.

**Population of the study**

A total of 40 staff from two hospitality firms in Awka Metropolis constitute the population of this study. Out of the total population, Trig-Point Hotel has 25 staff and Emka Hotel has 15 staff. A complete enumeration method was adopted, as the researcher made use of the entire population of Trig-Point and Emka.

**Selected hospitality firms**

Names of hospitality firms	Location	Population
Trig-Point	Nibo, Awka	25
Emka	Amawbia, Awka	15
<b>Total</b>		40

Source: Fieldwork (2017)

**Method of data collection**

The primary source of data was generated through the use of structured questionnaires. The questionnaires were structured to place the respondents on object response for each statement on a five-point Likert scale. The response scoring weight was 5 for strongly agree (SA), 4 for agree (A), 3 for strongly disagree (SA), 2 for disagree (D), and 1 for undecided (U). The researcher administered copies of the questionnaire to the staff of the organisation under study.

**Sources of data**

A structured questionnaire was the major tool used to get information from the staff of the two selected hospitality firms.

**Method of data analysis**

Chi-square and mean were used to analyse the data. Copies of structured questionnaire were administered, and the participants were placed on objective response for each statement on a five-point Likert scale. The five-point Likert scale scoring weight of the structured questionnaire was calculated using the formula below:

$$\text{Where } x = \frac{\sum Fx}{N}$$

$$\text{Where } x = \frac{5 + 4 + 3 + 2 + 1}{5} = \frac{15}{5} = 3$$

**Decision Rule:**

Any item that has a response of 3.0 and above is to be accepted or agreed on, while responses below 3.0 are to be rejected or disagreed on.

### Data presentation and analysis

This covers the presentation and analyses of data collected from the field. The presentation is divided into twoparts. The first part contains descriptive statistics, while the second part contains a test of the hypotheses.

**Table 1:** Questionnaire frequency distribution

S/N	Questionnaire	SA	A	SD	D	U
1.	Labour turnover has an influence on organisational performance	25	8	3	4	0
2.	Hospitality industry records high rate of employee turnover	15	15	8	2	0
3.	When there is a record of inconsistency in the pay structure of an organisation, employee turnover decreases	4	1	15	20	0
4.	Organisations incur additional cost when employees leave	20	8	10	0	2
5.	When the compensation packages of an organisation are perceived to be equitable, employees may not want to leave	23	14	0	0	3
6	Employees will work in an organisation where there is no training and development	0	2	30	8	0
7	Labour turnover increases when there is a feeling of inequality in the pay structure of an organisation	25	4	0	1	0
8.	When there is a conducive working environment, labour turnover decreases	29	5	0	4	2

Source: Field survey (2017)

To objectively answer the research question, the relevant responses supplied by the questionnaire that corresponded with each of the research questions were analysed with the aid of mean and the decision rule.

**Table 2:** Mean result of the influence of compensation packages on employee retention

S/n	Section A	Mean	Decision rule
1.	Labour turnover has an influence on organisational performance	4.4	3.0
2.	Hospitality industry records high rate of employee turnover	4.5	3.0
3.	When there is a record of inconsistency in the pay structure of an organisation, employee turnover decreases	2.7	3.0
4.	Organisations incur additional cost when employees leave	4.1	3.0

Mean of mean	3.9
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Source: Field survey (2017)

Table 2 reveals that the respondents agree that compensation packages influence employee retention to a greater extent with a mean of 3.9. The respondents agree with items 1, 2 and 4 respectively, while respondents disagree with item 3 with a mean of 2.7.

**Table 3:** Mean result on the relationship between training, development and employee satisfaction

S/n	Section B	Mean	Decision rule
1.	When the compensation packages of an organisation are perceived to be equitable, employees may not want to leave	4.4	3.0
2.	Employees will work in an organisation where there is no training and development	2.9	3.0
3.	Labour turnover increases when there is a feeling of inequality in the pay structure of an organisation	3.6	3.0
4.	When there is a conducive working environment, labour turnover decreases	4.4	3.0
	Mean of mean	3.8	

Source: Field survey (2017)

Table 3 reveals that the respondents agree there is a relationship between training, development and employee satisfaction the mean of mean of Table 2. The respondents agree with items 1, 3 and 4, while respondents disagree with item 2 with a mean of 2.9.

### Test of hypothesis

The formulated hypotheses were tested with chi-square ( $X^2$ ), as shown below.

Decision Rule: Reject  $H_0$  if the calculated chi-square is less than the table value.

#### Hypothesis 1

$H_0$ : Compensation packages have no significant influence on employee retention.

$H_1$ : Compensation packages have significant influence on employees retention formula, for expected frequency =

$$\frac{\text{Row total} \times \text{column total}}{\text{Grand total}}$$

S/N	SA	A	SD	D	U	Total
1.	25 (16)	8 (8)	3 (9)	4 (6.5)	0 (0.5)	40
2.	15 (16)	15 (8)	8 (9)	2 (6.5)	0 (0.5)	40
3.	4 (16)	1 (8)	15 (9)	20 (6.5)	0 (0.5)	40
4.	20 (16)	8 (8)	10 (9)	0 (6.5)	2 (0.5)	40
	64	32	36	26	2	160

$$X^2 = \sum \frac{(of - ef)^2}{Ef}$$

$$X^2 = 10.52 + 9.92 + 47.63 + 12.11 = 80.18$$

Degree of freedom at 0.05 level of significance

$$df = (r-1)(C-1) \\ (4-1) (5-1)$$

$$3 \times 4 = 12$$

Table value of df on  
12 upon 0.05

$\chi^2$ critical value = 21.026

Therefore, since the calculated chi-square is greater than the critical table value, we reject  $H_0$  and accept  $H_1$  which states that compensation packages influence employee retention.

**Hypothesis II**

$H_0$ : There is no significant relationship between training, development and employee satisfaction.

$H_1$ : There is significant relationship between training, development and employee satisfaction.

S/N	SA	A	SD	D	U	Total
1.	23 (19.25)	14 (8.75)	0 (7.5)	0 (3.25)	3 (1.25)	40
2.	0 (19.25)	2 (8.75)	30 (7.5)	8 (3.25)	0 (1.25)	40
3.	25 (19.25)	14 (8.75)	0 (7.5)	1 (3.25)	0 (1.25)	40
4.	29 (19.25)	5 (8.75)	0 (7.5)	4 (3.25)	2 (1.25)	40
	77	35	30	13	5	160

$$\chi^2 = 17.1 + 100.2 + 15.2 + 25.5 = 158$$

Degree of freedom at 0.05 level of significance

$$df = df = (r-1)(C-1)$$

$$(4-1) (5-1)$$

$$= 3 \times 4 = 12 \text{ upon } 0.05 = 21.026$$

Therefore, we reject the  $H_0$ , since the calculated value is greater than the chi-square critical value. We then accept  $H_1$  which states that there is a significant relationship between training, development and employee satisfaction.

**FINDINGS**

The following findings were made after subjecting the responses retrieved from the respondents to statistical analysis. The study revealed that compensation packages have influence on employee retention, mostly in hospitality firms. This is in line with the assertion by Chipunaza (2009) that intrinsic and extrinsic motivational variables can enhance retention and reduce the high rate of employee turnover in various organisations. Such variables include rewards for good performance, recognition and training and development.

From testing Hypothesis II, the study revealed a significant relationship between training, development and employee satisfaction. This finding is backed by Maarjitje (2009), who also finds that certain factors (such as proper leadership, training and development, participation in decision, promotion and opportunity for growth, and reward and recognition) lead to high job satisfaction, which in turn keeps labour turnover minimal. This is also in line with the assertion by Robin (1998) that a person with a high level of job satisfaction holds positive attitude toward the job, while the person who is dissatisfied holds a negative attitude.

**CONCLUSION**

From the discussion of the findings, the study concludes that labour turnover affects an organisation adversely and causes the organisation to lose competent hands that will help improve the efficiency of the organisation. When, however, the organisation considers variables such as compensation packages, training and development as vital tools to be used, it helps them achieve their objectives and leads to better performance, while reducing the turnover rate of their employees, mostly in hospitality firms.



## RECOMMENDATIONS

The study recommends that the management of hospitality firms should be more committed to training and developing their workers get the best from them.

Organisations should structure their compensation packages, especially fringe benefits, in such a way that it will take care of the general needs of the employees as well as their retention.

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## **CURATING THE CROWD – TOWARDS A TYPOLOGY OF VALUE-CREATING ONLINE COMMUNITY INTERACTIONS.**

MICHAEL ROWE<sup>1</sup>, JOHN DOUGLAS THOMSON<sup>2</sup> AND MARTA POBLET<sup>3</sup>

### **ABSTRACT**

This paper proposes a conceptual model of online community management and development in the context of organizational value creation. It investigates the drivers and limiting factors that contribute to the development of online communities and the appropriation of value from them. A multiple-methods approach to the study of online communities has been used. Qualitative data from semi-structured interviews with subjects actively participating in crowdsourcing activities was obtained over a two-year period. Quantitative methodology included a review of online communities associated with the 2015 Fortune 500 companies, and an additional 167 measurements of eight online communities provided cross-sectional and time-series data. This paper contributes an empirical model which considers two categories of factors: organizational factors – which are controllable by decision makers within the organization; and community factors – which shape and limit the nature of the resultant community, and reflect variables relating to the nature of participation.

**Key words:** Online community, crowdsourcing, community participation, crowd, value creation

### **INTRODUCTION**

Social media has created a new paradigm where thoughts, attitudes and beliefs can be instantly captured and shared across networks of other participants around the world (Kietzmann, Hermkens, McCarthy and Silvestre, 2011). While the movement of content in the social media universe may be perceived simply as a form of diversion or entertainment, the underlying technology provides users with the opportunity of forming cohesive online communities (OCs), a fact increasingly being taken into account by business and government (Turban, Strauss and Lai, 2016). OCs have been defined as ‘social networks in which people with common interests, goals, or practices interact to share information and knowledge, and engage in social interactions’ (Chiu, Hsu and Wang, 2006). The potential associated with the leverage of OCs can be seen not simply as a by-product of an organization’s social interactions, but potentially a characteristic central to its use as a creator of value (Sridhar Balasubramanian, 2001).

Understanding the factors that drive formation and development of OCs and which mediate the participation of their membership is an important precondition of recognizing how these communities may create value. Specific questions addressed by this research are what are the drivers and limiting factors that contribute to the development of online communities and the appropriation of value from them, and how might the variables associated with online communities and the interactions between them be modeled?

### **LITERATURE REVIEW**

While the study of community dates back to Aristotle, contemporary studies find that the range of characteristics which need to be satisfied in order for community membership to occur

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1 PhD candidate, RMIT University Graduate School of Business and Law. 405 Russell St, Melbourne, VIC, Australia 3000. E-mail: - michael.rowe@rmit.edu.au

2 Senior Lecturer, RMIT University Graduate School of Business and Law. 405 Russell St, Melbourne, VIC, Australia 3000. E-mail: - doug.thomson@rmit.edu.au

3 Assoc Professor Marta Poblet, RMIT University Graduate School of Business and Law. 405 Russell St, Melbourne, VIC, Australia 3000. E-mail: - marta.pobletbalcell@rmit.edu.au

include a sense of belonging, emotional safety and the integration of needs fulfillment for participants (McMillan and Chavis, 1986). Community is seen as a resource utilized by people ‘...for meeting key physiological and psychological needs such as the need for affiliation, power and affection’ (Nowell and Boyd, 2010).

Translated into an online context, any definition of community must transcend physical place and instead describe a set of social relationships (Andrews, Preece and Turoff, 2001). Many properties of OCs are consistent with those of their more traditional counterparts (Silva, Mousavidin and Goel, 2006). The interest of each individual within a community is generally better served by individuals acting in concert rather than by each acting in isolation. In translating the exchanges of such a community from a sociological to an organizational context, the best interests of an enterprise may be served through the appropriate harnessing of the interactions of whatever community the organization may be able to harness. From these roots the notion of community in relation to organizational performance arises.

### **Forms of community**

If the ultimate objective of enterprise is to satisfy the needs of customers more effectively than alternatives (Webster, 2017) then competitive advantage is the reward that comes with the achievement of that aim (Treacy and Wiersema 1993). But online customer communities are rarely completely homogenous and each individual customer is likely to have perspectives and preferences that differ from others in his or her cohort. This has implications for organizations and the approach they take to customer communities - how well a company understands its prime stakeholders (customers among them) and how capable it is in not just addressing the variation in needs, but also operationally integrating the views of its customers into the attributes of the goods and services it produces (Treacy and Wiersema 1993).

Into this context the role of the brand community can be considered. In his paper introducing the concept, Muniz defined brand community as ‘a specialised, non-geographically bound community based on a structured set of social relationships among admirers of a brand’ (Muniz, Jr. and O’Guinn, 2001). He noted that brands with a strong sense of community are of more value to a marketer than brands with a lesser focus or understanding of their community.

An additional category of OC might be called ‘communities of interest’ (Armstrong and Hagel, 2009). Internet technologies enable the members of a community of shared interests to associate with relative ease. Geographic, language, cultural and status barriers are significantly reduced in an online context and this enables the formation of communities that are potentially both demographically truly diverse, and also quite narrow in their focus.

### **Nexus with crowdsourcing**

Crowdsourcing is defined as a ‘type of participative online activity in which an individual, an institution, a non-profit organization...proposes to a group of individuals...via a flexible open call, the voluntary undertaking of a task’ (Estelles-Arolas and Gonzalez-Ladron-de-Guevara, 2012). For value to be created through crowdsourcing three criteria must be met. Firstly the subject of the task being crowdsourced must be modular in nature i.e. elements of the subject must be able to be changed without compromising the integrity of the whole. Secondly, there must be structural capability within the organization to be able to both engage the crowd and utilize the output from the crowd in a manner that creates value. Finally, an authentic community must be engaged (Rowe, Poblet and Thomson, 2015). The manner in which these communities may be engaged, and the variables associated with mediating that involvement are critical determinants of successful leverage of OCs by organizations.

So the study of crowdsourcing must take into account the dynamics of the crowd. Here arises a definitional constraint as many of the crowds engaged in crowdsourcing do not satisfy the accepted preconditions of community. In other words, while all communities are comprised

of crowds, not all crowds are communities. Participation in crowdsourcing may be by individuals unmotivated by commonality of interest with like-minded others. Consider the individual that voluntarily submits information about the location of potholes to their local council using an app similar to “Street Bump”. This individual is enabling the local government to crowdsource data in relation to the condition of roads in surrounding neighborhoods, however the individual is not by any practical means a member of a community for the purposes of this activity.

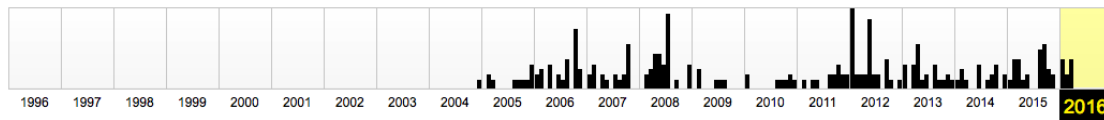
This paper therefore does not use ‘community’ and ‘crowd’ interchangeably, rather it assumes that it is the characteristics of the OC that drives value creation, not the mere access to a crowd.

**METHODOLOGY**

This research applies a multiple-method approach to the study of OCs. Qualitative data was obtained through semi-structured interviews over a two-year period with subjects actively participating in crowdsourcing activities. In addition, a ‘digital ethnographic’ investigation including naturalistic involvement in, and observations of functioning OCs and associated artifacts was undertaken. Digital Ethnography is a qualitative research methodology which adapts ethnographic research techniques to the study of OCs (Underberg and Zorn, 2013). Quantitative methodology included a review of OCs associated with the 2015 Fortune 500 companies, and an additional 167 measurements of a convenience sample of eight OCs providing cross-sectional and time-series data encompassing 1.1 billion individual posts and contributions.

Many OC forums have been captured in Internet archives along with metrics that enable the development of these communities over time to be mapped. As an investigation into the nature of the kinds of communities these forums attract formed a significant part of this research, taking data from these archives provided a rich source of quantitative data. A selection of candidate sites was obtained and these were then entered into the Internet Archive site ([www.archive.org](http://www.archive.org)) to establish the quality of historical data available. Quality of data in this sense refers to the start date of entries into the archive, and the frequency and distribution of updates. Figure 1 shows an example of the reporting available on the site and provides an overview of the data density. Where the data relating to a particular forum was insufficient to provide samples of sufficient frequency and regularity the site was discarded and the next on the list was submitted.

**Figure 1:** Internet Archive entries for [www.rolexforums.com](http://www.rolexforums.com) showing commencement of inclusion in the archives, and frequency and distribution of updates (Source: [http://web.archive.org/web/\\*/www.rolexforums.com](http://web.archive.org/web/*/www.rolexforums.com))



Conceptual modeling has been described as ‘the activity of formally describing some aspects of the physical and social world around us for the purposes of understanding and communication’ (Mylopoulos, 1992). Identifying variables and interactions based around defined categories will enable the development of a model that identifies and explains the actors and structural characteristics associated with value creation from OCs.

**TOWARDS A COMPREHENSIVE MODEL**

OCs may exist in many forms. They may be directly associated with an organization, or they may be entirely independent of the organization and exist only as a result of the individual members’ shared approach to a contingency.

The proposed empirical model considers two dimensions:

1. Organizational dimensions – which are controllable by decision makers within the organization; and
2. Community dimensions – which shape and limit the nature of the resultant community; and reflect variables relating to the nature of participation.

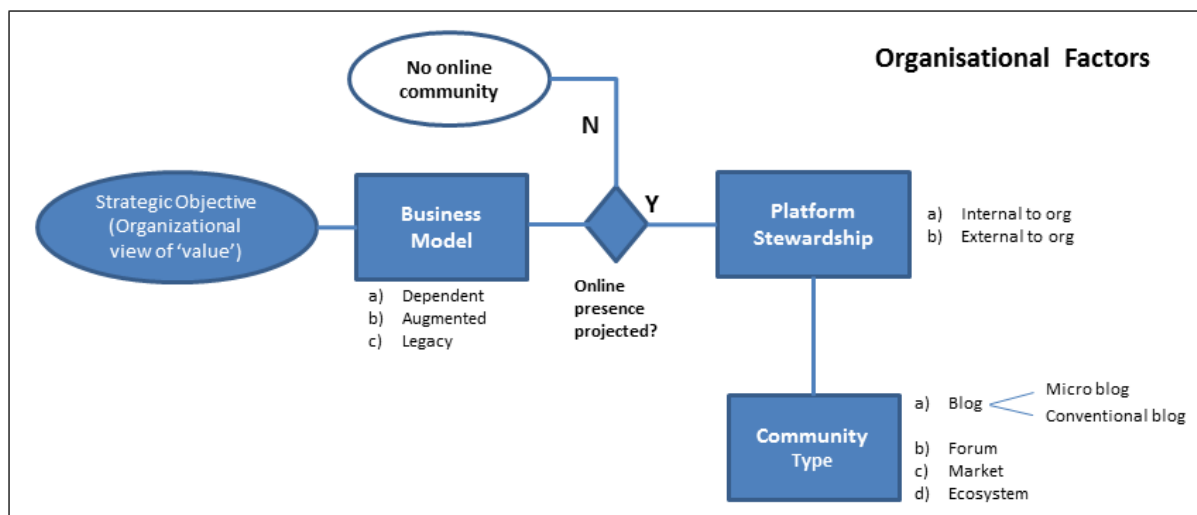
Taken together, the proposed model provides both an explanation for observed community interactions, and a diagnostic tool showing alternative configurations that may potentially drive better value creation from an existing community engagement approach.

### Organizational dimensions

Organizational dimensions are those that are related specifically to, and under the control of, the seeker organization. They are distinct from any particular crowdsourcing process and can be considered independent variables.

1. Strategic Objective: The starting point for development of this model is the assumption that an organization's involvement with OCs is intended to contribute to the achievement of the seeker organization's strategic goals. 'Value' in this context may well be an end-product, but it may also represent the unlocking of insights or a capability (for example) hitherto unavailable to the organization. Curating or engaging solver OCs in the absence of a clear strategic vision is problematic and will undermine the ability for the benefits of that community to be leveraged.

**Figure 2:** Organizational dimensions of OCs



2. Business Model – The second organizational factor for consideration is the degree to which the community is integrated into the business model used by the seeker organization. This factor can assume one of three states. The first is where the capability of engaging the community is a central and essential part of the operational model of the organization. This is called the 'dependent' model and organizations pursuing this model are incapable of surviving in the absence of community interactions. The second state is where the organization uses a more traditional business model but captures community inputs as an added-on capability. This is the 'augmented' model. Examples of this model are governments that use crowd-based techniques to assist in policy formation and problem solving. The third state is where the organization disregards, either through design or neglect, the presence of whatever OC of interest exists around it. This can occur for a number of reasons and is relatively prevalent at the time of writing. This is referred to as the 'legacy' model.

Organizations that are 'dependent' such as Amazon, Facebook and eBay maintain customer communities that are the value creation engine and effectively inseparable from the

organization itself. Other companies such as AT&T, Hewlett Packard and Nike maintain active communities that have been developed alongside their primary operations enabling input to be obtained whilst the organization remains operationally independent from its associated communities. Many more organizations – usually ones of significant scale – are too bound by fixed organizational structures, industry regulatory pressures, or stock market expectations to engage OCs in any meaningful way. Banks and mining companies are typical examples. As the impact of social media and OCs becomes more apparent, some business-to-consumer enterprises appear to be decreasing their reliance on legacy systems and are starting to provide opportunities within their operating or business models for more significant stakeholder interactions.

3. *Online Presence Projected* – at this point the model seeks to establish whether the organization projects an online presence beyond a simple website. The null case here is the organization whose presence provides no way for interested parties to respond. In these cases the organization eschews even the most basic social media presence. American Tower (<http://www.americantower.com>) is a large transnational enterprise based in the United States. Its website is purely descriptive with no social media presence or any other way for interested parties to interact with the firm beyond a ‘contact us’ page.

Social media is simple and inexpensive to access and many organizations use social media platforms such as Twitter, FaceBook, Pintrest and Instagram as an extension of their website. This may satisfy a technical definition of creating and engaging with an OC but in reality simply posting content to Twitter and Instagram does not mean an impact is being felt either in respect of forming or contributing to a community discussion. It should be recognised that almost all organizations of scale now project some form of online presence through social media channels. This is a necessary but not sufficient precondition to the formation of a community. The test of whether a community has been formed relates to the extent of response that results from this activity. This kind of irregular and ad-hoc activity is a separate category of interaction that, whilst capable of influencing decision making within organizations, does not represent a coherent response to community building and is, one might surmise, often unwelcome in relation to the pressure it puts on management. It is however an important community interaction and one with the potential to create value for the organization.

4. *Platform Stewardship* - This factor reflects the relationship between the organization and its community. This is an important decision for an organization - it can foster the creation of its own OC (management of the community is a function *internal* to the organization), or it can monitor but otherwise have a hands-off relationship with a community that has been created outside the auspices of the organization (management is *external* to the organization). Some organizations may be unaware of both the existence of an associated community, or of the potential to leverage this community for advantage (*not considered* by the organization).

Web 2.0 technologies that enable interaction are ubiquitous and accessible to all. The degree of perceived authenticity of these interactions is likely to have the effect of mediating the quality of the contribution by the stakeholder. For example independently moderated, spontaneously evolving communities are likely to elicit a more open, honest and unfiltered set of responses than those from sites established, curated and overseen by the organization being commented upon. In this case the obvious presence of the observer is likely to influence the contribution of the community (Vaezi, Torkzadeh and Chang, 2011).

This review of companies comprising the 2015 Fortune 500 list in the United States found that of those that could be considered B2C ie operating in consumer markets, (n=226) only 44 or 19.5% hosted their own easily accessible OC. Of those with a primarily B2B focus (n=274) 31 or 11.3% maintained online stakeholder communities. In contrast, every one of the Fortune 500 companies was the subject of discussion and comment amongst online forums external to



the company. Many of these interactions centered on the investment potential of the companies under discussion. Others consisted of contributors seeking information about employment opportunities and experiences from other community members who had had dealings with the company. Independent and spontaneous communities discussing products, strategies and topical concerns related to the companies were also prevalent.

5. Community Type: Categorisation of type of community utilizes two dimensions: the scope of interests covered in the interactions of community members, and the extent of diversity of interaction enabled by the platform.

Some communities form around very specific topics – they are single interest driven and often quite specialist in nature. A community dedicated to the restoration of a particular model of automobile is unlikely to sustain discussions about politics. Other communities arise in response to a broader range of interests. These might be aligned to a particular brand or cause, or be more general in nature. Members of these communities such as *Quora* and *Straight Dope Message Board* typically start and propagate discussions and encourage the contribution of different perspectives and viewpoints from their community across a range of topics.

‘Diversity of interaction’ in this model reflects the degrees of freedom of participation afforded to the community. Interactions can range from one-sided to many-sided. A one-sided community will have a flow of information that moves from a source to an audience. In a typical one-sided system the audience is either unable to contribute back to the source, or can do so only in a piecemeal fashion without the formation of conversational threads and free-ranging interactions with other audience members being feasible. Some organizations may seek to limit the diversity of interaction to minimise the potential risks associated with open and unconstrained communication. Moving beyond this token activity can be challenging for the organization. It requires it to develop capabilities of managing a more plentiful and diverse range of interactions. However there are numerous examples where organizations have benefitted from a broad and diverse range of interaction. This can be achieved by allowing stakeholders to independently and autonomously create new topics and opportunities for interaction between each other and the organization itself.

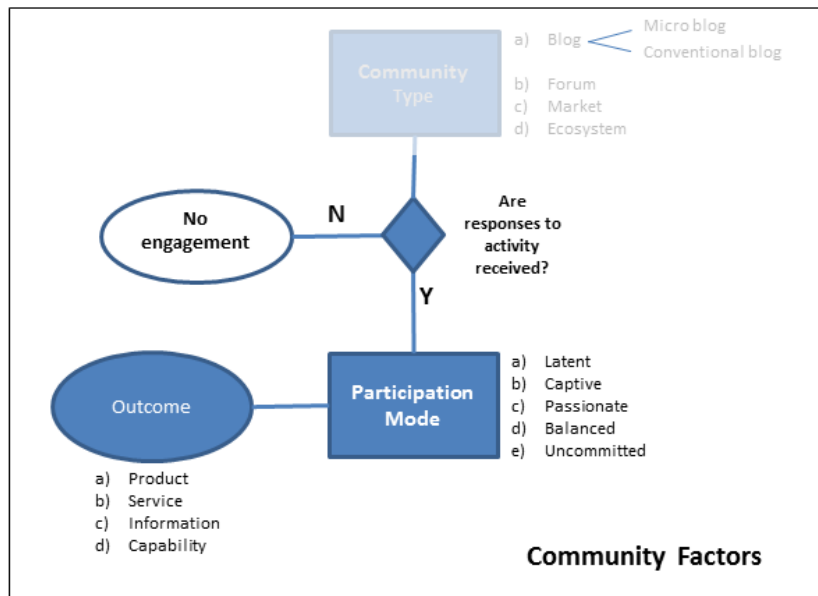
Four community types arise from the scope/diversity interaction. Where the scope of interest is low and the diversity of interaction is also low, the community form is a **blog** (originally called a ‘weblog’). The blog’s author (blogger) is typically an individual or representative with some professed interest or expertise in a particular area, communicating to a community that shares that interest. The number and extent of responses is insignificant compared to the number of viewers of the content. Contrast this to a situation with low diversity of interaction but high scope of interest. This form may be found in online **markets** such as eBay, or Alibaba where the range of topics (ie categories of items for sale) is potentially unlimited, but participants generally relate only within the context of the individual vendors in the market.

The third form is found where the scope of interest tends to be focused while the diversity of interaction is much greater. Online **forums** - sites enabling users to participate in topic-driven discussions - are perhaps the most visible and therefore accessible example of this and lie at the basis of the formation and development of many OCs. The final categorisation occurs when the scope of interest is large and the diversity of interaction is similarly large. Under these circumstances a number of separate communities (based on a common theme) form an **ecosystem** around a particular organization or cause. The subsequent interaction is complex. An example of an ecosystem topology is Lego which engages with a diverse range of communities around the world.

## Community dimensions

Community dimensions flow as a direct consequence of the type of community that mediates the interaction between seeker and solver. As noted previously in this paper the mere fact of an organization participating on a platform doesn't mean that the activity generates responses, and so the engagement or otherwise of potential communities needs to be established in advance of categorizing the participation mode. In those cases where an organization for example hosts a forum but there are few if any responses to the content it posts, no engagement has taken place and there is effectively no community.

**Figure 3:** Community dimensions of OCs



6. **Participation Mode:** While the configuration of the platform is an important enabler of various scopes and diversities of interactions, the actual performance of the community will be significantly impacted by the style of interaction or participation mode demonstrated by the users. When assessed on an empirical basis the following five states are observed:

**Latent:** where the individual in a crowd has not yet become part of a community. The condition precedent necessary for the individual to be motivated to connect has not yet occurred. An example of this is residents in earthquake zones. Their participation in social media may be entirely recreational until a quake hits. The exogenous shock caused by the quake coalesces the latent actors into a cohesive community – the resources of which can then be used by authorities in rescue and remediation efforts.

**Captive:** where interactions between platform and community are a result of there being no practical option. Participation isn't through choice rather it is through necessity (for example, Telstra, Commonwealth Bank of Australia);

**Passionate:** where participation is the result of a free choice to engage on behalf of the members of the community, and contributions come from the participants desire to be heard and to make a positive contribution to the community (Straight Dope Message Boards, Rolex Forums);

**Balanced:** where participation becomes a way of life, not driven by compelling external stimuli but by the incorporation of the platform into the participant's daily routine. Need to participate is often justified as functional rather than driven from a particular need to address issues. An example of this is recreational participation on platforms such as Facebook and Twitter; and

**Uncommitted:** where the bond between platform and community member is weak and irregular – if it exists at all. The platform owner is offering access to the platform through a sense of obligation or to be seen to be contemporary. The potential user may perceive the pages to be a contrivance with little substance and limited ability to actually provide influence (for example The Clorox Company, and their ‘Heritage Community’).

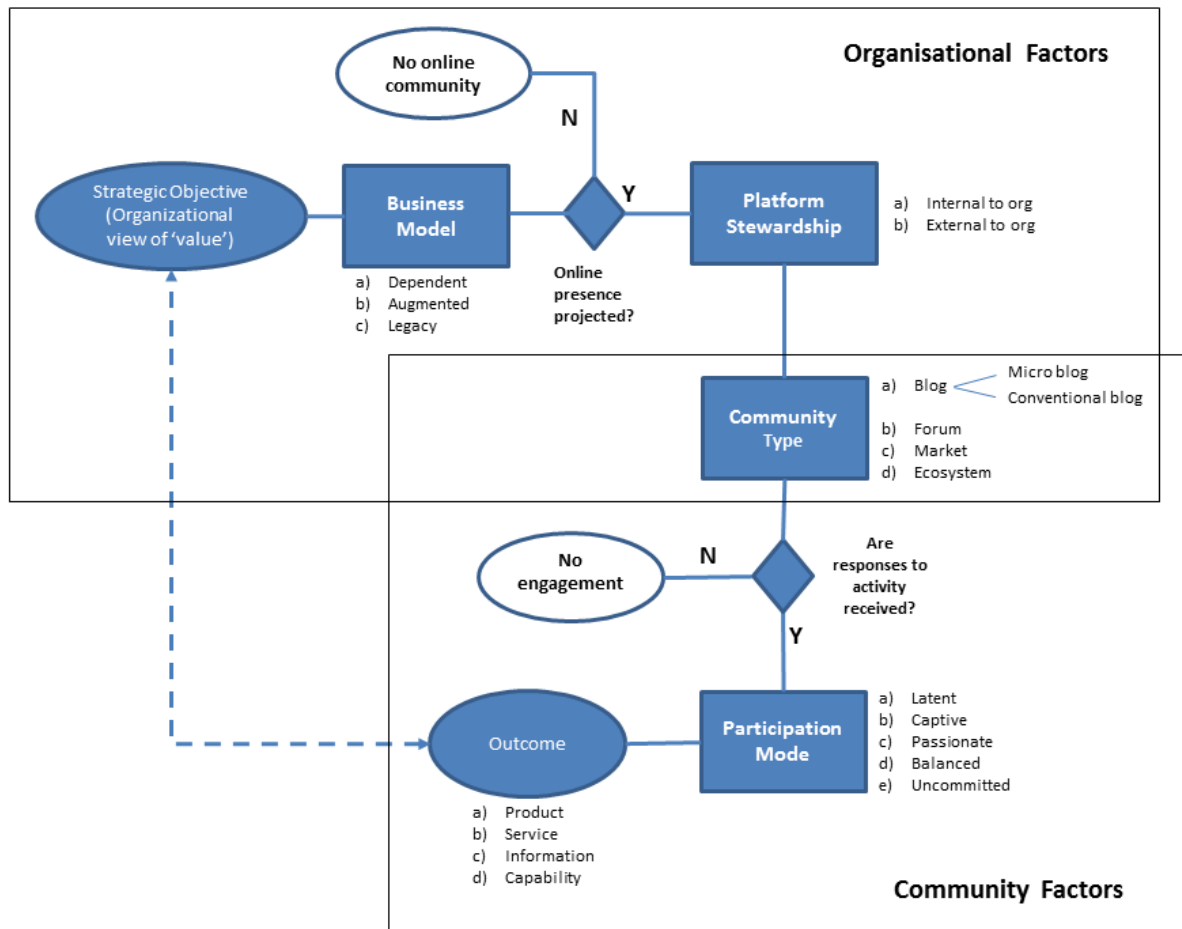
The style of interaction is an important consideration because it contributes to the degree of authenticity and engagement present in the interaction. The standard of contribution arising from authentic and engaged participants is more useful than that of individuals participating on a platform through obligation or lack of choice. An organization seeking to leverage the insights of its community may be disappointed by responses when that community is delivered to the organization through overly moderated or controlled platforms.

7. Anticipated Outcome - A final element of the comprehensive model relates to the nature of outcome sought. The classical dichotomy of goods and service (tangible/intangible) can be extended here to include two additional classifications of outcome; *information* and *capability*. Turning to a community for information is self-explanatory – the information may be in relation to guidance on potential new products and services, understanding better the priorities of consumers, or establishing a clearer picture of the organization’s reputation and brand in the eyes of the market. When an organization turns to a community to either get it to perform tasks on its behalf or solve problems, the community is effectively providing that firm with a capability it did not have previously. Community-based capability building extends the resource-based view of the firm (Barney, 1991) to include the valuable, rare and imperfectly imitable contributions of a community of individuals, each with a perspective and some degree of willingness to contribute.



## EMPIRICAL END-TO-END MODEL

**Figure 4:** End-to-end model of OC interaction



By combining these organizational factors and community factors an empirical end-to-end model can be constructed that accounts for the range of modalities in which community interaction may be accessed by an organization.

This model serves two purposes. It accounts for the range of management decisions contributing to the formation of an interactive online presence, and it provides a framework for troubleshooting when performance of online presence has not matched management expectations. By identifying how each of the model's categories are configured by an organization, opportunities for modifying or enhancing the constituent elements to achieve outcomes more consistent with the strategic objectives of the organization can be undertaken. Attempting to obtain crowdsourced ideas through an *augmented* model using *internal* ownership in *blog* form is unlikely to be successful. Migrating communities from *captive* to *passionate* through relinquishing ownership of a platform may seem like a lessening of commitment, but will likely lead to more authentically engaged communities and better outcomes. Understanding that the elements in this framework have a variety of settings, and that each of those settings is a management controllable has the potential to provide greater access to enriched outcomes as a result of community interactions.

## CONCLUSION

The purpose of this research is to propose a conceptual model of OC development and management in the context of organizational value creation. OCs demonstrate distinct characteristics, and a deterministic and predictive model can be developed through integrating

these typologies with other critical decision points in relation to choose of business model, platform stewardship, community type, participation mode and desired outcome.

## FUTURE RESEARCH

The model developed by this research is conceptual in nature. Future research directions may include a more formal investigation of the nature and characteristics of the linkages between agents, and their impact on performance of the organization seeking to utilize communities in value creation. There is now an abundance of data in accessible with relative ease through new data mining techniques. Artificial Intelligence (AI) algorithms are already enabling meaning to be extracted from large and diverse datasets with relative ease (Kozinets, 2010). As new forms of community evolve investigations may reveal a meta-categorisation of sociological importance across a range of disciplines.

At the heart of these investigations lies the basic human drive for connectedness. And perhaps the most important dimension of this is the authenticity with which relationships form and are carried forward. Just as the notion of community is losing its geographic dependence and becoming more abstracted over time so the challenge of keeping the trust and the humanity in the relationships becomes a more important factor. Future research directions accounting for aspects of authenticity in distributed relationships may provide a stepping off point for a means of further leveraging the potential that exists wherever communities operate.

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## MOTIVES AND BARRIERS FOR GREEN ENTREPRENEURSHIP: A SYSTEMATIC REVIEW

MARIA URBANIEC<sup>1</sup>

### ABSTRACT

Green entrepreneurship, also known as environmental, ecological or sustainable entrepreneurship, is a part of entrepreneurship, integrating the general concept of entrepreneurship with sustainable development, which takes into account environmental, economic and social issues. The inclusion of these factors is inherently related to creating new opportunities for developing the company in a responsible way, while committing it to social and environmental activities. Green entrepreneurship is gaining growing interest in scientific literature. From an analytical point of view, key research issues include the question: What are the motives and barriers for the development of green entrepreneurship? The aim of this article is to identify the influencing factors both determining or impeding the development of green entrepreneurship from a microeconomic perspective. The findings of the study indicate that, in the literature, there are different approaches showing the wide range of opportunities for the development of green entrepreneurship, as well as for overcoming the associated challenges.

**Keywords:** green entrepreneurship, environmental entrepreneurship, sustainable entrepreneurship, innovation, sustainability.

### INTRODUCTION

The growing importance of environmental issues contributes to the development of new trends at the company level (Hall, Daneke and Lenox, 2010). One of the concepts being developed since the 1990s is environmental entrepreneurship. Green entrepreneurship goes beyond environmental management, which involves planning, organising, motivating, and controlling organisational processes, thereby reducing the organisation's negative impact on the environment (Schaltegger, 2002). Nevertheless, green entrepreneurship is gaining growing interest in scientific literature. These issues are no longer simply a subject of scientific debate in environmental management journals but also in many mainstream scientific business journals, such as: *Academy of Management Journal*, *Academy of Management Review*, *Strategic Management Journal*, *Entrepreneurship: Theory and Practice*, *Journal of Business Venturing* (Hall, Daneke and Lenox, 2010).

Based on the critical analysis of literature on ecological entrepreneurship, a lack of conceptual development is still noted (Lenox, York, 2011). In particular, there is no answer to the question of how this concept can be operationalised and what measures can relate to environmental entrepreneurship? In addition, studies on environmental entrepreneurship have evolved over recent years, taking into account various research perspectives, including ethics, entrepreneurship, innovation, economics and environmental issues. Schaper (2002) emphasises that green entrepreneurship is a new concept, offering many opportunities for sustainable business development through innovation. This phenomenon occurs not only in business strategies, but also in the expectations of clients and other stakeholders.

Despite the fact that, over the past two decades, there has been a growing interest in eco-entrepreneurs (Kirkwood and Walton, 2010), most of the literature focuses on the incentives and motivation behind eco-entrepreneurial ventures (Bosman, 2013), as well as the distinguishing features of eco-entrepreneurs (Schaper, 2010). Little attention has been paid to

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<sup>1</sup> Phd, Cracow University of Economics, Department of Entrepreneurship and Innovation, Poland. E-mail:-maria.urbaniec@uek.krakow.pl

the motives and barriers faced by companies involved in the transition to more sustainable development in the environmental dimension. From an analytical point of view, among key research issues is the question: What are the motives and barriers for the development of ecological entrepreneurship? This is an important topic requiring further study. These findings can help companies to properly evaluate potential efforts and make the effective transition towards sustainable development. Moreover, supporting enterprises in their environmental efforts is important because of their impact on the environment, as they contribute to the creation and implementation of new, more sustainable patterns of production and consumption, taking into account the interests of business and social aspects of environmentalism. As shown in previous studies, particularly in small and medium-sized enterprises, there is a desire to pursue action for sustainable development, but there are often many barriers in the way (Condon, 2004).

The aim of this article is to identify the influencing factors determining or impeding the development of green entrepreneurship from a microeconomic perspective. Accordingly, the essence and meaning of green entrepreneurship will be presented. This shows differentiated approaches and the difficulty of operationalising this concept. Next, the motives for and barriers to green entrepreneurship will be identified based on the systematic literature review. Finally, the conclusions will be presented and directions for future research will be suggested. The research methodology includes critical literature analysis, problem analysis, and methods of synthesis.

## **THE CONCEPTUAL BACKGROUND OF GREEN ENTREPRENEURSHIP**

The concept of green entrepreneurship is defined by different terms in the literature: “environmental entrepreneurship”, “enviropreneurship”, “ecological entrepreneurship”, “green entrepreneurship”, “green business”, “ecoentrepreneurship”, “ecopreneurship”, “sustainable entrepreneurship” (Tandoh-Offin, 2010; OECD, 2011). A person or group of people dealing with such activities are also defined differently by researchers as “ecopreneurs”, “enviropreneurs”, “green entrepreneurs”.

The term “eco” indicates the extension of traditional business opportunities and the generation of new entrepreneurial potential. Entrepreneurial activity in this approach is closely connected with environmental protection. In addition, terms such as: sustainable, triple bottom line, green, clean, environmental, eco-friendly, compostable, recyclable, renewable, natural, organic and many others may also apply in the concept of “green” entrepreneurship (Koester, 2016).

The implementation of green entrepreneurship is the conscious choice of the entrepreneur who decides on achieving environmental goals in business (Blue, 1990). Initially Berle (1991) introduced the concept of “green entrepreneurship”, including topics such as recycling, nature conservation and the use of renewable energy. Over time, the concept of green entrepreneurship has also emerged within the context of the green economy as a way of mitigating market failures and promoting social welfare by exploiting environmental opportunities (Meek, Pacheco and York, 2010).

Green entrepreneurship is primarily the process of identifying, evaluating and exploiting economic opportunities that arise during market failures and facilitate the development of enterprises (Gibbs and O’Neill, 2014). Dean and McMullen (2007) have developed an environmental entrepreneurship theory from the perspective of environmental economics, taking into account the concept of market failure. According to their definition, environmental problems are caused by imperfections in the market and, as such, provide an opportunity for entrepreneurs contributing to the improvement of the environment. Market failure in their model is understood as an opportunity, which supports the development of entrepreneurship, assuming that the entrepreneur has knowledge of market failure. This means that market

imperfections are the primary cause of environmentally friendly entrepreneurial activity. An example of market failure are public goods, externalities, monopoly power, government interventions and incomplete market information (information asymmetry).

According to Cooney (2009), green business or sustainable business is a way of doing business that has minimal negative impact on the global or local environment, the community, society or economy. This company strives to meet the triple bottom line (people, planet, profit). Overall, the company is referred to as “green” if it meets the following four criteria:

- takes into account the principles of sustainable development in every business decision,
- provides environmentally friendly products or services replacing the demand for non-organic products and/or services,
- is more ecological than traditional competitors,
- is committed to respecting the rules of environmental protection.

In other words, sustainable business means a company with a dynamic balance between three interrelated elements: (a) ecosystem and natural resources protection; (b) economic efficiency and (c) taking into account social well-being, such as jobs, housing, education, medical care and cultural opportunities (Bell and Morse, 2008). The definitions in the literature show not only a varied conceptual scope, but also multi-faceted possibilities for interpreting ecological entrepreneurship (Table 1).

**Table 1:** Definitions of green entrepreneurship

Author (year)	Notion	Definitions
Lober (1998, p. 26)	environmental entrepreneurship	“the creation of new products, services or organisations to meet environmental market opportunities”
Schuyler (1998, p. 3)	ecopreneurship	“is one market-based approach in which opportunities are identified for improving environmental quality, and then these opportunities are capitalised upon in the private sector for profit”
Isaak (2002, p. 81)	ecopreneurship	“as an existential form of business behaviour committed to sustainability”
Isaak (2002, p. 82)	green-green business	“is designed to be green in its processes and products from scratch, as a start-up, and, furthermore, is intended to transform socially the industrial sector in which it is located towards a model of sustainable development”
Schaltegger (2002, p. 48)	ecopreneurship	“can thus be described as an innovative, market-oriented and personality-driven form of value creation through environmental innovations and products exceeding the start-up phase of a company”
Dean, McMullen (2007, p. 58)	environmental entrepreneurship	“the process of discovering, evaluating, and exploiting economic opportunities that are present in environmentally relevant market failures”
Kotchen (2009, p. 28)	eco-entrepreneurship	“the practice of starting new businesses in response to an identified opportunity to earn a profit and provide (minimise) a positive (negative) environmental externality”
Ndubisi, Nair (2009, p. 22)	green entrepreneurship	“the propensity to innovate or create a green organisation”
York, Venkataraman (2010, p. 456)	environmental entrepreneurship	“is inherently tied not only to the creation of new products and services, but also to the public good of reducing environmental degradation”
Nikolaou, Ierapetritis, Tsagarakis (2011, p. 3)	green entrepreneurship	“the opportunity of entrepreneurs to establish new business focused on natural resources or natural conditions such as ecotourism, recycling, wastewater treatment and biodiversity”

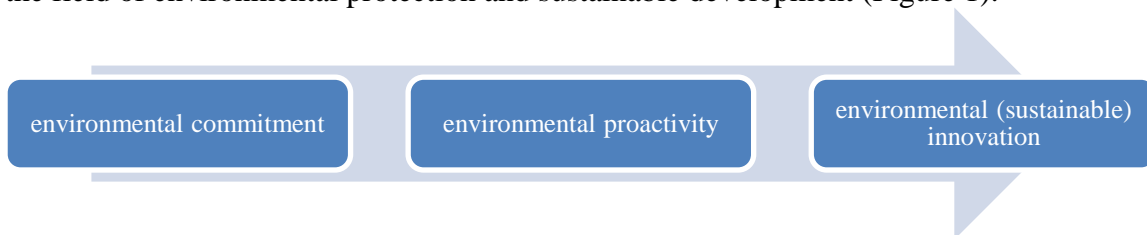
Author (year)	Notion	Definitions
York, O’Neil, Sarasvathy (2016, p. 695)	environmental entrepreneurship	“the use of both commercial and ecological logic to address environmental degradation through the creation of financially profitable organisations, products, services, and markets”

Source: Own elaboration based on a literature review.

Despite the different concepts, the essence of ecological entrepreneurship is to explore new opportunities for eco-innovation, while committing itself to social and environmental responsibility. It is therefore a coherent process of planning and developing ideas, innovations and risk-taking by people initiating such activities. According to the definitions of ecological enterprise, this concept can evolve from the identification of the basic solutions and possibilities of the company’s involvement through the environmental proactivity of the improvement and development of the company’s activities to focus on environmental innovations, which are the result of systematic actions and support transformations towards the green economy or circular economy. To explain green entrepreneurship, the following stages of its development can be identified:

- environmental commitment – this is because the company strictly obeys environmental law, which supports the use of better (innovative) solutions and methods of doing business in an environment with high regard for the sustainable use of resources resulting from environmental regulations;
- environmental proactivity – is understood as business activity aimed at implementing new opportunities to achieve a competitive advantage reflected in the anticipatory behaviour of enterprises ahead of the possibility of change. The diversity of environmental practices that characterise environmental proactivity points to the complexity of this phenomenon, as reflected in the quest to change the perspective and mode of doing business in order to reduce resource use in a rational manner and shift production processes towards sustainable development. In a narrower sense, it is understood as the process of being integrated in the management of the organisation through prevention techniques and management systems.
- environmental innovation – reduces cost by conducting environmentally friendly economic activities and supporting the strategic development of the company by creating economic, environmental and social value in the short and long term.

On this basis, it can be seen that environmental entrepreneurship is evolving in three stages, starting with environmental commitment, through proactivity to innovative activities in the field of environmental protection and sustainable development (Figure 1).



**Figure 1.** Conceptual model of green entrepreneurship development

Source: Own study.

To summarise, ecological entrepreneurship is a diversified market-based approach to identify opportunities for improving quality of life through good environmental practices. This concept need not be limited to new ventures. In fact, ecological entrepreneurship is applicable to both large enterprises (Miles, Munilla and Darroch, 2009), as well as small and medium-sized enterprises seeking to improve the environmental issues of companies (Cooney, 2009). Given the diverse concepts and definitions in the literature, as well as the evolving nature of green entrepreneurship, it should be emphasised that this concept refers to environmentally



friendly ways of conducting innovative business activities dependent on many factors determining and inhibiting its development.

## **MOTIVES AND BARRIERS OF ENVIRONMENTAL ENTREPRENEURSHIP**

The implementation of ecological entrepreneurship is conditioned by many factors, which can constitute both an opportunity and a challenge. These are, for example, regulatory environment, political support and market conditions, access to finances, the creation and diffusion of knowledge and technology, entrepreneurial capacity and organisational culture. According to the conceptual model of green entrepreneurship proposed in the previous chapter, the motives and barriers found in the literature can influence every stage of its development.

### **Motives for environmental entrepreneurship**

The basic factors supporting the development of green entrepreneurship are environmental regulations, which is a factor supporting the environmental commitment of enterprises. Particularly noteworthy here is the so-called Porter's hypothesis (Bitat, 2012). According to this hypothesis, restrictive environmental legislation can increase productivity and encourage innovation that contributes to improving the competitiveness of enterprises. Porter and van der Linde (1995, p. 128) emphasise that properly designed legal regulations in this area can influence the company's innovation by:

- signalling the current state of resource inefficiency and technological improvement opportunities,
- raising awareness of companies and undertaking corrective actions if the purpose of these regulations is to provide information,
- reducing uncertainty about return on investment,
- motivation to achieve innovation and making progress,
- ensuring equal conditions of competition, and this is necessary in the case of incomplete compensation.

In addition to the regulatory environment, Porter and van der Linde (1995, p 127) point to an improvement in revenue as a result of the predominance of the market. They explain that the environmental aspects can be seen as an opportunity for competitive advantage. Leading companies on new markets especially can expect to benefit from the primacy of the market and improve the company's image, which allows them to set higher prices for organic products. Green entrepreneurship can be a source of competitive advantage by reducing costs (Porter and Van der Linde, 1995), product differentiation, or new business opportunities (Tomomi, 2010), which should have a positive impact on economic performance, and contribute to reducing the environmental impact of companies.

Motives supporting the development of ecological entrepreneurship include: the ability to transform environmental issues into eco-efficient products through effective strategic planning and marketing. These actions are also positive environmental situations that can be controlled through the pursuit of using environmental opportunities as an intentional process resulting from the feasibility and perception of desirability (Krueger, 1998). Other studies also confirm that the effectiveness of implementing sustainability activities depends on the personal involvement and support of managers (Rainey, 2010).

Schaltegger (2002) states that, in order for a company to have a positive impact on the environment, it must make a real and significant contribution to advancing the environment. This is reflected in environmentally friendly production processes, products and services. A significant contribution means that the company exerts a significant influence on the market by expanding the market share or influencing competition and other market players (e.g. suppliers) to adopt the best environmental solutions reflected in eco-innovations.



Shepherd and Patzelt (2011) argue that the essence of a green entrepreneurship is to explore new opportunities for the further development of the green market through innovation and a commitment to corporate social and environmental responsibility. Due to the longer payback period combined with its social responsibility (Lin, Chang and Dang, 2015), green entrepreneurship often requires strategies that support this process and are widely recognised by society. The essence of green entrepreneurship is not only entrepreneurship and care for the environment, but also the issue of innovation. Innovation is important in terms of entrepreneurial benefits and new opportunities. Wagner (2009) outlined four main types of benefits that affect the competitive advantage of enterprises:

- market-related competitive advantage – refers to sales, product image, new market opportunities and market share,
- image-related competitive advantage – relates to corporate image, owner and shareholder satisfaction, management satisfaction as well as worker satisfaction,
- efficiency-based competitive advantage – refers to profitability, cost savings and other financial indicators,
- risk-related competitive advantage – relates to improved insurance conditions and better access to bank loans.

Environmental benefits may be either the primary goal of innovation or the result of other assumptions. Eco-innovation generates changes not only in businesses but also in their environment, i.e., within existing socio-cultural norms and institutional structures (Urbaniec, 2015). According to the current trend of socio-economic development, it can be assumed that environmental and ecological issues are becoming increasingly important also in the context of innovative processes.

As shown by numerous studies, many organisations treat environmental activities as single (separate) tasks related to waste minimisation, pollution control, recycling, etc. The analysis carried out among European SMEs (European Union, 2016) also shows that their involvement is limited to individual actions, chiefly reducing waste and reusing energy in order to reduce consumption. Nevertheless, it should be emphasised that, in many cases, green business practices do not exist in isolation but rather develop in the form of a comprehensive business and culture philosophy leading to better business performance (Nair and Menon, 2008) and competitiveness. On this basis, it can be seen that the implementation of individual actions in selected areas is an important milestone in the development of their environmental pro-activeness and, consequently, eco-innovations.

### **Barriers to environmental entrepreneurship**

By analysing the barriers to the development of ecological entrepreneurship, we can also see a wide range of factors that inhibit or restrict not only the commitment of companies to take environmental actions, but also to develop proactivity and implement innovations.

Post and Altman (1994) classified the various problems related to environmental entrepreneurship, taking into account compliance-based barriers, market-driven barriers and value-driven barriers. Whereas compliance-based barriers consist of rules and regulations, national, regional and global cooperation agreements, market-driven barriers and value-driven barriers are seen as alternative solutions for regulatory actions aimed at controlling the poor state of the environment. A similar classification of barriers was made by Sinding (2000), who distinguished the institutional, economic and organisational barriers.

According to Newton (2005), the key barriers to green entrepreneurship relate to:

- lack of implementing regulations,
- unfavourable environmental conditions,
- resistance of potential consumers and users of services provided by eco-entrepreneurs in order to transition to alternative products and technologies,

- insufficient intellectual property right protection.

There are many similar barriers in the literature. Frequently mentioned barriers include incomprehensible legal requirements and non-perceivable benefits, such as cost reduction (Condon, 2004). In addition, financial difficulties, lack of time, skills and qualified staff are cited as major obstacles to the development and implementation of sustainable innovation by SMEs (Vasilenko and Arbačiauskas, 2012).

According to Brammer, Home and Merchant (2012), the following are considered as important barriers:

- insufficient financial resources, which are often the main cause of insufficient commitment to environmental protection for SMEs,
- lack of human resources, and in particular lack of necessary knowledge on broadly understood sustainable development, and on ecological issues.

In addition, SMEs perceive environmental issues as secondary (Spence, 1999), and even as extra and unnecessary work. This has been confirmed by recent research, which indicates that many small and medium-sized enterprises have a desire to work towards sustainable development, but often face many barriers. The key problems identified by the European SMEs – based on the results of research on “European SMEs and the Circular Economy” (European Union, 2016) mainly include: complex administrative and legal procedures (34%) and the costs associated with adapting to regulations and standards (32%) (European Union, 2016, p. 32). Slightly over one quarter of European companies mentioned difficulties in access to finances (27%), and at least one in five – lack of expertise (22%) or lack of human resources (21%). Some authors emphasise the low level of awareness of SMEs on support facilities and information sources, which is often associated with a lack of relevant knowledge (OECD, 2015). For SMEs, in particular, the acquisition of expertise in environmental issues is seen as too costly (Mandl and Dorr, 2007).

These barriers are also reflected in other studies available in the literature. Eco-entrepreneurs can take advantage of what may initially appear to be barriers and transform them into new opportunities through innovation, risk-taking, far-reaching visions, and engagement. Keogh and Polonsky (1998) state that entrepreneurship is focused on a vision that allows entrepreneurs to go beyond the boundaries of the available resources and identify opportunities that have been overlooked by others. Both motives and barriers can occur at any stage of the development of ecological entrepreneurship (Table 2).

**Table 2:** Motives and barriers at various stages of the development of ecological entrepreneurship

Stages	Motives	Barriers
Commitment	<ul style="list-style-type: none"> <li>• restrictive legislation promoting productivity and innovation</li> </ul>	<ul style="list-style-type: none"> <li>• lack of implementing regulations,</li> <li>• complicated administrative and legal procedures</li> <li>• costs associated with compliance to regulations and standards</li> </ul>
Proactivity	<ul style="list-style-type: none"> <li>• the advantage of being first on the market (competitiveness)</li> <li>• improving the image</li> </ul>	<ul style="list-style-type: none"> <li>• lack of perceiving benefits</li> <li>• difficulties in accessing finances</li> </ul>
Innovation	<ul style="list-style-type: none"> <li>• ecological market development through innovation</li> <li>• social and environmental responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• lack of expertise</li> <li>• lack of human resources</li> </ul>

Source: Own study.

Based on a review of barriers and motives, it can be assumed that:

- An important issue here is the institutional context that exists in a given country, which has an impact on the development of ecological entrepreneurship, because environmental activities are significantly influenced by legal regulations and government support (Cooney, 2009). Therefore, the role of policy is important with regard to environmental activities.
- In many cases, green business practices do not exist in isolation, but rather in the form of developing a comprehensive business philosophy and culture, leading to the improved performance of the company (Nair and Menon, 2008) and competitiveness. On this basis, it can be seen that the implementation of individual actions by companies in selected areas is an important stage in the development of their green entrepreneurship.
- Furthermore, the size of enterprises is an important factor affecting motives and barriers. For example, many similar barriers identified by SMEs that address environmentally friendly actions can be found in the literature. Frequently mentioned barriers are incomprehensible legal requirements and non-perceived benefits, such as cost reduction (Condon, 2004).

An important role in the development of ecological entrepreneurship is attributed not only to legislation, government regulations and industry supporting agencies, but also to NGOs, venture capital funds and local communities. Government actions and environmentally conscious stakeholders can provide support for environmental entrepreneurs in the financing of innovation, but may also pose serious obstacles to the development of entrepreneurship in the most ecologically advanced societies, with regard to restrictive rules and legal requirements.

## CONCLUSIONS

The development of ecological entrepreneurship is essential for the economy where, by carrying out various environmental actions in companies, it is possible to create good conditions for the sustainable development of the economy. It has recently become apparent that companies are pro-active in taking action to protect the environment, which often provides an opportunity for innovative enterprise development. Green entrepreneurship is closely linked to eco-innovation, which can be reflected in the different changes in technology, products, organisational structure and organisational management, reducing negative impact on the environment. This means that efforts to protect the environment are not only an opportunity for the innovative development of enterprises, but also support overcoming existing problems.

Based on the analysis, it can be stated that the existing definitions of ecological enterprises refer to the varying degrees of progress of the core business, taking into account environmental issues. Despite different concepts and definitions, the common feature is that entrepreneurship is the idea of developing environmental business, while demonstrating concern for the social and environmental needs of present and future generations (Schaper, 2002). The three-stage model was developed to operationalise the concept of green entrepreneurship. Green entrepreneurship takes place at various stages of commitment from businesses through the proactive phase, to the implementation of new solutions (eco-innovation). Within these stages, some determinants provide support, while others inhibit its development. For example, legislation can have a positive effect in some cases, and a negative impact in others. This is dependent, among other factors, on the institutional context of the country (i.e. different environmental regulations in different countries), as well as on the size of enterprises (small and medium-sized enterprises versus large companies).

The key objective of green entrepreneurship should not only be to improve the compliance of companies with environmental regulations, but also to increase their responsibility for environmental issues. As a result, it can contribute to the implementation of

eco-innovations and the achievement of economic and ecological benefits, leading companies towards green businesses, understood as an activity having a positive impact on the environment, and is a chance for the innovative development of the company.

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## AN INVESTIGATION INTO THE IMPACT OF TRAINING AND DEVELOPMENT ON ENHANCING STUDENTS' EMPLOYABILITY

INDU RANI<sup>1</sup> AND SAKSHI<sup>2</sup>

### ABSTRACT

**Introduction:** Rapid forces for change in the post-modern society have left their mark on the labour market, creating a metamorphosis in the nature of work and the way in which individuals approach their careers. Organizations are responding to swift technological changes, increased customer demands and globalisation by implementing work structures that support adaptability and flexibility.

**Objective:** The research aims to fulfilling the following objectives: The goal of this research is to study the impact of training and development on enhancing students' employability and to study the influence of academic training with complementary activities and tasks meant to improve some of the competencies and skills.

**Research Methodology:** The researcher utilized amount inspecting partitioning into the NCR said above and in each of these zones non-random of purposive/Judgmental testing is utilized with the end goal of review.

**Findings:** It was found from the study without training practices experiential training or career management There was no positive and significant relationship exists between college support, support from colleagues on Internal employability as well as external employability. It clearly indicated the importance of training for the employability of the graduate students. It was found from the study that there positive and significant relationship exists between Training Practices on Internal employability and external employability. So the graduate student needs to really work on the training practices in order to get place externally.

**Keywords:** Internal Employability, Training and Development, External Employability.

### INTRODUCTION

Rapid forces for change in the post-modern society have left their mark on the labour market, creating a metamorphosis in the nature of work and the way in which individuals approach their careers. Organizations are responding to swift technological changes, increased customer demands and globalisation by implementing work structures that support adaptability and flexibility (Van Dam, 2004, p29). Companies that want to be competitive therefore have to react to these changing market conditions by being smarter, smaller and swifter (Hall and Moss, 1998, p 22), often resulting in constant processes of restructuring and employee redundancies, which are forever changing traditional bureaucracies (Baruch, 2004, p 58; Brown, Hesketh and Williams, 2003, p 107). In the face of a volatile business environment that no longer offers long-term employment (Rothwell and Arnold, 2007, p 24) and clear linear career ladders (Baruch, 2004, p 60), new career paths for employees are knowledge-driven (Brown et al., 2003) and include frequent changes in employer and even in occupations, lateral instead of vertical job moves and interruptions in employment (Reitman and Schneer, 2008,p 19). These shifts have resulted in organizations explicitly encouraging workers to take active responsibility for and manage their own learning and development throughout their careers (King, 2004, p 113; Quigley and Tymon, 2006, p 523; Williams, 2005, p 34). This requires

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1 Main Author, Assistant Professor, Bharati Vidyapeeth Institute of Management & Research, India. E-mail:- sapnachaudhary05@gmail.com

2 Co-Author, Assistant Professor, Bharati Vidyapeeth Institute of Management & Research, India. E-mail:- dhandasakshi192@gmail.com



individuals with the type of knowledge, skills, creative potential and dispositions (Tomlinson, 2007, p 285; Williams, 2005, p 34) to maintain and enhance their attractiveness in the labour market (Rothwell and Arnold, 2007, p 24). In essence, individuals must take a more adaptive, flexible and proactive approach to manage their careers (Hall and Moss, 1998; Tomlinson, 2007; van Veldhoven & Dorenbosch, 2008), which also involves the management of their employability (Tomlinson, 2007, p 286).

## REVIEW OF LITERATURE

According to Fugate, Kinicki and Ashforth (2004, p 15) an individual's employability includes a multitude of person-centred constructs that interactively fuse to assist individuals in successfully adapting to numerous work-related changes in the economy. From this perspective, employability is viewed as a "... psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface" (Fugate et al., 2004, p 15). An individual's employability therefore extends beyond knowledge and skills to include individual attributes and characteristics that make individuals valued assets to both prospective and current employers. The responsibility lies with the individual to manage and develop his or her career, and it is important that individuals know what their career needs are (Van der Heijde and Van der Heijden, 2006, p 450) and what they can do to improve their employability so as to be successful in their careers. For the purposes of the study, the focus is on individuals' suitability for employment, and not actually obtaining an appropriate job (Yorke and Knight, 2007, p 158), which depends on factors such as demand for labour locally and internationally (Gazier, 2001, p 9) and the economic circumstances of the time (Brown et al., 2003, p 110). Employability in this context therefore relates to the value of individuals with regards to future employment opportunities (Schreuder and Coetzee, 2006, p 37), and emphasises individual-level employability.

Being employable is especially relevant to graduates at the brink of their careers. In this regard Harvey (1999, p 4) defines graduate employability as "... the propensity of the graduate to exhibit attributes that employers anticipate will be necessary for the future effective functioning of their organisation". It should be noted from this definition that employability is not the same as employment, although higher employability increases the chance of obtaining employment. Yorke (2006, p 8) accordingly defines employability as the skills, understandings and personal attributes that make graduates more apt to obtain employment and be successful in their occupations to their own advantage, but also to the advantage of the labour force, the community and the economy.

Individuals enter higher education mainly to improve their future employment opportunities, but a degree no longer secures employment. Companies expect, apart from academic capabilities, additional qualities and competencies of individuals that will facilitate the most successful and speedy transition from higher education to the workplace (Holmes and Miller, 2000, p 655). In fact, employers seek to recruit new graduates that can instantly become involved in delivering value to the company, without having to make use of extended induction programmes (Barthorpe and Hall, 2000, p 165). Such expectations requires graduates to display qualities that will enable them to "hit the ground running" and stay abreast of the latest developments in a changing work environment. To this effect, the attributes needed to make graduates employable in the new world of work need to be investigated.

Despite the obvious significance of employability and widespread interest in the topic, it remains conceptually ambiguous (Harvey, 2001; McQuaid and Lindsay, 2005) and there is a lack of empirical studies that explain its foundation (Fugate et al., 2004, p 16). Moreover, relatively few studies have attempted to construct an instrument explicitly gauging employability (see for example Fugate et al., 2004; Fugate and Kinicki, 2008; Rothwell and Arnold, 2007; Van der Heijde and Van der Heijden, 2006), and fewer still have focused on



developing accurate measures to assess the employability of graduates in particular. Instead, crude measures of graduate employability have been used as a gauge of the quality of higher education (Lindberg, 2007; Harvey, Locke and Morey, 2002; Pool and Sewell, 2007, p 278). Consequently, there remains a major gap in the literature in understanding the employability of graduates. Within the South African environment, even fewer attempts have been made to measure the employability of graduates, although Coetzee's (2008) Psychological Career Resources Inventory provides valuable insights into enhancing employees' career meta-competencies – an important component of their general employability.

Training programs are the essential features of Organizational life (Sandi and Robertson, 1996), they are the salient features of the competitive organization's corporate strategy, and in times of great change, learning is the key to success (Tennant, Boonkrong and Roberts, 2002). In the post-industrialization era, training assumed greater significance. The concepts of Frederick Winslow Taylor, Henry L. Gantt, Fank and Lillian Gilberth etc. who invented a better method of 'doing a thing', concretised the need for training. Practitioners and academicians have tried to define Training with time, by adding new dimensions to it, which are industry relevant. There are many trends relevant to impart training in the organizations, on-the-job training and off-the-job training. E-learning is becoming pre-dominant replacing traditional learning programs due to constraints of time, and motivation. Although there are many quantitative and qualitative tools to measure Training effectiveness, like Kirkpatrick Model, CIRO Model, Jack Phillip Model etc., training activities still lack in terms of absolute effectiveness. This study has aimed to develop a holistic model, which evaluates the (i) Individual characteristics of employees and (ii) Training effectiveness, after the training is imparted. "Training, as defined in the present study "is the planned intervention that is designed to enhance the determinants of employability". Training plays significant role in achieving organizational objectives by keeping in view the interest of employees and organization (Stone J.R. human resource 2002). To achieve the organizational goals employee performance is important that depends on a variety of factors. But training receives high importance as it improves the skills, capabilities, confidence and competencies. Training includes 'soft' skills such as software training, management training whereas development focuses upon the activities that enhances employee skills for future. Employee development is a long term process that comprises, mentoring, succession planning, coaching etc.

Given the importance of the construct to employees in general, and graduates in particular, the overall purpose of the study was to study the impact of training and development on the employability amongst the students. In order to fulfil the objective, the conceptual model developed for Rothwell (2008) has been taken to determine the variables that employability and it has been linked with the initiatives of training and development. the scale has been culturally modified to match the objectives undertaken.

A new career era has dawned in which a volatile work environment dictates that individuals need to be flexible and adaptable in order to be marketable to various employers. This has resulted in the surfacing of new career forms and new ways of working, which signifies the necessity for more research into employability (Clarke, 2008, p 261). Employability, however, remains a contentious topic with conflicting definitions and conceptualisations (Hartshorn and Sear, 2005, p 272; Rothwell and Arnold, 2007, p 24) and a lack of theoretically informed research (Brown, et al., 2003, p 109; Fugate et al., 2004, p 33). Bridgstock (2009, p 31) adds that this contention extends to the attributes that tertiary students need to promote their employability. Attempts to measure employability outcomes have encountered even greater problems than efforts to define the concept (Cranmer, 2006, p 173). There has been a tendency to adopt "narrow" approaches to assess employability based on initial graduate destination indicators (Bridgstock, 2009, p 33; Pool and Sewell, 2007, p 278), while others focus on sets of skills that employers require from graduates entering the new

world of world (Holmes, 2001). Employability, however, extends beyond these knowledge, skills and abilities (Fugate and Kinicki, 2008, p 505) to include a broader collection of individual attributes and actions (Fugate et al., 2004, p 18). There are consequently a limited number of sound measures of employability, and graduate employability in particular.

In light of these aspects, as well as the fact that the India environment has scant research on the topic in this context, it is necessary to (re)examine the construct of employability in order to operationalise the term and to determine the variables employability consists of and how it can be measured. In this way the characteristics that help individuals be adaptable in a constantly changing economy can be identified and areas of development can be highlighted that will help those yet to start working, or already employed, to be desirable to current and future employers.

The definition of employability adopted in this article follows this broad conception and it is best encapsulated by M. Yorke and P. Knight (2006, p 5) as ‘a set of achievements – skills, understandings and personal attributes – that make college students more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy’.

In accordance with those views that understand employment as an aspect of quality in higher education (Støren and Aamodt, 2010), Knight and Yorke (2004, p 8) maintain that such practices should be appealing to any university committed to the improvement of their teaching programmes and learning outcomes, since ‘the principles of good learning and those for enhancing employability tend to be congruent’.

## OBJECTIVES OF THE STUDY

In light of the above, the research aims to fulfilling the following objectives:

- The goal of this research is to study the impact of training and development on enhancing students’ employability.
- To study the influence of academic training with complementary activities and tasks meant to improve some of the competencies and skills.

## Research Questions:

- How can graduate employability in relation to Training and development be conceptualised in a theoretical model
- Is there positive relationship exists between Training and Development on Internal employability?
- Is there positive relationship exists between Training and Development on External employability?
- Is there positive relationship exists between various aspects of Training and Development on employability?

## Hypothesis

1. There positive and significant relationship exists between Training Practices on Internal employability
2. There positive and significant relationship exists between Experiential Training on Internal employability
3. There positive and significant relationship exists between career management on Internal employability
4. There positive and significant relationship exists between Training Practices on External employability
5. There positive and significant relationship exists between experiential Training on External employability

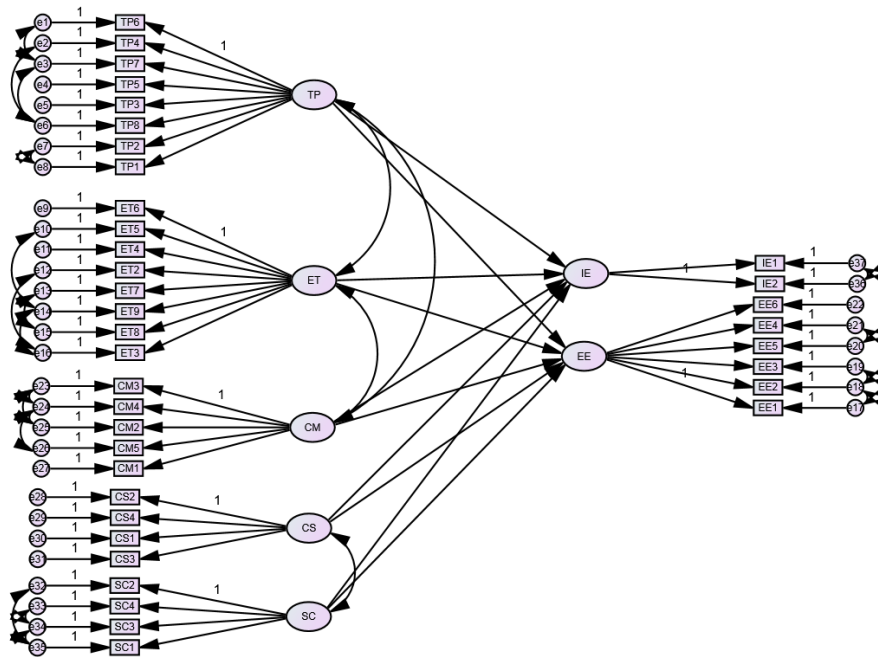
6. There positive and significant relationship exists between career management on External employability
7. There positive and significant relationship exists between college support on Internal employability
8. There positive and significant relationship exists between support from colleagues on Internal employability
9. There positive and significant relationship exists between college support on External employability
10. There positive and significant relationship exists between support from the colleagues on External employability

## RESEARCH METHODOLOGY

The researcher utilized amount inspecting partitioning into the NCR said above and in each of these zones non-random of purposive/Judgmental testing is utilized with the end goal of review. It is an examining system in which the example is gotten by selecting helpful populace units. With the end goal of the study, essential information was gathered with the assistance of a generally drafted Questionnaire given to graduate students. Further, Judgmental examining was taken after, as it is suitable for exploratory studies. Further Judgmental or purposive examining strategy was utilized for two reasons firstly respondents are chosen on the grounds that they happen to be in opportune spot at the ideal time and alternate is, comfort inspecting method is not proposed for elucidating or cool research yet they might be in exploratory examination for creating plans [Malhotra, 2005].

## ANALYSIS AND INTERPRETATION

(SEM) was employed in this study to test proposed model and hypotheses and used AMOS as the analysis instrument. For parameter estimation, maximum likelihood method was adopted. Measurement model and structural model test were used to test fitness of the model. To assess direct and indirect relationships among the studied variables the researchers have followed a two-step procedure using confirmatory factor analysis and structural equation modeling (Anderson & Gerbing, 1988). Amos has been used to perform these analyses. In the Model of all paths from the Impact of Training and Development on Employability have been examined. The paths from dimensions of Training and Development initiatives have been examined. The path from the dimensions of Perceived support has been examined and finally the path from the employability has been examined. Confirmatory factor analysis (CFA) was conducted to have a more rigorous interpretation of cyber entrepreneur motivation. The CFA model or Measurement model was employed to identify and determine the relationships of variables within the model. To evaluate the goodness-of-fit of model several measures of indices are used as suggested by Hair et al. (1998), Iacobucci (2010), Schumacker (1992): Chi-square/degrees of freedom ( $\chi^2/df$ ) ratio, root mean-square error of approximation (RMSEA), goodness of fit index (GFI), Normal fit index (NFI), comparative fit index (CFI), incremental fit index (IFI). Finally overall model Model3 was examined, by studying the impact of Training and development and Perceived support on Employability.



**Summary Table-Model**

The Normed Fit Index (NFI)	0.888	The Normed Fit Index (NFI) Exceeds .90 (Byrne, 1994) or .95 (Schumacker & Lomax, 2004)
Incremental fit index, IFI	0.906	IFI should be equal to or greater than .90 to accept the model
the Tucker-Lewis Index (TLI)	0.879	the Tucker-Lewis Index (TLI) should be nearer to 1
The Comparative Fit Index	0.905	The Comparative Fit Index exceeds .93 (Byrne, 1994)
The Goodness of Fit Index	0.931	The Goodness of Fit Index exceeds .90 (Byrne, 1994)
RMSEA	0.075	the RMSEA (good models < .08)

**Regression Weights: (Group number 1 - Default model)**

			Estimate	S.E.	C.R.	P	Label
IE	<---	TP	-.201	.061	-3.316	***	
IE	<---	ET	-.733	.146	-5.014	***	
IE	<---	CM	2.750	.390	7.047	***	
EE	<---	CS	-.097	.036	-2.697	.007	
EE	<---	SC	.052	.039	1.332	.183	
IE	<---	CS	-.103	.052	-1.983	.047	
EE	<---	TP	-.167	.057	-2.932	.003	
EE	<---	ET	-.858	.141	-6.087	***	
EE	<---	CM	3.070	.401	7.663	***	
IE	<---	SC	.137	.057	2.412	.016	

1. There positive and significant relationship exists between Training Practices on Internal employability **Accepted**
2. There positive and significant relationship exists between Experiential Training on Internal employability **Accepted**
3. There positive and significant relationship exists between career management on Internal employability **Accepted**
4. There positive and significant relationship exists between Training Practices on External employability **Accepted**
5. There positive and significant relationship exists between experiential Training on External employability **Accepted**
6. There positive and significant relationship exists between career management on External employability **Accepted**
7. There positive and significant relationship exists between college support on Internal employability **Accepted**
8. There positive and significant relationship exists between support from colleagues on Internal employability **Accepted**
9. There positive and significant relationship exists between college support on External employability **Accepted**
10. There positive and significant relationship exists between support from the colleagues on External employability **Not Accepted**

### **FINDINGS OF THE STUDY**

It was found from the study that without training practices experiential training or career management There was no positive and significant relationship exists between college support, support from colleagues on Internal employability as well as external employability. It clearly indicated the importance of training for the employability of the graduate students, in the same way, According to Saleem and Mehwish (2011) training is an organized increase from the know-how skills and sensations needed for staff members to execute efficiently in the offered process, as well as, to operate in underling situation. Moreover, it also enhances the capabilities of panel of employees in very effective way by motivating them and transforming them in to well organize and well-mannered, that ultimately affects the performance of organization. Laing (2009) defines training as an indicator to enhance superior skills, knowledge, capabilities and outlook of the employees that results in effective performance of the workers. However, he adds one thing more that it (training) extends the production of the organization. Massod (2010) and Khanfar (2011) argued that training is an active means to enable individual to make use of his capability and his potential capability.

It was found from the study that there positive and significant relationship exists between Training Practices on Internal employability and external employability. Pool and Sewell (2007), therefore, expanded the model to include a greater focus on the importance of reflection and evaluation as a technique which leads to self-efficacy, self-awareness and self-confidence. Subsequently, these three self-reflective concepts increase the likelihood of graduate employability. Andrew and Higson (2010) who conducted thirty interviews with business graduates from four European countries to explore the concept of graduate employability. In the same way, they found that students perceived themselves as employable through hard skills which referred to proper engagement with their course material and therefore led to an understanding of their subject as well as being able to adapt the information and apply it within a work context. In addition to this, they found that students believed that interpersonal skills and communication, known as soft skills, were critical in their ability to secure employment and maintain it (Andrews and Higson, 2008).

It was also found from the research that there positive and significant relationship exists between Experiential Training on Internal employability as well as external employability The findings revealed that there were eight dimensions of internal graduateness which included: (1) interactive skills; (2) problem-solving and decision-making skills; (3) continuous learning orientation; (4) enterprising skills; (5) presenting and applying information skills; (6) goal-directed behaviour; (7) ethical and responsible behaviour and (8) analytical thinking skills (Coetzee, 2012). Also, Al-Alawneh (2009) examined educators and employers' perceptions on employability skills of graduates from career and technical education institutions as perceived by both educators and employers. The results show that employers and educators agreed on their need of the following employability skills: teamwork skills, communication skills, and work ethics.

The research also revealed that there positive and significant relationship exists between career management on Internal employability and external employability Also, Al-Alawneh (2009) examined educators and employers' perceptions on employability skills of graduates from career and technical education institutions as perceived by both educators and employers. The results show that employers and educators agreed on their need of the following employability skills: teamwork skills, communication skills, and work ethics.

In the overall model, was considered the findings were very different it was found that there positive and significant relationship exists between Training Practices on Internal employability as well as external employability. Similarly, there positive and significant relationship exists between Experiential Training on Internal employability and External employability. In the same way, there positive and significant relationship exists between career management on Internal employability and External employability. And Lastly, there positive and significant relationship exists between college support on Internal employability as well as External employability. But though, there positive and significant relationship exists between support from colleagues on Internal employability but, there was no positive and significant relationship exists between support from the colleagues on External employability. So the graduate student need to really work on the training practices in order to get place externally. Education is backbone within the development of a new society and teacher incorporates a pivotal role within the education system. Every community invests inside the teacher schooling by creating the teachers' prospective in training methodologies and ways of ensure maximum outcomes through the system. In Pakistan key teacher's education is a pivotal thought of diverse national and also international companies. These institutions are continuously adding to develop the teacher's skills at fundamental level (Shah and Rehana, 2011). Undoubtedly good quality connected with education can be directly related to the improvement connected with instructional aims, training applications, curricula, services, tools in addition to management design nonetheless it is merely the teacher whom put life straight into the frame (Shah and Rehana, 2011). Olaniyanand Ojo (2008) identify the training is important because it increase productiveness, improves the good quality of work; increases skills, knowledge, develop the attitude; enhance using tools, reduces waste, mishaps, turnover, lateness, absenteeism and also other overhead costs, eradicates obsolesce in knowledge, technologies, methods, items, capital management and so forth. It brings incumbents to that level of effectiveness which needs the performance with the job; enhance your implementation of brand new policies and regulations; prepares people for achievement, improves the employees' growth and ensures survival and growth of the organization.

## IMPLICATIONS

In the development of organizations, training plays a vital role, improving performance as well as increasing productivity, and eventually putting companies in the best position to face competition and stay at the top. This means that there is a significant difference between the

organizations that train their employees and organizations that do not (April, 2010). Training is a type of activity which is planned, systematic and it results in enhanced level of skill, knowledge and competency that are necessary to perform work effectively (Gordon, 1992). There exists a positive association between training and employee performance. Training generates benefits for the employee as well as for the organization by positively influencing employee performance through the development of employee knowledge, skills, ability, competencies and behavior (April, 2010). Organizations that are dedicated to generating profits for its owners (shareholders), providing quality service to its customers and beneficiaries, invest in the training of its employees (Evans and Lindsay, 1999). The more highly motivated a trainee, the more quickly and systematically a new skill or knowledge is acquired. That is why training should be related to money, job promotion, and recognition etc, i.e. something which the trainee desires (Flippo, 1976). There are four prerequisites for learning: Motivation comes first. Cue is the second requirement. The learner can recognize related indicators (cue) and associate them with desired responses with the help of training. Response comes third. Training should be immediately followed by positive reinforcement so that the learner can feel the response. Last is the feedback; it is the information which learner receives and indicates in the quality of his response. This response must be given as quickly as possible to make sure successful learning (Leslie, 1990). Performance can be defined as the achievement of specified task measured against predetermined or identified standards of accuracy, completeness, cost and speed. In an employment contract, performance is deemed to be the accomplishment of a commitment in such a manner that releases the performer from all liabilities laid down under the contract. Efficiency and effectiveness are ingredients of performance apart from competitiveness and productivity and training is a way of increasing individual's performance (Cooke, 2000). Kenney et al., (1992) stated that employee's performance is measured against the performance standards set by the organization. Good performance means how well employees performed on the assigned tasks. In every organization there are some expectations from the employees with respect to their performance. And when they perform up to the set standards and meet organizational expectations they are believed good performers. Functioning and presentation of employees is also termed as employee performance. This means that effective administration and presentation of employees' tasks which reflect the quality desired by the organization can also be termed as performance. While much is known about the economics of training in the developed world, studies of issues associated with training in less-developed countries are rarely found. Job characteristics and firm background were found to play key roles in determining training provision. Workers who received off-the-job training were less likely to receive on-the-job training, while those who received on-the-job training were neither more nor less likely to have received off-the-job training. However, a complementary relationship was found between receiving informal training and receiving on-the-job or off-the-job training. Earnings differentials were not found to correlate with different types of training. Unlike in developed countries, training in China was usually intended to remedy skills deficiencies, rather than enhance productivity (Ying Chu Ng, 2004). There is a positive relationship between training and employee performance. Training generates benefits for the employee as well as the organization by positively influencing employee performance through the development of employee knowledge, skills, ability, competencies and behavior (Benedicta and Appiah, 2010). It is obvious that training plays an important role in the development of organization, improving performance as well as increasing productivity, and eventually putting companies in the best position to face competition and stay at the top. This means that, there is a significant difference between the organizations that train their employees and that organizations that do not (Benedicta and Appiah, 2010). Organization that is dedicated to generating profits for its owners (shareholders) and providing quality service for its



customers and beneficiaries usually invest in the training of its employees (Evans and Lindsay ,1999).

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## **THE CONTRIBUTION OF DEMOCRATIC LEADERSHIP IN INNOVATIVE PRACTICES AT AN ORGANIZATION: A CASE STUDY AT AN INDIAN B-SCHOOL**

ANUJ KUMAR<sup>1</sup> AND NISHU AYEDEE<sup>2</sup>

### **ABSTRACT**

The 21<sup>st</sup> century is globalising and the level of competition is increasing. Creativity and innovation is much needed in every organisation for competitive advantage. The top leadership in the organisation plays an important role in enhancing the creativity and innovation of the employees. In this paper the researchers work on the aspect of leadership at an educational institute as a means of enhancing the creativity and innovation of the employees. There has been much talk about transformational leadership and its linkage with organisational creativity and innovation. Through this paper the researchers analyse several factors of transformational leadership previously identified in the literature and check whether those factors match the democratic leadership of the director at educational institute.

**Key Words:** Leadership, Emotional Intelligence, Democratic leadership, Transformational leadership, Innovation, Creativity.

### **INTRODUCTION**

In this paper the researchers focus on finding a link between leadership and innovation in the educational organization. There has been plentiful research on leadership and innovation by academicians and researchers and there are different leadership styles have been identified- transformational, transactional, charismatic, democratic leadership, etc. The researchers focus particularly on an Indian B-School named the Bharati Vidyapeeth Institute of Management and Research, in New Delhi, India. The new director, Dr. Vikas Nath, joined the institute two years ago. Dr. Nath's leadership style of Dr. Vikas Nath was democratic and transformational. In this research, the researchers have interviewed 12 respondents from the educational institute to analyse Dr. Nath's leadership style and its impact on the creativity and innovation of the employees.

### **OBJECTIVES**

The basic objectives of the paper are:-

1. to check the linkage between leadership and innovation at the educational institute:-
2. to study the impact of democratic leadership in enhancing the creativity of employees in the organisation; and :-
3. to check whether emotional intelligence enhances the innovative capability of the employees in the organisation:-

### **LITERATURE REVIEW**

The educational institutes and multi-national organizations are currently working in a competitive environment in which technology is continuously changing due to the increased pressure of globalisation. Creativity and innovation can provide new paths for the organisation to achieve competitive advantage. The various organizations, whether they are educational institutes, corporate houses or, restaurants are pressurised to change their current state into a

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<sup>1</sup> Main Author, Assistant Professor, Bharati Vidyapeeth Institute of Management and Research, India, E-mail:- anujsmooth@gmail.com

<sup>2</sup> Co-Author, Assistant Professor, Bharati Vidyapeeth Institute of Management and Research, India. E-mail:- nishu\_marwah77@yahoo.co.in

preferred future state. It is necessary to understand the key terms before going further. As argued by Jong & Hartog (2007), the term ‘leadership’- means the ability of an individual to influence others by achieving some kind of desired outcome. A leader has traits that can positively influence the creativity and innovation of the employees. Leadership has evolved from being dominating in style to being more transformational and charismatic in style. The term ‘innovation’ has been described as having two phases- the initiation of an idea and its implementation (Jong and Hartog, 2007). In the first phase, the idea is introduced by the employees or leaders. Feedback is collected on that idea. In the next phase, that idea is implemented to achieve the desired level of innovation. Leadership plays a significant role in this implementation. The leaders have a positive influence over the divergent thinking of the employees. Divergent thinking involves the generating of more fruitful ideas which leads to creativity inside the organization.

These terms (creativity, innovation and divergent thinking) are positively interlinked. The modern organizations face a variety of different types of problems. As argued by Williams (2004) the personality and attitude of leaders towards their subordinates positively influence the divergent thinking of the employees in solving different types of problems. The divergent thinking approach helps in the first phase of creative idea generation (Williams, 2004). The employees are handled by business leaders and managers. The managers are different from leaders. There comes the difference between manager and leaders. The managers want more control over their employees and the overall processes with-in their organizations while contemporary leaders don’t want much control over the employees. They provide more freedom to the employees to think new ideas and implement them. The support of the leaders matters because some ideas can fail in the implementation phase. Though some of the ideas can fail in the implementation phase but the support of leaders matter.

Before connecting leadership with divergent thinking, creativity or innovation in the organisation, it is necessary to know about the different styles of leadership. Initially traditional leaders were autocratic (Northouse, 2015). Autocratic leaders often do not consult their subordinates and make all decisions by themselves. They want their subordinates to obey them and they don’t want to lose their control.

The next category of leaders are bureaucratic leaders who don’t believe in new ideas or their implementation. The leaders believe in the established leadership theories and they want to lead the organisation in a copy book manner. They also want their subordinates to follow their orders. The next category of leaders that has evolved are the democratic leaders. The democratic leaders do not take decisions alone; they believe in collective decision-making. Managers effectively seek consultation from their subordinates on all the major issues. They welcome the feedback from subordinates and implement the suggestions given by them. Next in line are laissez-faire leaders. As argued by Yang (2015), laissez-faire leaders believe in the delegation of authority and work to their subordinates. Such leaders provide complete freedom to their subordinates for making decisions (Yang, 2015) and just provide support. Supervision is missing in laissez-faire leaders. Situational leaders are another type of leaders making decisions according to the appropriate situation in the organisation.

The three types of leaders evolving in modern organisations are transactional, transformational and charismatic leaders. Transactional leaders are those leaders who promotes compliance in their subordinates through rewards and punishments. They are passive in nature and want to motivate employees through different means of rewards and punishments. As argued by Onorato (2013) transformational leadership is the most talked-about category of leadership. Transformational leaders transforms the whole environment by setting themselves as an example before their employees. They do not believe in control. They believe that people, especially subordinates, can be trusted (Onorato, 2013). If those subordinates are given a free

hand, they can solve complex problems with their divergent thinking. The leaders take the roles of mentors and coaches and set their own examples in transforming the behaviour of their subordinates. The key components of transformational leadership are idealised influence, inspirational motivation, intellectual stimulation and individualised consideration.

The last category of leadership discussed in this paper is charismatic leadership. Charismatic leaders are similar to transformational leaders in that they both rely on their ability to influence and inspire their followers (Northouse, 2015). The communication skills of charismatic leaders set them apart as they are simply eloquent in nature. They often communicate with their followers at deep and emotional levels. Charismatic leadership is incomplete without focusing on the leaders personally.

The researchers have gone through previous literature on leadership and innovation. Most of the existing literature sees a link between transformational leadership, charismatic leadership and innovation. Previously the researchers have argued in the favour of transformational leadership in bringing creativity to the organisation through new ideas and their final implementation. According to authors currently working on leadership and innovation, charismatic leaders also bring innovation to an organisation. There are certain gaps in the previous literature. Previous authors have worked less on the aspects of democratic leadership and innovation, they talked much about transformational leadership. The emotional intelligence of democratic leaders in understanding employees and bring innovation to an organisations has also been less discussed previously.

As argued by Jung, et al. (2003), transformational leaders bring creativity in the organisation because they go beyond the contractual agreements between employees and employers to bring innovation to the system. The transformational leaders actively engage employees in the problems of the organization by appealing to their personal values and bringing a social connect. Transformational leaders bring intrinsic motivational factors such as competition, cooperation, curiosity and control to motivate the employees and ease out their creativity. One of the factor of transformational leadership is intellectual stimulation (Jung et al., 2003). Transformational leaders encourage out-of-the-box thinking in the employees by bringing new ways to solve old problems. As argued by Gumusluoglu & Ilsev (2009) transformational leaders are more likely to enhance creativity in employees because they promote psychological empowerment. This boosts the self-confidence of the individuals and provides them with free space to work. The overall environment inside the organisation should be positive to encourage creativity. Transformational leaders can develop such a positive environment in which employees do not feel insecure about their innovations. As argued by Aydin, et al. (2013), transformational leadership plays a key role in enhancing organisational innovation. In the educational institutes, transformational leaders support the intellectual development of the individual, which positively affects the job satisfaction. As the employees feel satisfied, they show more enthusiasm for transformation within their organisations.

Transformational leaders are committed to their organisational goals. They develop a vision and mission that enhance creativity and innovation in their employees. These leaders work like a motor and transmitter of innovative culture (García-Morales et al., 2012). Transformational leaders have the charismatic power to influence their followers to aspire to higher values of creativity. There is a close linkage between transformational and charismatic leadership. Both types of leaders have a high degree of emotional intelligence, which helps them in understanding the emotions and internal concerns of the followers and subordinates. When employees adopt new ways or procedures, they have a fear of failure in their mind. Other negative emotions also stop them having new ideas. The emotional intelligence of the leaders' helps employees both initiate new ideas and finally implement them within the organisation.

## RESEARCH METHODOLOGY

The methodology adopted to check the impact of leadership on innovation is a mix of in-depth interview and research in the literature. In this paper, the researchers check the leadership skills of Dr. Vikas Nath, who leads a team of 50 faculty members and 50 non-teaching staff. The non-teaching staff includes clerks, administration, finance, and employees from other departments. The faculty members include professors, associate professors and assistant professors. Dr. Nath is the director-in charge of the Bharati Vidyapeeth Institute of Management and Research, Paschim Vihar, New Delhi. The institute runs various programmes, including Bachelor of Business Administration, Bachelor of Computer Application, Master of Business Administration and Bachelor of Law, under the flagship of the Bharati Vidyapeeth Deemed University, Pune. The total number of students is approximately 3000 across all courses.

The researchers have applied purposive sampling for the selection of the candidates. The interviews have been conducted from all the core groups including faculty members, non-teaching staff, current students and passed out students. A total of 12 candidates were selected for the purposive sampling. Data collection is an important element of the research and it was important to select an appropriate method by which data would be collected and analysed by the researcher. Purposive sampling is a judgemental sampling in which it is easy to select the participant on the basis of qualities of the participants (Etikan et al., 2016). It is a non-random sampling technique in which the researcher first checks research needs and selects the profiles of the participants according to the information needed. In purposive sampling, the researchers look for people with particular characteristics. For this research paper, the researchers chosen four faculty members including the institute director, four non-teaching staff members, two current students and two alumni.

The profiles of the participants are listed in the table below.

<b>Participant</b>	<b>Profile</b>
Teaching	Professor
Teaching	Associate Professor
Teaching	Assistant Professor
Teaching	Assistant Professor
Non-Teaching	Administration
Non-Teaching	Exam Cell
Non-Teaching	CMS Department
Non-Teaching	Fee Section
Student	Current Batch (MBA)
Student	Current Batch (BBA)
Student	Alumni (MBA)
Student	Alumni (BBA)

Figure 5

All participants participated actively in the interviews. The teaching faculty staff talked about certain key factors that stipulated innovative behaviour in them under the leadership of director Dr. Nath. The leadership of Dr. Nath is not transformational but it incorporates

innovative behaviour in the teaching faculty. The close analysis of Dr. Nath's leadership revealed that he is a democratic leader who talks with certain key people before implementing decisions.

## ANALYSIS

Certain key characteristics of Dr. Nath's leadership that supports innovation in the teaching faculty staff include delegation, consulting, providing vision, recognition and less power distance. Hofstede argues about five cultural elements that help in differentiating between the cultures of countries. Power distance is one of these component. The director maintains a low power distance with his employees both teaching and non-teaching. The students also agreed that the director maintained a low power distance with them. There has been proper delegation of responsibilities with teaching faculties. The director likes to listen to new innovative ideas from colleagues and helps them in the initiation of new ideas. The key innovative practices of the director can be seen in several departments, for example:-

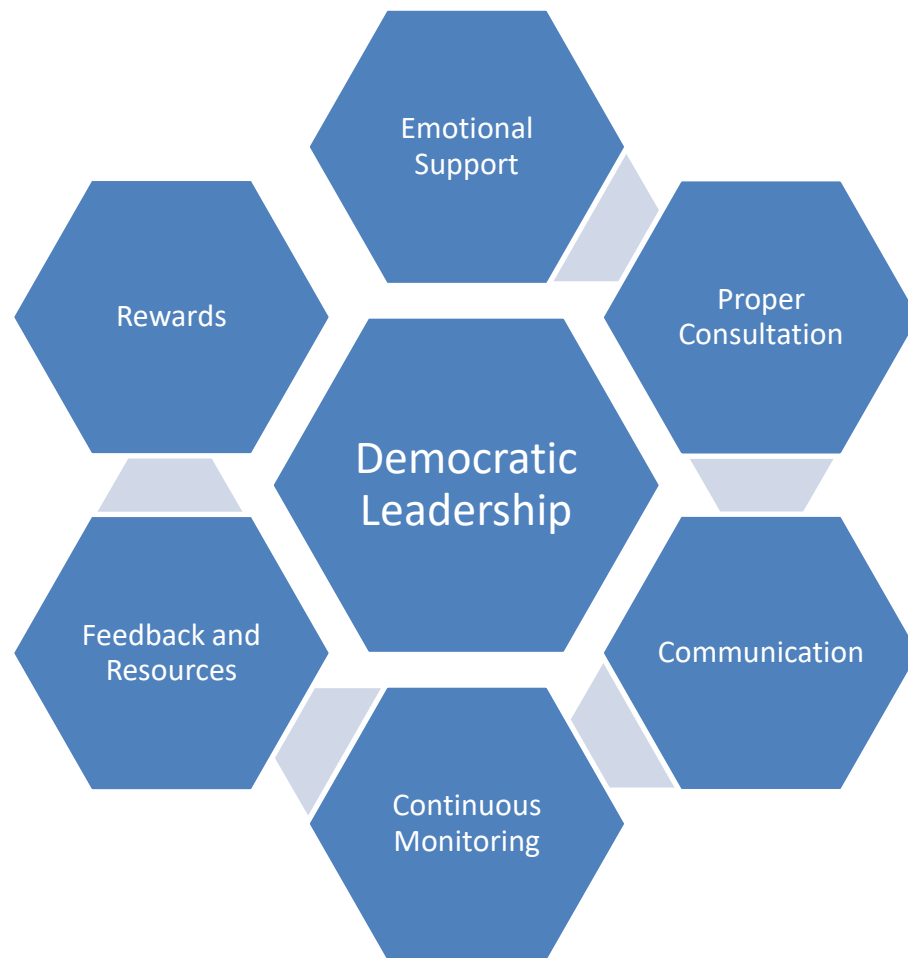
*Admissions Department-* previously there was less usage of technology in the admissions department but the director aligned the admissions process with internet and technology. The usage of technology helped get more queries and admissions as well. The Director provided his vision of innovation to the admissions cell, which used social networking sites and other technology media to get more admissions and queries. Both offline and online modes of admission have been started. Evening shifts have also been implemented in undergraduate courses.

*Exam cell-* previously, the exam cell of the college had certain problems, but the director of the college sat with his colleagues and discussed them. The number of students was increasing and it was not easy to maintain the exam cell's responsibilities. The overall administration of the exam cell was streamlined after discussing with the teaching and non-teaching sections. Technology also helped the exam department know about the status, dates and overall schedule of particular exam.

*Faculty-student collaboration-* the director also focussed on positive faculty student collaboration through various innovative practices, for example- continuous feedback from students, introducing foreign webinars and course packs for students. The director along with the teaching and non-teaching departments opened various online and offline platforms for continuous talk with students about their placements, studies and other extra-curricular activities.

*Placements-* the placement cell of the college came up with several ideas to improve the domain knowledge of the students and help them get good placements and high-pay package. The director listened to the ideas of placement team and provided enough resources to fulfil the needs of the cell.

## COMMON FACTORS



The common factors that support creativity and innovation among all the respondents interviewed from various departments were rewards, emotional support, proper consultation, feedback and resources, continuous monitoring, proper consultation and communication. Most of the respondents assumed the fact that the director was emotionally intelligent enough to understand their internal barriers while talking about new ideas and their implementation. He helped them overcome their fear while talking about a new project to start in the college. Emotionally intelligent leaders have the ability to anticipate reactions and respond effectively. The Director has that anticipatory ability and he continues communicating with people about the measures to correct. He is smart enough to pick the mood and feelings of the working environment and mould the situations accordingly. His emotional intelligence helped people enhance their creativity and innovation because it reduced the power gap and allowed them to communicate their ideas freely. An emotionally intelligent leader is also a good listener. The respondents felt that director needed to work on his listening skills more to become an emotionally intelligent leader. Emotional intelligence in the director helped him announce rewards and recognition for the employees so they could come up with more innovative ideas to solve the problems of their institutions. For example: - the I.T. department of the college is continuously working to make the institution paperless by aligning all the tasks through technology. The director is always listening their ideas and providing resources and timely

feedback for correction, if any is required. The director has provided proper consultation for all the new and old faculties to achieve institutional goals.

## CONCLUSION

On the basis of the previous literature and interviews conducted at B.V.I.M.R, it can be concluded that there is a positive linkage between leadership and innovation at the organisation. The leadership style of the director, Dr. Nath is recognised as democratic rather than transformational. He is not forcing his decisions on subordinates, but rather talking to them to reach a consensus. It is not easy for leader and subordinates to implement new innovative practices without communicating with each other. B.V.I.M.R is reaching new heights in ranking, placements, admission and academics because the leader is supporting his subordinates both at the idea initiation and implementation phases. It can be said that not only transformational but also democratic leaders enhance creativity and innovation at the organisation. The intention of the leader and his emotional intelligence play a key role in understanding the key barriers faced by the employees while forming new creative ideas. Emotionally intelligent leaders can better judge the overall environment at the organisation and provide whatever resources and support is needed for enhancing the innovation of the employees.

## RECOMMENDATIONS

A few recommendations can help the director in improving his leadership, and thus the innovation of the employees.

The director needs to work on his listening skills so that employees will not feel ignored on occasion.

The director can modulate his leadership style to become transformational, because most of the employees still feel he is a democratic leader. The situational leadership style can also help the director in coming out of a problem situation.

The director should conduct more brainstorming sessions for both teaching and non-teaching staff so they can collectively think of solutions for the institute's problems.

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**AN INDUSTRIAL NETWORKING: SECURITY INSTRUCTIONS AND PANACEA**SHOUMIK RAHMAN MEHEDY<sup>1</sup>, ASHIKUR JHALAK<sup>2</sup> AND MD. ASHRAFUL ALAM<sup>3</sup>**ABSTRACT**

An open sharing and connectivity of computer networks expand the resources and make more applications in technical sector of IT industries. The prosperity of networking is making creation more and simpler. This paper represents the information systems of an industrial sector which can be visualized in an appropriate format and scrutinizing the solution of the security threat of an industry. With the rapid expansion of using network as well as the increasing popularity, the illustration of virus attack, hackers attack, theft of network data in unauthorized access. The paper also focused the systematic protecting network information security of an industry. We have also gathered temporary data of 100 companies and organizations around the world that have been somehow affected by any cyber-attack or any kinds of unwanted activities. We tried to found their financial losses and discussed whether they have survived from that losses or not. We applied Data mining techniques to specify the data and predict the data by class level with the attributes.

**Keywords:** security of networking; Naïve Bayes; technology security; Firewall System; ROC

**INTRODUCTION**

Data analysis is done by the data mining technique that is to unleash data relation and control a systematic graph pattern among them and also can be applied for authentic prediction. By using classification rule technique we have analyzed the data of the global companies during the time of (2011-2017). Data mining can be applied for future prognosis and true relational data based knowledge discovery. The networking Sector is getting larger day by day. The system of networking has become a sector of politics, economics and country's security. But now-a-days, there are many applications of networking system which are not proper securable. The reasons are: it causes fake information, illicit utilization of network resources, using unauthorized harmful information, Precious data leakage etc. On the field of corporate industry, Government website and hardware has been hacked many times and hackers are applying many methods to capture the information of large industrial sites.

Multi computer security risks a huge economical amount. Industrial network connectivity defines application of transmitting data. Industrial security network has grabbed more attention than any other sectors on recent times. Sometimes for having no precaution many data might be lost. The exposure of security in the host operating system causes many problems to management system. The system security comprises of the arrangements and practice received to anticipate and screen unapproved get to, abuse, adjustment or dissent of a computer system and system open assets which may be controlled by computer network organization. So it is really important to keep industrial network system protective (Sun, 2016; Stallings, 2006).

**LITERATURE REVIEW**

Like many others many industrial organization and association needs direct marketing. Authors discussed 2 methods of data mining: the Naive Bayes and the C4.5 decision tree algorithms. Term Deposit guarantee is the main perspective of the paper whether the clients will registered

<sup>1</sup> Student, Dept. of Electrical and Computer Engineering, North South University, Bangladesh. E-mail: - shoumik.rahman@northsouth.edu

<sup>2</sup> Student, Dept. of Computer Science and Engineering, BRAC University, Bangladesh. E-mail: - ashikurjhalak@gmail.com

<sup>3</sup> Assist. Prof., Dept. of Computer Science and Engineering, BRAC University, Bangladesh. E-mail: - ashrafal.alam@bracu.ac.bd

for deposit term. These methods show a good value in the paper (Ling and Li, 1998). Lung cancer survives prediction by applying two different. In this paper, two classification procedures, the J48 execution, C4.5 calculation and a Naive Bayes classifier are connected to anticipate lung cancer survivability from a broad informational index having fifteen years of record about the patients. The main purpose of the paper is to predict the effectiveness of the methods based on real time dependent historical data and info (Dimitoglou, Adams and Jim, 2012).

The paper has gathered information and problem with solution comparing with a campus network information. The paper broadly showed the widespread problems in campus network and probabilistic solution things and how they are inter-related within networking (Wu, 2010).

In this paper, the main point is that, security thread solution are tried to solve by having strong software and security devices so that no damage could be happened. In the time of utilization of these security instruments like software and hardware are frequently utilized as a straightforward heap, with no association with each other, and don't shape an incorporated protection framework having the goal that the extensive speculation can't assume a part in the security. This indicates to present a worldwide good security system (Wang and Zhang, 2011).

In this paper, the discussion is about breaking down and evaluating the system data security components classification, honesty and accessibility, the paper portrays the system security secrecy vector, arrange security respectability vector and system security accessibility vector. The paper reflects a good way of reliable security of networking. (Mohan and Anuradha, 2015).

This recent paper got the discussion broadly about the history of network security, network data theft, network information security, legislation, design principles of a network security system. The paper has pointed that how network attack can be saved from outside (SUN, 2016).

All the paper basically focused on the security of networking industries and the solutions of the attacks. Some paper used data mining techniques to classify various data and predicts various systems. Classifying the data and applying various methods like J48, Naïve Bayes Algorithms. But we have focused on both side. In our paper we focused on the industrial networking problems and their solution. We also tried to visualize the probabilistic factor of our modified data according to attributes. By ROC curve we showed statistical probability for both Class level YES and NO. 100 company data has been collected via different resources.

## METHODOLOGY AND DATA

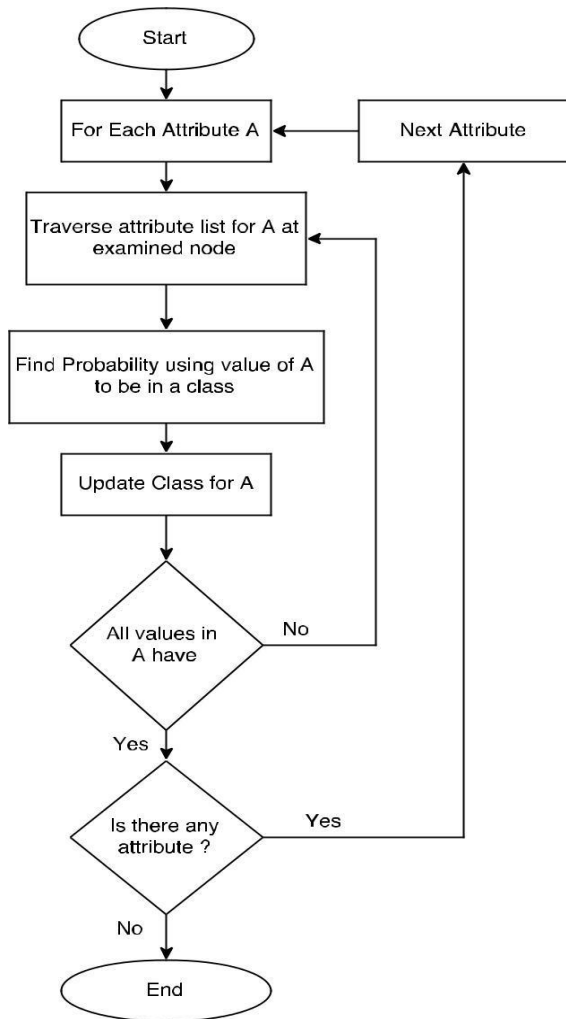
In our paper we used naïve Bayes algorithm to specify the data. In this paper we have used software of various kinds of data mining known as WEKA under General Public License (GNU).

Naïve Bayes Algorithm: Statistical classification is used widely for its natural simplicity and enhancing the training speed. The epithet naïve indicates the terms independence assumption. That means distribution of joint terms is the product of marginal.  $C_j$  is known as class and  $t_i$  is called probability of data instances. The probability  $P(t_i | C_j)$  denotes that  $t_i$  can be labeled  $C_j$

$$P(t_i | C_j) = \prod_{k=1}^p P(x_{ik} | C_j)$$

Here  $p$  defines the number of attributes of individual data instances. Classification indicates step by step indication that how a new data instance can be determined. To visualize the work flow a flowchart of the algorithm is show below

**Fig 1:** Flowchart of Naïve Bayes Decision Tree Algorithm



**Table 1:** 100 companies’ data analyses (Generated in Weka Software). (Weka showing only 3 digits of time duration as it is automatic generated from CSV file)

No.	1: Company	2: Country	3: Money Loss	4: Effect	5: Category	6: Time	7: Duration	8: Class	Condition of Recovery
	Nominal	Nominal	Nominal	Nominal	Nominal	Numeric	Nominal	Nominal	Nominal
1	Oschadb...	Ukraine	Not found	out-o...	High	201...	still gain...	No	
2	Sony Cor...	Japan	\$171 million	Netw...	High	201...	3 months	No	
3	Citigroup...	USA	\$2.7 million	stole...	High	201...	1 month	No	
4	Stratfor	USA	\$2 million	infor...	Moderate	201...	1 month	No	
5	AT&T	USA	\$2 million	secu...	Moderate	201...	1 month	No	
6	Fidelity In...	USA	\$1 million	stole...	Low	201...	1 month	Yes	
7	Scotttrade	USA	\$1 million	stole...	Low	201...	1 month	Yes	
8	Charles ...	USA	\$1 million	stole...	Low	201...	1 month	Yes	
9	Los Ange...	USA	\$72 million	Lock...	High	201...	1 month	No	
10	FACC Au...	Austria	\$53 million	stole...	High	201...	1 month	No	
11	RSA Sec...	USA	\$100 million	stole...	High	201...	1 month	No	
12	Epsilon	USA	\$4000 milli...	data ...	High	201...	1 month	No	
13	X-Factor	USA	\$15 million	stole...	High	201...	1 month	No	
14	Bethesd...	USA	\$12 million	stole...	High	201...	1 month	No	
15	SEGA	USA	\$77 million	Data ...	High	201...	1 month	No	
16	NATO	USA	\$0.72 million	acco...	Low	201...	1 month	Yes	
17	Shop ijs2...	USA	\$1.7 million	dum...	Low	201...	1 month	Yes	
18	Lawrenc...	USA	\$2.2 million	data ...	High	201...	1 month	No	
19	Adidas	USA	\$107 million	data ...	High	201...	1 month	No	
20	premier...	UK	\$1.5 million	data ...	Low	201...	1 month	Yes	
21	OhMedia...	Malaysia	\$13 million	data ...	High	201...	1 month	No	
22	Beachvol...	Switzer...	\$1.2 million	data ...	Low	201...	1 month	Yes	
23	mAPPn, ...	China	\$2.14 million	data ...	High	201...	1 month	No	
24	FindFrien...	india	\$1.2 million	data ...	Low	201...	1 month	Yes	
25	Providen...	Ireland	\$1 million	data ...	Low	201...	1 month	Yes	
26	duowan ...	China	\$1700 milli...	data ...	High	201...	1 month	No	
27	7k7k.co...	China	\$4300 milli...	data ...	High	201...	1 month	No	
28	178.com...	China	\$2100 milli...	data ...	High	201...	1 month	No	
29	TRION	USA	\$7000 milli...	data ...	High	201...	1 month	No	
30	Taishin B...	China	\$4.3 million	data ...	High	201...	1 month	No	
31	Karma fl...	Spain	\$1.3 million	data ...	Low	201...	1 month	Yes	
32	tianya.cn ...	China	\$8500 milli...	data ...	High	201...	1 month	No	
33	SpecialF...	USA	\$4.7 million	data ...	High	201...	1 month	No	

No.	1: Company	2: Country	3: Money Loss	4: Effect	5: Category	6: Time	7: Duration	8: Class:Condition of Recovery
	Nominal	Nominal	Nominal	Nominal	Nominal	Numeric	Nominal	Nominal
34	Promow...	USA	\$6 million	data ...	High	201...	1 month	No
35	Israel co...	USA	\$1.2 million	data ...	Low	201...	1 month	Yes
36	NHS Sou...	UK	\$3.9 million	data ...	High	201...	1 month	No
37	YAMAHA	Japan	\$2.14 million	data ...	High	201...	1 month	No
38	CEO Stat...	USA	\$1.3 million	data ...	Low	201...	1 month	Yes
39	Club pen...	USA	\$4.3 million	data ...	High	201...	1 month	No
40	SQUARE...	Japan	\$385 million	data ...	High	201...	1 month	No
41	Sinterkda...	Spain	\$2.8 million	Stole...	High	201...	1 month	No
42	glovedas...	Canada	\$3 million	data ...	High	201...	1 month	No
43	Hostboot...	USA	\$1.5 million	data ...	Low	201...	1 month	Yes
44	Naijaloa...	Nigeria	\$53 million	data ...	High	201...	1 month	No
45	Nexon	South ...	\$2000 milli...	data ...	High	201...	1 month	No
46	Treve.fi w...	Finland	\$15 million	data ...	High	201...	1 month	No
47	Islamaba...	Pakistan	\$5 million	data ...	High	201...	1 month	No
48	relayspe...	USA	\$5.9 million	data ...	High	201...	1 month	No
49	Universit...	USA	\$16 million	data ...	High	201...	1 month	No
50	Weit.de ...	Germany	\$6.5 million	data ...	High	201...	1 month	No
51	EPSON	South ...	\$7490 milli...	data ...	High	201...	1 month	No
52	Universit...	USA	\$2.35 million	data ...	High	201...	1 month	No
53	bklightin...	USA	\$7.3 million	data ...	High	201...	1 month	No
54	cancaon...	USA	\$5.6 million	data ...	High	201...	1 month	No
55	FileDEN ...	USA	\$9.6 million	data ...	High	201...	1 month	No
56	Orion.si ...	Czech ...	\$1000 milli...	data ...	High	201...	1 month	No
57	Pakistan ...	Pakistan	\$4 million	data ...	High	201...	1 month	No
58	Loongso...	China	\$4.77 million	data ...	High	201...	1 month	No
59	City of Sp...	USA	\$1.3 million	data ...	Low	201...	1 month	Yes
60	Yamaha ...	Japan	\$0.375 milli...	data ...	Low	201...	1 month	Yes
61	Banglad...	Bangla...	\$6.4 million	data ...	High	201...	1 month	No
62	Vista.pl w...	Poland	\$2.5 million	data ...	High	201...	1 month	No
63	Gram24....	Poland	\$50 million	data ...	High	201...	1 month	No
64	Target co...	USA	\$40 million	data ...	High	201...	1 month	No
65	Maricopa...	USA	\$2.4 million	data ...	High	201...	1 month	No
66	China da...	China	\$20 million	data ...	High	201...	1 month	No
No.	1: Company	2: Country	3: Money Loss	4: Effect	5: Category	6: Time	7: Duration	8: Class:Condition of Recovery
	Nominal	Nominal	Nominal	Nominal	Nominal	Numeric	Nominal	Nominal
67	BIPS	USA	\$1 million	data ...	Low	201...	1 month	Yes
68	inputs.io ...	USA	\$1.3 million	data ...	Low	201...	1 month	Yes
69	LoyaltyBu...	USA	\$1.12 million	data ...	Low	201...	1 month	Yes
70	Adobe	USA	\$2.9 million	data ...	High	201...	1 month	No
71	Barclays ...	USA	\$1.4 million	data ...	Low	201...	1 month	Yes
72	Ubuntu F...	USA	\$1.82 million	data ...	Low	201...	1 month	Yes
73	KONAMI	japan	\$4 million	data ...	High	201...	1 month	No
74	Wiley	USA	\$2.8 million	data ...	High	201...	1 month	No
75	Crown ca...	Austria	\$33 million	stole...	High	201...	1 month	No
76	Slik Road	USA	\$2.6 million	data ...	High	201...	1 month	No
77	flexcoin	France	\$0.62 million	data ...	High	201...	1 month	No
78	St. Aldhel...	UK	\$1.7 million	data ...	High	201...	1 month	No
79	South kor...	South k...	\$1.154 milli...	stole...	High	201...	1 month	No
80	Niwa	New Z...	\$12.7 million	data ...	High	201...	1 month	No
81	Thomas ...	UK	\$0.1 million	data ...	Low	201...	1 month	Yes
82	Affin ban...	Malaysia	\$1.2 million	data ...	Low	201...	1 month	Yes
83	HSBC	Turkish	\$2.7 million	data ...	High	201...	1 month	No
84	Turkish P...	Turkish	\$0.65 million	data ...	Low	201...	1 month	Yes
85	Bitstamp	UK	\$5.2 million	data ...	High	201...	1 month	No
86	Bter	China	\$1.75 million	stole...	High	201...	1 month	No
87	Afgnak N...	USA	\$3.8 million	Acco...	High	201...	1 month	No
88	Ryanair	Ireland	\$5 million	stole...	High	201...	1 month	No
89	Central B...	Russia	\$31 million	Acco...	High	201...	1 month	No
90	Leoni AG	Denma...	\$44.6 million	Acco...	High	201...	1 month	No
91	Local Co...	Austria	\$0.334 milli...	Acco...	High	201...	1 month	No
92	Bitfinex	China	\$65 million	stole...	High	201...	1 month	No
93	Lori Sattler	USA	\$1 million	Acco...	Low	201...	1 month	Yes
94	NHS	UK	\$1.2 million	data ...	Low	201...	1 month	Yes
95	Ashley M...	USA	\$37 million	data ...	High	201...	1 month	No
96	Talk Talk	UK	\$2.4 million	data ...	High	201...	1 month	No
97	Nayana	South k...	\$1 million	data ...	Low	201...	1 month	Yes
98	British co...	UK	\$135 million	data ...	High	201...	1 month	No
99	Home de...	USA	\$109 million	stole...	High	201...	1 month	No
...	ebay	USA	\$56 million	stole...	High	201...	1 month	No

It was really tough to gather this data because many links were classified and they didn't reveal many things. There might be thousands of companies that might be affected during this time and even before, but we focused only on some specific data and condition all over the world.

### AUC

Area under ROC curve (AUC) is a good probability estimation. ROC is the representation within a graph based measurement curves that demonstrates the diagnostic ability of numerical analysis and verify its threshold. ROC curve plotting is created by TPR (true positive rate) and FPR (false positive rate). False positive rate is denoted by X axis and true positive rate is denoted by Y axis. (0, 1) analyze all negative and positive rate. It is called perfect classifier. It is considered as (0, 1) because true positive rate is considered as 1 for all of the instances and False positive rate is 0 for none. On the other hand (0, 0) points indicates all the negative cases. (1, 1) says to classify to predict every case positive. (1, 0) points to be incorrect classifier for all. If the Area under ROC curve (AUC) is 1 then it is perfect prediction. If it is .5 then it will be a random prediction.



**DATA ANALYSIS: NAÏVE BAYES ALGORITHM**

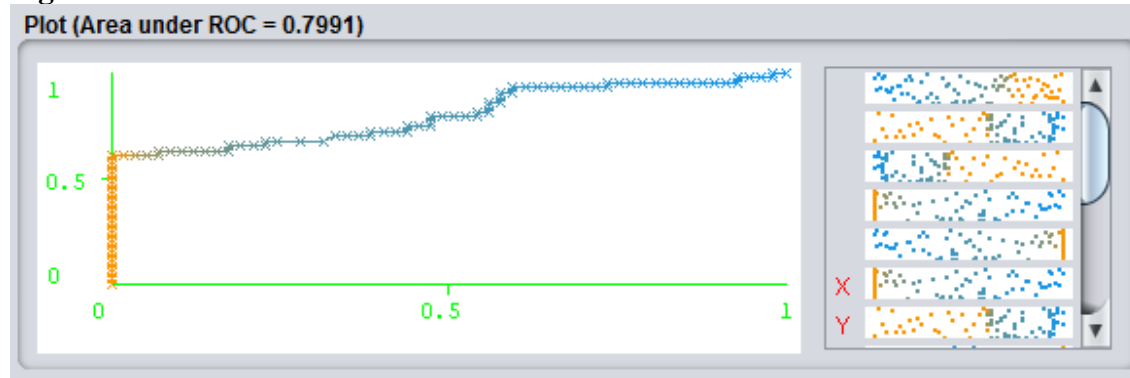
Naïve Bayes technique shows us some more points of view. Say, if data contains millions of components or attributes, then the system will take more time to compute the desired model. But the fact is, the more data is provided, the more accurate result we get.

Table 2: Confusion matrix of 100 data using naïve Bayes algorithm

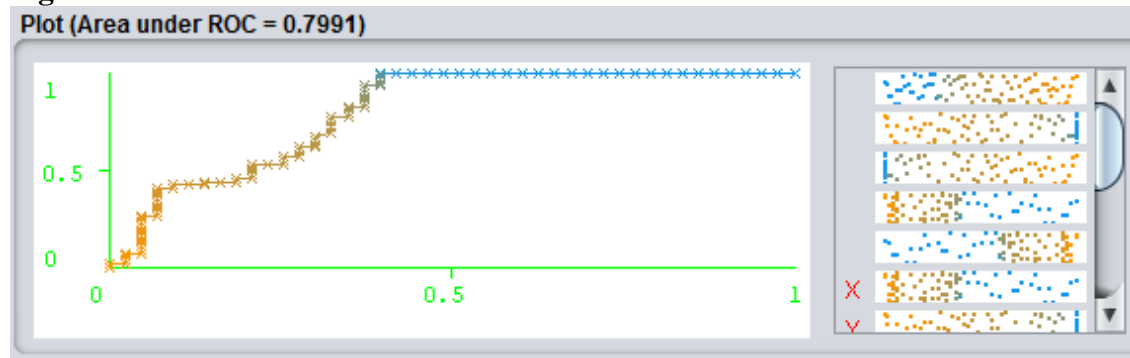
		Predicted Class	
		YES	NO
Actual Class	YES	52	5
	NO	16	27

The confusion matrix focuses on the predictive capability of a model. The model defines True positive: TP (w=52), False negative: FN (x=5), False positive: FP(y=16) and True negative: TN (z=27). The total number is divided into 100 data variables w+ x+ y+ z=52+5+16+27=100. The proportion of the exact predicted number is known as Accuracy. The Calculation of the Accuracy= (w+ z)/ (w+ x+ y+ z) = (TP+TN)/ (TP+FN+FP+TN) = (52+27) / (52+5+16+27) = 0.79%. There are 79% correct classifiers and 21% incorrect classifiers. The time took almost 0 second to build this data. That indicates the algorithm is good and fast.

**Fig 2:** ROC curve for class: YES



**Fig 3:** ROC curve for class: NO



In naïve Bayes algorithm, ROC curve evaluate the data model 0.7991 accuracy is pretty much ok and near to (0,1) and ROC class: YES curve is more close to Y axis which is known as True Positive rate curve. X axis is known as False Positive rate curve. So Class YES model is relatively accurate and reliable.

**PREDICTING A CLASS LABEL USING NAÏVE BAYESIAN CLASSIFICATION**

Now, we will assign some changes in this part. We will count the nominal parts as our data sets and avoid the numerical part. But the value will be same as the previous data.

NO	Country	Effect	Category	Class
1	Ukraine	out-of-order payment	High	No



---	---	---	---	---
100	USA	Stolen fund	High	No

We will predict the class label of a tuple using naïve Bayes Classifier. To predict the class label of  $X$ , probability  $P(X|C_i)P(C_i)$  is evaluated for individual class label  $C_i$ . The classifier predicts the class label of tuple  $X$  is the class  $C_i$  if and only if

$$P(X|C_i)P(C_i) > P(X|C_j)P(C_j) \quad \text{for } 1 \leq j \leq m, j \neq i \quad (\text{Han, Kamber and Pei, 2012})$$

The recent made data tuples are described by the attributes country, Effect and category. The class label attribute, Class: condition of recovery has two distinct values {yes, no}. Let,  $C_1$  corresponds to the Class Condition of Recovery = Yes and  $C_2$  correspond to Condition of Recovery= No. The tuple we wish to classify

$$X = (\text{Country} = \text{USA}, \text{Effect} = \text{data breach}, \text{Category} = \text{High})$$

We need to maximize  $P(X|C_i)P(C_i)$ , for  $i=1,2$ .  $P(C_i)$ , the prior probability of each class can be calculated upon the training tuples:

$$P(\text{Condition of Recovery} = \text{Yes}) = 43/100 = 0.43$$

$$P(\text{Condition of Recovery} = \text{No}) = 57/100 = 0.57$$

To compute  $P(X|C_i)$ , for  $i=1,2$ , we compute the following condition probabilities:

$$P(\text{Country} = \text{USA} \mid \text{Condition of Recovery} = \text{Yes}) = 23/43 = 0.535$$

$$P(\text{Country} = \text{USA} \mid \text{Condition of Recovery} = \text{No}) = 22/57 = 0.386$$

$$P(\text{Effect} = \text{data breach} \mid \text{Condition of Recovery} = \text{Yes}) = 26/43 = 0.604$$

$$P(\text{Effect} = \text{data breach} \mid \text{Condition of Recovery} = \text{No}) = 35/57 = 0.614$$

$$P(\text{Category} = \text{High} \mid \text{Condition of Recovery} = \text{Yes}) = 16/43 = 0.372$$

$$P(\text{Category} = \text{High} \mid \text{Condition of Recovery} = \text{No}) = 56/57 = 0.982$$

Using these probabilities, we obtain

$$\begin{aligned} P(X \mid \text{Condition of Recovery} = \text{Yes}) &= P(\text{Country} = \text{USA} \mid \text{Condition of Recovery} = \text{Yes}) \\ &\quad \times P(\text{Effect} = \text{data breach} \mid \text{Condition of Recovery} = \text{Yes}) \\ &\quad \times P(\text{Category} = \text{High} \mid \text{Condition of Recovery} = \text{Yes}) \\ &= 0.535 \times 0.604 \times 0.372 = 0.120 \end{aligned}$$

$$\text{Similarly, } P(X \mid \text{Condition of Recovery} = \text{No}) = 0.386 \times 0.614 \times 0.982 = 0.233$$

To find the class  $C_i$ , that maximizes  $P(X|C_i)P(C_i)$ , we compute

$$P(X \mid \text{Condition of Recovery} = \text{Yes}) \times P(\text{Condition of Recovery} = \text{Yes}) = 0.120 \times 0.43 = 0.052$$

$$P(X \mid \text{Condition of Recovery} = \text{No}) \times P(\text{Condition of Recovery} = \text{No}) = 0.233 \times 0.57 = 0.132$$

Therefore, as  $0.132 > 0.052$ . So the naïve Bayes Classifier predicts Condition of Recovery=No for tuple  $X$ .

## STUDY THE PROBLEMS IN INDUSTRIAL NETWORKS

### The Security Problem

An external environment system should be considered as security. In Industrial networking attackers attempt to break security. Threat is great protection threat. The hacker tries to destroy the systems and may try to steal the valuable data. These attacks can be malicious or accidental. Any kinds of unwanted activities can be occurred. So awareness is important.

### Unauthorized access

In Industrial Network sites, attacks, invasion the machines, theft of other account, fake access to unauthorized files, making harassment by sending mails make threats to the management of an industry.

## Security Violation

These actions can be categorized into many individual indexes. Breach of availability, Breach of confidentiality, Integrity, Denial of service and theft of service. The methods of attacking is like masquerading (breach authentication), reply attack, man in the middle attack, session hijacking and so on. Security must occur at four levels effective like physical human, operating system and network. Actions sometimes happen unconditionally. These violation cause great consumption of industrial network resources, resulting in sharp decline in network performance of an industry.

### Program Threats:

It might be very difficult to use the functions that industry provides to employees. Network virus affects can get directly to user's privacy and data leakage. There might be consistent risk within the industrial network for virus attack. Internal users might know about the proper usage of the correct structure and application of network. So in other part of saying, internal security threats are the main threat. Some program threats are like

1. Trojan horse: It mainly happened with code segment that misuses the environments.
2. Logic Bomb: In a Certain condition a special program that initiates security incident.
3. Trap Door: Particular client identifier or secret word that bypasses typical security.
4. Stack and Buffer overflow: It generally exploit bug in a program. Overflow either in the stack or memory buffer.

Program threats expose many baleful viruses. It usually borne via email or as a macro in industrial network. Virus droppers inserts virus onto the virus. There are many categories of viruses like file, boot, macro, source code, polymorphic, encrypted, stealth, tunneling, multipartite.

### System and Security Threat

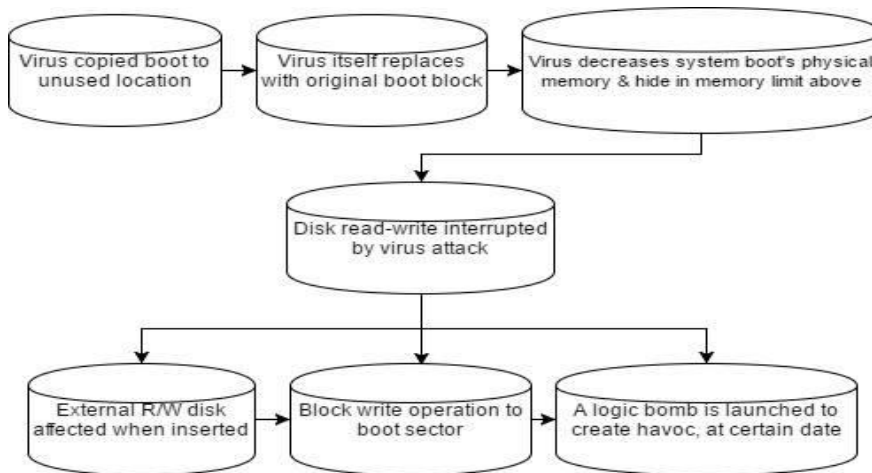
Lacking of awareness of copyright, piracy software is used in general industrial network. As the spreading of software needs a lots of bandwidth but it takes some risk in networking. For example, Windows XP OS is run by a pirated version. Updating has a limited in this version. If user installs Microsoft XP with a pirated version, Computer will have very big amount of security risk. On the other part, Trojan virus might be hidden within internet software, backdoor and other harmful viruses if downloaded from internet. (Wu, 2010)

### Identification

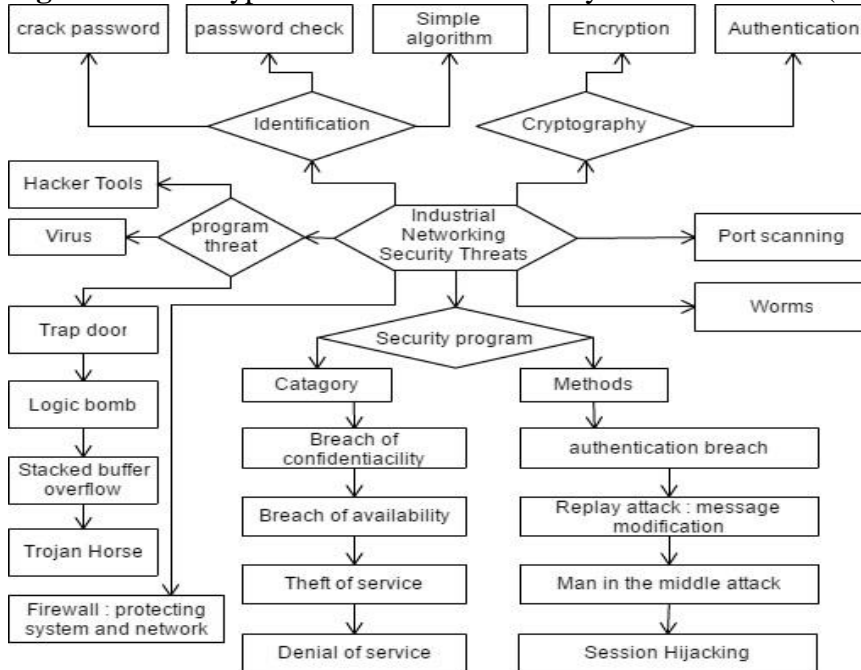
Password discloser may cause the data leakage. There should be variety of database setting in the field of industry such as employee data base, employee training systems, architecture of the management, business plans and so on. The user personal misconduct or negligence of safety measures can lead to these database password to be lost. The data may be illegally removed. So setting password is very important. Another reason might occur as too simple password. (SUN, 2016)

**Fig 4:** A Boot Sector Computer Virus





**Fig 5:** Common types of industrial network system and threats. (Wu, 2010)



**INDUSTRIAL NETWORKING SECURITY CONTINGENCY**

**Firewall protecting System and Network**

The isolation between external and the local network defense system. It basically sets a gateway between internets and to block external network encroachment. Basically, Firewall technology is usually based on the packet filter technology. Standard of the packet filter is formulated on the basis of security policy. Proxy filter, complex filter and packet filter firewall are included in firewall system as well as industrial networks (SUN, 2016).

**Ensuring Physical Security**

Industrial Computer information system includes some aspects like equipment safety, environment safety, lines safety. System detection environment is the protection security as safety of environment in industrial network such as regional protecting and disaster protecting. Equipment safety indicates anti-theft of devices, radiation leak of anti-electromagnetic information and thus it will be a solution to avoid line interception, anti-electromagnetic interference and protection in power supply.

## **Virtual Private Network (VPN)**

For industrial networking, we should have a unique plan on risk inspecting. VPN established a dedicated implementation on the public network to carry on encrypted communication. VPN portal is based on the packet encryption and changing of target deliver to acknowledge remote get to. VPN has variety of classification (Wu, 2010).

## **Cryptography**

Cryptography can be differ as the science of secret writing. It has a one sort of broadest security apparatus accessible. Source and goal message shouldn't be trusted without cryptography. Terminology of cryptography are like encryption, decryption, cipher text, and plaintext.

Plaintext is refers as unencrypted data to be communicated. For example: "dr partha pratim dey" and cipher text is defined as plaintext is encoded into something muddled cipher text for connectivity. For example: "es qbsuib qsbujn ebt". Encryption is the method of changing simple information (plaintext) into cipher text. Decryption will be just the reverse term process of encryption. Confidentiality, data integrity (message authentication). Other features are authentication, Non repudiation (ability of preventing authorized party from denying the existence of connectional session, access control ability. These are some goals of crypto system.

Authentication based on password is one of the main methods to make secure the integrity of the information. Emergence of encryption technology guarantees for the global e-commerce, which makes it possible for electronic trading system based on internet. Encryption is denoted as "public key" and Decryption is called as "private key".

## **Intrusion detection technology (IDT)**

As far we have discussed many things as well as firewall that resist the invaders. It is difficult to find intrusion attempts and successful invasion. Intrusion detection technology is effective to make up for the gaps. It can detect the invasion behavior and invasion attempts, alerting the user in time to prevent intrusion behavior. This kind of action can raise up the industrial network security.

## **Risk assessment tool**

Main object of hackers are to purloin data and modify the system illegally. Risk assessment tool for the system could be used to assist the system administrator recognize whether the client benefits charge ought not to be installed. IDT can track user's activity. It can prevent the internal tools from to damage internet. If some suspicious act occurs, it identifies the irregularities and inform immediately the administrator. Administrator can record the task results and occurrence to track the crook. This act will definitely give our industrial network system a new stage of privilege that will break the era of communication of technology and ensure the safety.

## **Network Admission Control (NAC)**

It can be proved one of the most effective strategies of industrial network security and refuge including various control methods as network access. It is such an approach that attempts to unify endpoint security technology such as anti-virus, host intrusion prevention and vulnerability assessment. Network entry is the first pass of NAC. Password and account number should be much longer. Letters and numbers should be case sensitive to ensure more secureness. Password should be as complex as should be regularly be updated to prevent to be stolen. Not like setting password according to birth dates or voter ID (SUN, 2016)

## Backup database

Database backup and recovery is one step ahead decision to prevent some unrecognized situation and ensuring the data security and integrity. Data security is the most burning issues in the recent times. It could harm billions of currency and cause a great threat to national security if some confidential data is leaked and occupied by the hacker.

## CONCLUSION

So until now it is obvious that industrial networking is a very complicated system engineering, includes the protection for everyone and future for the Digital Country. Technology, equipment, management are some valuable factor for industry networking. Safeguard of network information is a combination of firewall technology, physical security, VPN, data encryption, IDT and NAC to form a set of coordinated network security protection system. We need to make our industrial network management strong. Thus having these decisions and above measures, network may serve the human kind in a better way.

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20-AX15-5512

**THE RELATIONSHIP BETWEEN ECONOMICS AND POLITICS**HAKKI ÇİFTÇİ<sup>1</sup>**ABSTRACT**

The concept of politics, in general, is an effort to organize, direct and shape relations of social life and social life to innate birth. inclusive efforts. Political notion can be defined as a decision to reach a certain aim when a broad concept of politics is considered and its implementation. Therefore, economic policy also requires the state to make decisions for certain currencies and to implement this decision, in order to achieve the socio- the process can be defined as uncertain science, which deals with specific decisions, selected tools, appropriate means of acquiring, and directing and controlling influence on the systematic form. Political ideology influencing economic thought. This study is aimed at preserving or modifying the political-economic objectives, the political-economic situation or the network of relations within the framework of policy-economic interaction.

**Key Words:** Politics, Economics, Political Economy

**INTRODUCTION**

Economics is concerned with studying and influencing the economy. In practice there is a strong relationship between economics and politics because the performance of the economy is one of the key political battlegrounds. Economics needs political support. whether these policies get implemented depends on whether there is political support for them. Political ideology influencing economic thought (Bates and Kruger, 1993). Economics is concerned with studying and influencing the economy. In theory, economics could be non-political. Economic objectives are aimed at protecting or changing a particular economic situation or network of relations (Bresser, Maravall and Przeworski, 1993). The economic situation or relationship system in which protection or change is desired constitutes the relevant objectives (Alesina and Rodrick, 1994).

However, for a politician, they can use those economists and economic research which backs their political view. Economic thought independent of politics. Many economic issues are inherently political because they lend themselves to different opinions. The political-economic situation or relationship system to be protected or altered constitutes the subject matter concerned. Political interventions, productive the tendency of an entrepreneurial sector apart from the activities to obtain rent income, It strengthens. Finally, compared to market participants, bureaucrats their informational superiority is inevitable even the best shaped plans are ineffective It is. Politics is the theory and practice of influencing people through the exercise of power, e.g. governments, elections and political parties. political bias or prejudice to give neutral unbiased information and recommendations on how to improve the economic performance of a country. they need economists who share political responsibility (Haggard and Kaufman 2005). The policy is for general purpose purposes. a good economic policy should produce positive results and Due to this, it must be prepared well. On the other hand, the execution of a good economic policy strong and autonomous leadership. Because they are sourced to give up and give their difficulties. policy stricter budget constraints politics. Therefore, the scientific economy policy is the scientific one that the theoretical economy put forward. Scientific economics politics can be deduced from the cause-effect relations of the

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<sup>1</sup>University of Cukurova, Assistant Professor, Department of Economics, Administration Faculty of Economics and Administrative Sciences, Adana, Turkey. E-mail: - hciftci@cu.edu.tr. 01330

theoretical economy to the goal-instrumental relations. Politics of politics underlines the need for There are some areas of economics finance, macro which contributes to monetary and exchange rate policies and economic stability the elimination of economic policies and relative price distortions and the elimination of public intervention structural reforms, such as the reduction of economic growth and contribute to economic growth liberalization policies we could argue are free of politics – basic supply and demand and concepts like the theory of the firm are not laden with political ideology, policies import controls, overvalued foreign currency exchange rates, ceiling on interest rates, intensive public enterprises and wide price adjustments, financial discipline, priorities in public expenditure health, education and infrastructure, extension of the tax base and excessive, tax on reduction of tax rates reform, protection of property rights, deregulation, trade liberty financial liberalization. Another issue with economics is that some criticize the subject for prioritizing economic growth and maximization of monetary welfare. Some argue that the aim of society is not to maximize GDP – but to maximize happiness, the environment and being satisfied with what we have. Establishing appropriate economic management teams is important (Ranis and Mahmood 1992).

"Stability" and "structural adjustment", there has been a priority concern. Therefore, a politician from an environmental background may disagree with the whole premise behind macro-economics. It is not just about the best way to promote economic growth. But, whether we should be aiming for economic growth in the first place. That is a political issue too. Another interesting case is the relationship between fiscal policy (set by government) and monetary policy (largely set by independent Central Banks). If politicians pursue tight fiscal policy, Central Bankers have to adapt Monetary policy. Who should control key sectors – private enterprise or the government? When we look at the literary genre in recent years, It seems that the number of works done is increasing. In this study, the interactions between economy and politics are It was studied. good economics but good politics It is a fact that can be created with. The events of the last 10-15 years have also affected the politics of politics the need for meaning has emerged. other areas of economics or policy sciencedo not produce interdisciplinary scientific studies These studies enough for someone to study the interactions between economy and politics resources. The next step is the systematic detection of the findings should be transferred to analytical work. We would like to emphasize that we need to do more studies we want to close one by highlighting one of the required questions. In this work, an economist on the political economy of policy reforms will be looked at with eyes. Again, in this study, politicians will also open an important window for their prosperity (Williamson, 1994).

## **THE CHANGING NATURE OF THE ECONOMIC POLICY**

Primitive Religions and Primitive Political Economy, where hunting and gathering are dominant, and wealth, wealth and wealth are organized as tribes and clans dominated by non-livelihood economics; The Fourth Wave of Globalization: Individual Intelligence, Subjektivism, Positivist Imputer Method, Electronic Information, Communication and Information Technology Modern Ideologies and Until the Postmodern Political Economy of Modern Forms of Power, the economic policies of the multinational corporations, which weakened the nation states and led to the new world order, showed great changes(United Nations Department of Economic and Social Affairs, 1994), (Tekeoğlu, 1993), (Üstünel, 1990).

Starting with Primitive Political Economy, Traditional Political Economy, Pre-Modern Political Economy, Modern Political Economy, Postmodern Political Economy Until the new economic fluctuations with knowledge and technology base, many different adventures of globalization emerged(Aktan, 1990). In this process The market-oriented supply side of economics, which has been dominated by the market and industrial society formed by early

economic economics, medieval, middle-aged, mercantilist, physiocratic and classical economic thought, is a paradise from new and post-keynesian economics, and even new classics and science technology surrounded by rational economic understanding with the latest wave of globalization, where the volume economy of advanced economics takes its place (Savaş, 1997), (Hailstone,1982), (Tekeoğlu, 1993), (Üstünel, 1990).

## **ECONOMIC POLICIES AND OBJECTIVES**

The economic policy, unlike the theoretical economy, involves not only the pervasive economic events but also their influence and orientation along with their socio-economic content. The theoretical economy or economy theory is concerned with explaining them, taking into account the positive economic aspects of socio-economic events. In order to achieve the socio-economic objectives set; economic order, economic structure and economical process are the science that directs and controls certain decision-making units in a conscious and systematic way using selected appropriate means (Hailstone, 1982). The economic policy is to achieve the specified socio-economic objectives; economic order, structure and process are the science of affecting, directing and shaping and supervising certain decision-making units consciously and systematically using selected appropriate means. As stated in the definition, the economy is influenced, guided, shaped and supervised by some decision units. These decision-making units bring out decision-making units in economic policy (Schwitzner, Theodore and Chad, 1990).

The basic assumption of the economic policy is: "Economic events can be influenced and directed". But it is very complex and very multi-dimensional. It is therefore possible within certain limits. This situation has laid the foundation for the birth of scientific policy as a separate science. we can apply economics politics in terms of spatial, regional, sectoral, aims and tools. we can also determine policies in terms of economic process, economic structure and economic system (Üstünel, 1990).

It is understood from the general concept of a political economy that the basic framework rules that consistently provide the principles, methods, objectives, instruments and relevant objectives and measures of economic policy in terms of mutual relations are understood(Kyer, Maggs and Garry, 1994), (Üstünel, 1990).

When the concept of politics is widely considered, it can be defined as "the decision to make a decision and the application of this decision". Therefore, economic policy can also be defined as "the decision of the state to reach certain economic objectives and the application of this decision". (Kyer, Maggs and Garry, 1994). As can be understood from this definition, the main determinant of the economic policy is the state. The bureaucratic bodies that make up the state are the decision-making units in the political economy according to the administrative structure of the state (Tekeoğlu,1993). What is meant by the aims of the economic policy are "the goals to be achieved" or "the results to be achieved". for example - to prevent inflation and "price stability" ensure", "full employment", "achieving high growth rates", "provide balance of payments",improving income distribution",constitute the main objectives of the model of economic policy(EGİAD 2005; Tekeoğlu,1993), (Üstünel, 1990).

The economic policy is generally a set of approaches that deal with how macroeconomic balances are to be changed and how. For example, economic policy applications are needed to change the existing balances of the economy, such as fighting inflation or increasing economic growth. Economy policy has three types of lower branches. These; fiscal policy, monetary policy and income policy. When the fiscal policy is mentioned, tax policy, borrowing policy, the spending policy, incentive policy; When it comes to monetary policy money supply policy, exchange rate policy, the policy of provisions, interest policy (EGİAD, 1994; Kyer, Maggs, and Garry, 1994), (Tekeoğlu, 1993).



We encounter subheadings such as; Income policy includes wage and price controls, The primary aims of economic policies are: reach full employment, to increase production, to ensure price stability, improve the balance of payments and a fair income distribution, struggle against poverty, fight against corruption, growth making outward opening useful and It is to perform(Hailstone, 1982).

## CONCLUSION

In the context of these thematic items, the concept of politics, which will make a general assessment, is the efforts to organize, orient and shape relations between social life and social life elements. in particular, this area includes normative purposes. When the policy concept is widely considered, it can be defined as a decision to achieve a certain purpose and the application of this decision (Tekeoğlu, 1993). Therefore, the economic policy is that the state takes a decision to reach certain economic goals and the implementation of that decision. To achieve the socio-economic goals, economic order, economic structure and economical process can be defined as the science which is directed to control and control certain decision-making units consciously and systematically using selected appropriate tools. In order for the knowledge-based innovative industrialization strategy to survive; To create a definite political will and political desire at the national level, motivate people and institutions for global competition and global leadership it is a compulsory condition to strengthen human capital by investing in individual investors (EGİAD, 2005), (Tekeoğlu,1993), (Üstünel, 1990).

In every political system, economic policy must be a tool for general political purpose. Because the acquisition and use of political power comes from economic power. Scientific economic policy, therefore, benefits from the scientific laws laid out by the theoretical economy. (Kyer and Maggs, 1994), (Tekeoğlu, 1993). The purpose-instrumental relationship of the scientific economy policy can be deduced from the causal relations of the theoretical economy. Economic objectives are aimed at protecting or changing a particular economic situation or network of relations. (Tekeoğlu,1993). The economic situation or relationship system in which protection or change is desired constitutes the relevant objectives (Üstünel, 1990). This study has also shown that political-economic objectives in the context of political economy interaction are directed towards the protection or modification of certain political-economic situation or network of relations. The political-economic situation or system of relations which is to be protected or changed constitutes the relevant objectives (Cohen, 2008), (Üstünel,1990).

Global political economy is an emerging yet specialized field that combines political analysis with the study of markets, trade, and development. With the global economy having an interdependent effect on politics, environment, and society, and with several major economic events of the last economic changes (Maliniak and Tierney, 2009).

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21-AX24-5543

## THE RISE OF ECONOMIC PATRIOTISM AND ITS IMPACT ON CROSS-BORDER MERGERS AND ACQUISITIONS: RE-DEFINING THE HORIZONS OF GOVERNMENT INTERVENTION

SANJANA CHOWDHRY<sup>1</sup>

### ABSTRACT

Globalization is approaching its pinnacle by steadily blurring national boundaries and integrating national economies to create an inevitably interdependent world economy. The UK has always been conscious of such interdependence while formulating its business regulations. A prime example of such conscious policy making is UK's open FDI policy that fosters acquisition of UK based companies by foreign bidders without almost any restrictions. Lately this ease of acquisition has led to the loss of vital UK companies to foreign competitors. Further, the global M&A landscape has witnessed drastic changes that present unseen challenges to national security not accounted for in UK's existing takeover regime. The complexities of this external change are intensified by the domestic uncertainties of Brexit and UK's newly assumed nationalist disposition. The fundamental question germinated by these circumstances and concerns is whether the UK government should have greater powers to intervene in the acquisition of a UK based company by a foreign bidder? Thus, this paper seeks to address this very question as until now, although this debate is alive in speculation and political commentary, it is yet to produce any substantial results or firm commitments.

**Key Words:** cross-border acquisition, foreign bidder, government intervention, national security

### INTRODUCTION

On 17 February 2017, Kraft-Heinz launched an unsolicited bid for Unilever PLC and sent United Kingdom's (UK) political and business community into a frenzy (Clements, 2017). Kraft-Heinz, an American company backed by 3G Capital and Warren Buffet's Berkshire Hathaway Inc., can be best described as the meanest shark in the ocean of capitalism (Berman and Kenwell, 2017). Ironically, one of the milestones that earned it this reputation was its takeover of Cadbury, another iconic British Company in 2010 (Business Innovations and Skills Committee, 2009, p 5). Unilever on the other hand is a thriving Anglo-Dutch consumer goods mammoth respected for its commitment to long-term sustainability. In the ensuing 3-day hostilities, Unilever employed every trick in the book to thwart the bid until Kraft-Heinz amicably backed off stating that it was not interested in a hostile takeover (Boland, 2017, p 7). The bid was not only a rude awakening for Unilever, but also for the UK government. The government though publicly opposed to the takeover was absolutely powerless to control the bid's outcome. This situation reopened old wounds inflicted during the controversial Cadbury takeover, which had resulted in losses of every variety for the UK and its citizens (Patrone, 2011, p 64-66). Once again, the UK government and a vital British company alongwith its employees, assets, innovations and industry domination were in a sinking boat in the foreign ocean of capitalism, with no lifejackets capable of rescuing them. This seemingly distressed situation gives rise to many question of excruciating importance. What if Kraft would have relentlessly pursued Unilever raising its offer price until it drew blood? Could the UK government take any action except clenching its teeth in anger while sitting with folded hands? Should the UK government make provisions for lifejackets in the form of government intervention for the next time this turbulent ocean approaches its shores?

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<sup>1</sup> LL.M. student, University College London, London, United Kingdom. E -mail:- sanjana.chowdhry.16@ucl.ac.uk

In this paper, I aim to answer the above posed questions and suggest a way forward. Section 2 explores the factors prevailing domestically in the UK and in the global M&A marketplace that favor government intervention and it finds appreciable evidence in support of greater intervention. Section 3 conducts a comparative evaluation of the power of intervention wielded by the governments of other similarly placed and respected jurisdictions. This part alarmingly concludes that other jurisdictions have raced past the UK to ensure the protection of their ‘national interests’ and urges for introduction of measures to help UK keep pace. I then conclude in Section 4 by advocating a calculated increase in powers of intervention without losing sight of the valid purpose of such a power and the need to balance it with other objectives. Thus, this paper aims to add to a very recent and crucial debate, especially in the UK, and therefore endeavours despite of limited literature to forcefully assert its standpoint.

## **A CASE FOR GOVERNMENT INTERVENTION IN UK: NEW CHALLENGES AND OPPORTUNITIES**

The UK’s present politico-economic environment has shown a nationalist inclination and is constituted of various intertwined factors that are fueling a debate on economic patriotism. This section of the paper attempts to analyze the most pivotal of these factors in respect of takeovers by foreign bidders.

### **1. The fall in number of ‘National Champions’**

Since the Brexit vote itself, UK has lost heavyweights like ARM Holdings, WS Atkins and most recently Worldpay to foreign acquisition (Massoudi, 2016, p 3; Burton, 2016, p 12; Pooler, 2016, p 5). Additionally, there have been several failed bids to acquire high-profile companies, such as Pfizer’s bid for AstraZeneca, UK’s largest pharmaceutical company and Kraft-Heinz’s bid to acquire Unilever. These companies are at the forefront of vital industrial sectors critical to British prosperity, making their acquisition a national loss. Declining number of such ‘national champions’ has profound implications in respect of UK’s employment opportunities, innovation, infrastructure, industry dominance, long-term economic supremacy etc. (Kastrati, 2013, p 31-33). This situation is worsened by the acquirer’s motives, which in most cases are tax-dodging and profit-seeking, corporations, capitalists and private equity firms (Pwc, 2017, p 18-24). For instance, Pfizer itself confessed to tax avoidance being one of its objectives for acquiring AstraZeneca. Such acquisitions are made easier by the recently depressed value of sterling in the midst of Brexit uncertainties, which is expected to continue at it lowest in the near future (Martin, 2017). Such a predatory pattern elicits the demand for protectionist measures to shield UK’s companies from foreign siege at a time when they are most vulnerable.

### **2. The Conservative government’s standpoint**

During her electoral campaign in 2016, Theresa May, Prime Minister of the UK, reflected upon AstraZeneca’s potential takeover and suggested that the government should have the power to intervene in such bids (Parker, 2016, p 6). The Conservative government has continued to hold this opinion and has time and again given statements about its intention to undertake a complete review of the takeover regulations (Lascelles and Luque, 2016).

Recently, the government’s willingness to intervene in cross-border deals was demonstrated by its decision to delay approval of Hinkley Point C, a project to develop a nuclear power station in Somerset led by EDF, a French state-owned corporation and state-backed China General Nuclear Power Corporation (Ruddick, 2016, p 7). It was speculated that the delay resulted from national security fears due to Chinese involvement in the project (Ruddick, 2016, p 7).

The above statements evidently highlight the government's hypersensitivity to foreign takeovers and growing protectionist sentiment. However, being aware that any such policy change will imply a monumental shift from the present laissez-faire approach, the government is carefully reviewing its options while waiting for the opportune moment. Thus, with a government more supportive of calculated protectionism than any of its predecessors, UK's departure from a historically open economy might be on the horizon.

### **3. Disguised opportunities presented by Brexit**

As a member of the European Union, UK is bound by the European Union Merger Regulation (EUMR) to regulate all takeovers that fall within its scope. Article 21(3) of this regulation prevents national legislation to interfere with its operation. Resultantly, the government is incapable of blocking any deal once the European Commission has approved it on largely competition grounds. Although Article 21(4) provides certain exemptions allowing member states to protect their legitimate interests, these exemptions are rarely granted. On being asked to comment upon the expected changes to the takeover regime post Pfizer's bid for AstraZeneca, the Secretary of State had rightly noted that the UK operates 'within serious European legal constraints' in considering any extension to its public interest powers (*HC Deb*, 2014-15).

Now, Brexit presents the government with unprecedented opportunities in this regard. Giving credence to informed opinions and well supported speculation, it is likely that the UK will exit the EEA post a hard Brexit, thus rendering the EUMR inapplicable (Edwards, 2017; Clifford Chance, 2016). This will finally bestow the government with the freedom to draft a tailored takeover policy with its chosen measure of protectionism.

### **4. The rise of State Wealth Funds (SWFs) and State-owned Entities (SOEs) in the M&A landscape**

The continuous ascent of SWFs and SOEs as major players in the global M&A market has been the axis of worldwide media attention and government scrutiny. In 2015, SWF's alone owned assets worth USD 11.3 trillion, projected to reach USD15.3 trillion in 2020 (Pwc, 2016). The fear surrounding the expanded role assumed by governments in global M&A deals is primarily based on national security concerns (Mation, 2016, p 494-496). In particular, the Chinese state-owned enterprises find their motives questioned routinely by national governments and media alike.

In order to effectively address these legitimate security concerns, national governments have already amended or are in the process of amending their takeover policies. The US Congress passed the Foreign Investment and National Security Act 2007 (FINSA) requiring the Committee on Foreign Investment (CFIUS) to compulsorily review foreign investments by sovereign acquirers. Similarly, in 2009 the German Foreign Trade and Payments Act was amended to allow the German Federal Ministry of Economics and Technology to prohibit non-EU investors from acquiring German enterprises on security or public policy grounds. This has been further amended in 2017 and will be discussed later. The Australian Foreign Investment Review Board (FIRB) has also advanced in this direction by publishing a detailed policy requiring direct investments by foreign governments and their related entities to be treated differently from other acquisitions in terms of substance and applicable procedures.

In the light of these developments, UK's inaction is not only surprising but also potentially incautious. According to the World Investment Report 2017, UK is the second most targeted nation for government led acquisitions worldwide while US is the prime target (United Nations Conference on Trade and Development, 2017, p 8). The US however timely addressed these concerns by undertaking legislative action and even European nations, which famously advocate the free-market principle, have recognized the need for differential treatment of

sovereign acquirers. Thus, I believe that the question should no longer be whether UK needs to implement policy changes to tackle government led takeovers, but that when will such inevitable changes be implemented.

## 5. Socio-economic concerns

A takeover activity is never purely economic since its effects are borne by various socio-economic factors (Kastrati, 2013, p 31-33). The free market approach to takeovers surrenders these socio-economic factors to the self-regulating international markets, frequently leading to unintended consequences. The British government has faced such consequences on several occasions and is yet again helpless in the face of the deal between General Motors (GM) and PSA Group to sell GM's loss-making Opel and Vauxhall subsidiary to PSA (Kable, 2017). Vauxhall has two factories in UK directly employing 4,500 workers and engaging another 27,000 people in UK's retail and supply network all of whose jobs are now at stake (Wearden, 2017, p 5). The failed Kraft-Heinz bid for Unilever would have presented a much greater threat to 7,500 Unilever employees in UK specially given its ruthless cost-cutting reputation (Whipp, 2017, p 9). Such a loss of jobs at the hands of a foreign acquirer will not be new for British citizens who have been left unemployed on earlier occasions such as the Cadbury, Jaguar and Landrover and BBA takeovers.

In a time when the Brexit vote has patently demonstrated the people's predilection for protecting their jobs, losing jobs to achieve a foreign acquirer's profit margins will be vehemently unacceptable to British citizens. Thus, at this juncture of Brexit and spewing nationalism in UK, the public will expect the government to defend them from predatory capitalists who seek profits at the expense of UK's society, economy and long-term prosperity.

Historically, the UK is an exemplary free-market economy that proudly boasts of the world's most open takeover regime (Deresky, 2015). Any shift from this widely advocated stance by UK must therefore be grounded in well-founded and economically sound reasoning. It is argued that the above-assessed grounds possess the combined potency to justify government intervention. The UK government must acknowledge that this is the golden age of shareholder-first capitalism wherein the interests of here-today-gone-tomorrow shareholders can no longer be allowed to dictate the long-term interests of the society, the economy and the nation. Thus, it is contended that the UK government should no longer hold onto past notions of an idealistic takeover policy and initiate necessary reform.

## THE SCOPE OF GOVERNMENT INTERVENTION IN SELECTED JURISDICTIONS

This section seeks to provide an overview of the policy changes in respect of takeovers by foreign acquirers implemented or considered by certain economic superpowers, namely USA, Australia and the EU with a focus on the reasons that prompted their policy changes. This analysis will help draw comparisons with UK's current situation and provide a catalogue of the various approaches adopted by similarly placed economies.

### 1. USA: A takeover regime revolving around 'national security'

The USA is a longstanding champion of an open FDI policy and attracts the highest inward foreign investment year after year (United Nations Conference on Trade and Development, 2017). In 1988 due to circumstantial necessity, USA amended section 721 of the Defense Production Act 1950 to enact the "Exon-Florio Amendment". This amendment authorized the President to block foreign investments presenting a threat to U.S. national security. The Committee on Foreign Investment in the United States (CFIUS) is the primary vehicle for executing Exon-Florio and responsible for conducting a national security review of transactions by foreign acquirers. Recently two particularly controversial takeover attempts caused a furore

in the Congress to attack the CFIUS review process as inadequate and lax. First, in 2005, CNOOC an oil company with 70% Chinese government stake sought to acquire UNOCAL, an American oil company (Nanto and Jackson, 2006). Second, in 2006, Dubai Ports World, a Dubai state-owned company gained requisite regulatory approval to purchase the management rights of terminals at five American ports (Malwaki, 2011, p 170-174). Both these transactions crumbled under the immense political pressure exerted by the congress with CNOOC forced to withdraw its bid and DPW forced to sell the rights to a US entity (Mamounas, 2007, p 416-419). This congressional thrust triggered the further amendment of section 721 *vides* FINSA with an aim of formalizing the review process to enhance protection of national security.

CFIUS may review ‘covered transactions’ either on voluntary notification by the parties or unilaterally. FINSA defines a “covered transaction” as ‘a transaction by or with a foreign person that could result in control of a U.S. business by a foreign person.’ Investigation is mandatory where a transaction (1) would result in foreign control over critical infrastructure and (2) could impair national security. On completing the investigation, a recommendation is made to the President who exercises the ultimate authority to either approve or prohibit the transaction.

The new formalized review process has faced several criticisms, the key concerns being the expansive scope of ‘national security’ and the alarming influence of congress. FINSA purposefully omitted to define the term ‘national security’ although a subsequent guidance was published by the Treasury Department, which instead provides the factors considered by CFIUS in determining national security threats (United States of America, Department of the Treasury, 2008). These factors such as potential national security-related effects on U.S. critical infrastructure, international technological leadership in areas affecting U.S. national security etc. are themselves open to unbounded interpretations. Thus, a potential foreign acquirer is left vulnerable to uncertainty and excessive costs (United States of America, Department of the Treasury, 2008). The second concern regarding increased congressional influence stems from the easy access afforded to several members of the congress (including their staff) to confidential information relating to reviewed transaction (Stagg, 2007, p 360). Increased congressional influence opens the door for factors such as lobbying, pressure tactics by special-interest groups, public appeasement and political agenda in a room reserved for objective decisions on national security. Apart from the above, other concerns such as the uncertainty injected by authorizing the CFIUS to review a closed transaction at any time, the secrecy of the CFIUS’s internal process and the dangers of reciprocal retaliation towards US investment from countries like China have raised doubts as to the motivations and merits of enacting FINSA (Li, 2017).

Although any comment on the comprehensive impact of this enactment will be premature, it is believed that the true value of this regime lies in its function as a deterrent to ill-motivated takeovers and its potency as a weapon against national security threats (Tipler, 2014).

## **2. Australia: A fearless approach towards protection of ‘national interest’**

Despite being rated by the OECD as a country, which maintains a restrictive foreign investment regime, Australia is a significant beneficiary of foreign investment in the global acquisition landscape (Organisation for Economic Co-operation and Development, 2016). Recently, the Australian takeover regime has received considerable scrutiny following a decision to block two foreign bids by China’s State Grid Corporation and Hong Kong-based Cheung Kong Infrastructure for acquiring Ausgrid, an Australian electricity company (Smyth, 2016, p 4). Displaying a rising sensitivity to Chinese investments, especially after a transaction wherein China’s Landbridge Group acquired the lease to Darwin port, a strategically important area, the government in January 2017 ordered a full-scale review of its critical infrastructure and the



development of a register of key infrastructure ownership to strengthen the review of bids relating to critical infrastructure (Attorney-General for Australia, 2017). Earlier, Australia has also updated their Foreign Investment Policy to include additional regulatory requirements for ‘foreign government investors’. In response to accusations of protectionism, the Head of Australian Strategic Policy Institute commented that, “I don't think Australia should be embarrassed to say that we will have at least a strong protection of our national security interests around critical infrastructure, as the Chinese do around their critical infrastructure” (Iggulden, 2016).

Australia’s takeover regime is governed by the Foreign Acquisitions and Takeovers Act 1975 (FATA) which stipulates a case by case review of proposals and a mandatory review of proposals by a foreign government or a related entity, introduced in 2015. The treasurer must determine whether the proposed acquisition is contrary to ‘national interests’. Although FATA does not prescribe a definition of ‘national interest’, the Foreign Investment Policy of Australia as updated in January 2016 provides the factors considered by the treasurer in making such a determination such as, national security, competition, impact on the economy, analysis of Australian participation and the interests of employees, creditors and other stakeholders, the character of the investor etc. Resultantly, the acquisition is approved, rejected or approved with conditions, which is more usual than rejection.

The ‘national interest’ test is criticized for being a flexible ploy of expansive scope creating room for political influence and occasional strong-arming (Bath, 2012, p 16). Also, the case-by-case review mechanism lacks predictability evoking mistrust in the review process. However, past experience contains little evidence of arbitrary determinations by the treasurer with rare instances of rejection (Bath, 2012, p 17). The Australian model advocates that an open investment policy does not necessitate the limiting of national interest to purely defense considerations and an expansive interpretation is infact suitable and acceptable in light of the challenges presented by takeover bids particularly by governments-controlled acquirers.

### **3. European Union: Navigating the concept of protectionism**

The EUMR, as discussed earlier, regulates all takeover activity that exceeds the required revenue threshold through the European Commission. The EC reviews the proposed takeover bid on competition grounds and if a takeover is considered ‘incompatible with the common market’ it is either prohibited or approved with mitigating conditions. Under Article 21(4), the member states are permitted to intervene with the EC’s determination only for the protection of their legitimate public interest in three specified and consideration of any other interest is dependent upon its compatibility with EU principles. However, if the threshold is not met, the individual member states are authorized to regulate the takeover in accordance with their domestic law.

In the last decade, the EU has witnessed a surge of protectionist sentiment evoked by various factors and particularly orchestrated by France, Germany, Italy and Belgium. The recently elected French president has publicly supported the protection of ‘national security’ through the EU mechanism (Beesley, 2017, p 12). In Germany, the government adopted a directive in 2017 expanding its current power to block the acquisition of a German entity in excess of 25% by a non-EU acquirer if the takeover threatens public order or national security, to include companies providing critical infrastructure.

At the EU level however, there is an absence of any power to prohibit transactions on national security or interest grounds. This handicaps all the member states and has thus catapulted this concern to EU’s immediate agenda. A paramount concern for EU is the wave of acquisitions by Chinese firm in strategic sectors, particularly advanced technology, while China continues to place numerous restrictions on inward investment by member states

(Hanemann and Huotari, 2016). Consequent to these concerns and developments, on 13 September, the EC president announced measures to tackle this apparent lacuna in the EU regime (Lakhdar and Cristie, 2017). The EC has proposed a framework that authorizes the member states to screen FDI on security grounds while simultaneously authorizing the EC to screen such FDI, which can potentially affect projects of Union interest, such as projects involving critical infrastructure or technology, on security grounds. Pending the formalization and adoption of the draft regulation, the proposal is being lauded as a brave and unexpected step capable of addressing the concerns and fears of the EU member states.

In conclusion, this section emphasizes the overriding common threads between each jurisdiction's developments, namely, heightened sensitivity in respect of critical infrastructure and hyper-cautiousness towards government-controlled acquirers. As discussed above, the UK is equally vexed by these concerns, the only difference being that other jurisdictions have already ushered reforms despite of criticism and allegations. The above-discussed jurisdictions continue to remain proponents of an open FDI policy since the strength of their policies lie in deterrence rather than application. However, each jurisdiction is struggling to ensure the separation of decision-making power and political influence, both in substance and in appearance.

## CONCLUSION

The takeover regime in UK is a unique union of different legislations and rules that seamlessly integrate and purposefully overlap to produce a swift, certain and flexible regulatory mechanism. The principal legislations and rules that together constitute the takeover regime are the City Code on Takeovers and Mergers, the EUMR, the Enterprise Act 2002 (EA) and the Companies Act 2006. The EA affords the UK government the power to intervene in a takeover bid in very limited circumstances and even this power is curtailed by the EUMR. Interventions within the EUMR's narrow exceptions are further subject to EC's review and can be overturned by an ECJ infringement ruling.

In cases of mergers outside the scope of EUMR, section 58 of the EA empowers the Secretary of State to issue a Public Interest Notice (PIN) if he is satisfied that any public interest consideration, which under the EA are limited to national security, plurality of the media, and stability of the UK financial system, is threatened by the given takeover transaction. Once issued, the PIN transfers the decision making power to the Secretary of State who has the discretion to either remedy the adverse effects by exercising enforcement powers or prohibit the acquisition. Even this authority is rarely exercised predominantly due to the limited legitimate interests that are protected by the act. The exemption of 'national security' as defined under the EA is robbed of its inherently wide scope since its definition is based on the narrow definition of 'public security' under Article 21(4) of the EUMR. Thus, the UK government is often said to have the most hands-off approach to takeover control as compared to any other jurisdiction.

I believe that this regime has remained stagnant in the face of challenges that demanded acknowledgment through realignment of its objectives. The role of the key market-players, particularly the government, must adapt to face the challenges discussed in the preceding section in a way that best serves the interest of UK's economy. It is suggested that the revised framework should refrain from introducing radical changes to the present takeover policy and regime such as the introduction of a separate statutory review body similar to CFIUS. Primarily, this is to avoid differing compliance regimes within the UK and EU post-Brexit leading to onerous and lengthy investigations and opposing outcomes. Such inconvenient policy divergences between the former member states can induce hostility and possible retaliation from the EU (Buckle et al, 2015, p 60-66). Further, I believe that with the suggested amendments, the existing EA framework is highly capable of achieving the said objectives.

Therefore, UK should not overplay its likely freedom from the EUMR to its own detriment but should only utilize it to the extent necessary while striving to promote cooperation with the EU. In respect of SWFs and SOEs, it is suggested that unlike many other jurisdictions, they should not be discriminated against by subjecting their takeover proposals to compulsory scrutiny. The reason supporting uniformity of treatment is that the takeover regime should be grounded in commercial and rational considerations instead of the acquirer's identity in the absence of any reliable data warranting such discrimination. Infact, one study concluded that the determinants influencing the takeover decision of a government-controlled acquirer and a commercial acquirer vary >1%, thus eliminating political motivations (Karolyi and Liao, 2010, p 20-23).

In conclusion, the UK government must undertake measures to protect critical infrastructure and national security by appropriately amending the EA, expanding the use of golden shares to prevent takeovers provided UK leaves the EEA or/and introducing various sectorial restrictions on foreign investment to protect strategic sectors can restrict their acquisition by sovereign acquirers. However, any increase in the powers of intervention must be carefully calculated and appropriately restrained to ensure UK's openness to FDI and commercially motivated foreign acquisitions.

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## COMPARISON OF POTENTIAL TO WORK WITH CUSTOMER BETWEEN SLOVAK AND UKRAINIAN MANAGING EMPLOYEES IN THE CONTEXT OF PRIVATE AND PUBLIC SECTOR

TATIANA LORINCOVÁ<sup>1</sup>, RADOVAN BAČÍK<sup>2</sup>, RICHARD FEDORKO<sup>3</sup> AND ANNA TOMKOVÁ<sup>4</sup>

### ABSTRACT

The proposed paper analyzes potential to work with customer of Slovak and Ukrainian managing employees in relation to their position within the public and the private sector. The research sample consisted of 122 managing employees aged between 28 and 57 years (average age: 35.98, standard deviation: 8.56) included 62 Slovak and 60 Ukrainian managing employees, 64 from private and 58 from public sector. Data collection was carried out by means of Skasuk methodology developed by Sonnenberg in Slovak translation by Kováč (2006). By means of a Two- Way Anova it was detected that Ukrainian managing employees working in private sector show significantly higher levels of Empathy than the Slovak managing employees from private sector. We found statistically significant differences between managing employees working in private sector and managing employees working in public sector in the level of Extraversion. We found statistically significant differences in the level of Empathy between Slovak and Ukrainian managing employees.

**Key Words:** Potential to work, Slovak and Ukrainian managing employees, Private and Public sector

### INTRODUCTION

Employees are the most precious resource of the organization. Organizations started to realize that their future depends on employees and not on the size of buildings, equipment and instruments. Intellectual capital of organizations is covered through managing and executive employees. We focused on potential to work with customer in the context of work sector and nationality of managing employees.

Competitiveness and organizational development requirements are reflected in the requirements of organizational units and employees. The basis for the emergence of these competences is the personal potential of the businessmen (Šuleř, 2002). According to Pauknerová (2006) businessman's personality profile is judged in relation to the circumstances and situations in which the activity is taking place. Their consideration is important in assessing the significance of these attributes for success in the performance of business functions (Schiffman and Kanuk, 2004). Distinctive features of the personality and the businessman's characteristics can be understood as a set of features that a businessman characterizes in terms of his business activities. It is an organized and valuable complex of mental life that affects his behavior. The modern businessman is characterized by high responsibility, personal discipline, flexibility, high adaptability and business (Mikulášťik, 2007). According to Bělohávek (2003) the potential to work with customer plays important part in professional development of businessman because it allows achieve the goal in a certain activity and discourages from

<sup>1</sup> Lecturer, Department of Managerial Psychology, Faculty of Management, University of Prešov in Prešov, Slovakia. E-Mail: - tatiana.lorincova@unipo.sk

<sup>2</sup> Associate Professor, Department of Marketing and International Trade, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail: - radovan.bacik@unipo.sk

<sup>3</sup> Associate Professor, Department of Marketing and International Trade, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail: - richard.fedorko@unipo.sk

<sup>4</sup> Lecturer, Department of Marketing Managerial Psychology, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail:- anna.tomkova@unipo.sk

activities which are related to unexpected results. Personality development of a businessman can be perceived as the ability to cope with the negative characteristics that cause a certain failure. The ability to sell to customers in distant locations is a measure of market sophistication, for it requires functioning transportation infrastructure, sources of market information that can identify potential trading partners, and the means to assure bills are paid in arms-length transactions. By this measure Poland, Slovakia, and Romania are relatively advanced, with respectively 65 per cent, 68 per cent, and 54 per cent of their sales going to customers in different cities or different countries. In Russia and Ukraine trade is more localized: just 23 per cent and 30 per cent of transactions are outside the home city (Johnson, McMillan, Woodruff, 2000). At the same time, the identification and specification of potential to work with customer in relation to nationality and work sector is the main goal of the study.

## METHODOLOGY

The main goal of the research study is to compare Slovak and Ukrainian managing employees working in public and private sector in the level of potential to work with customer (frustration tolerance, self-observation, empathy, social appreciation, achievement motivation, motivation to help, dominance and extraversion).

### Research Hypotheses

Hypothesis 1: We assume the existence of statistically significant differences between Slovak and Ukrainian employees in the level of selected characteristics related to potential to work with customer.

Hypothesis 2: We assume the existence of statistically significant differences employees working in private and public sector in the level of selected characteristics related to potential to work with customer.

Hypothesis 3: We assume the existence of statistically significant differences between employees in the level of selected characteristics related to potential to work with customer in relation to interaction effect between work sector and nationality of employees.

### Research Sample

Research sample consisted of 122 respondents aged from 24 to 51 years (average age was 34.74 with standard deviation 5.76). The proportionality of gender was uneven- the sample contained 80 men and 42 women. The research sample consisted of 62 Slovak and 60 Ukrainian respondents living in city (70 respondents) and countryside (52 respondents) working in business area with customers.

### Research Method

We used self-reported questionnaire for research purpose called SKASUK developed by Sonnenberg.

### SKASUK- Scale of potential to work with customer

We used standardized questionnaire which is called **Scale of potential to work with customer (SKASUK)** developed by H. G. Sonnenberg, translated by T. Kováč (2006). The SKASUK questionnaire contains 94 statements and it consists of four motivational and four compensatory scales. The individual entries are rated with number 1= agree with statement and number 0= disagree with statement.

Motivational scales consist of four motives:

- social appreciation contains social motive,
- motivation to help contains motive to be at the service,
- achievement motivation contains motive of performance,



- dominance contains motive of power.

Compensatory scales consist of four scales:

- extraversion contains the ability to access other people,
- frustration tolerance contains the ability not to be discouraged by failure,
- empathy contains the ability to be able to feel empowered by others,
- self-observation contains the observation and analysis of own behaviour.

**RESEARCH RESULTS**

The objective of research is to analyze and compare potential to work with customer among Slovak and Ukrainian managing employees working in public and private sector. The research results were processed in statistical program IBM SPSS 20.00 and assess by Two-way mixed Analysis of Variances (ANOVA). Table 1 illustrates descriptive data dependent and independent variables. Levene’s test of Equality of Error Variances was higher than 0.05 in all cases. The value of *F*-ratio is highly significant.

**Table 1:** Descriptive statistics of dependent and independent variables

Dependent variable	Independent variable	Independent variable	N	Mean	Standard deviation
Extraversion	Slovak employees	Private sector	30	6.60	1.57
		Public sector	32	6.94	1.63
	Ukrainian employees	Private sector	34	6.06	1.83
		Public sector	26	7.08	1.41
Social Appreciation	Slovak employees	Private sector	30	6.27	1.84
		Public sector	32	5.75	2.20
	Ukrainian employees	Private sector	34	6.41	1.21
		Public sector	26	6.46	1.82
Dominance	Slovak employees	Private sector	30	6.60	1.17
		Public sector	32	7.31	1.86
	Ukrainian employees	Private sector	34	6.91	1.97
		Public sector	26	7.31	1.70
Empathy	Slovak employees	Private sector	30	4.67	1.92
		Public sector	32	6.25	1.74
	Ukrainian employees	Private sector	34	5.87	2.22
		Public sector	26	6.23	1.39
Motivation to help	Slovak employees	Private sector	30	5.47	1.96
		Public sector	32	5.62	1.34
	Ukrainian employees	Private sector	34	6.29	1.80
		Public sector	26	5.46	1.77
Selfobservation	Slovak employees	Private sector	30	5.20	1.35
		Public sector	32	5.38	1.52
	Ukrainian employees	Private sector	34	5.41	1.56
		Public sector	26	5.77	1.66
Achievement motivation	Slovak employees	Private sector	30	6.67	1.27
		Public sector	32	6.75	1.78
	Ukrainian employees	Private sector	34	7.00	2.26
		Public sector	26	6.92	1.57
Frustration tolerance	Slovak employees	Private sector	30	5.20	0.93
		Public sector	32	5.56	1.24
		Private sector	34	5.12	1.14

	Ukrainian employees	Public sector	26	4.85	1.32
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Results analysis of research shows significant differences between Slovak and Ukrainian employees in relation to their work sector. We used multivariate analysis, specifically two multivariate tests. Table two illustrates significant differences in all three cases.

**Table 2:** Interaction effect of work sector and nationality of employees– Multivariate tests

	Tests	F ratio	Sig.
Nationality of Employees	Pillai's Trace	2.808	<b>0.007</b>
	Wilks' Lambda	2.808	<b>0.007</b>
Work sector	Pillai's Trace	2.076	<b>0.044</b>
	Wilks' Lambda	2.076	<b>0.044</b>
Work sector * Nationality of Employees	Pillai's Trace	2.860	<b>0.006</b>
	Wilks' Lambda	2.860	<b>0.006</b>

Tests of between subject effects show significant differences in level of motivation to help between Slovak and Ukrainian employees. Using Analysis of Variances we found significant differences in level of Extraversion ( $p=0.0024$ ) between employees working in private and public sector. We found statistically significant differences in level of Empathy between Slovak and Ukrainian employees working in private and public sector.

**Table 3:** Interaction Effect of Work Sector and Nationality of employees in Level of Potential to work with customer – Tests of between Subject Effects

Dependent variable	Independent variable	Mean square	F ratio	Sig.
Nationality of Employees (Slovak and Ukrainian employees)	Extraversion	1.220	0.460	0.499
	Social appreciation	5.540	1.727	0.191
	Dominance	2.467	0.720	0.398
	Empathy	12.477	1.790	0.182
	<b>Motivation to help</b>	38.400	12.477	<b>0.001</b>
	Self-observation	2.774	1.198	0.276
	Achievement motivation	1.936	0.610	0.436
	Frustration tolerance	4.816	3.653	0.058
Work sector	<b>Extraversion</b>	13.874	5.234	<b>0.024</b>
	Social appreciation	1.646	0.513	0.475
	Dominance	5.374	1.568	0.213
	Empathy	5.753	1.869	0.174
	Motivation to help	3.432	1.149	0.286
	Self-observation	2.140	0.925	0.338
	Achievement motivation	0.000	0.000	0.992
	Frustration tolerance	0.063	0.047	0.828
Work sector * Nationality of Employees	Extraversion	3.497	1.319	0.253
	Social appreciation	2.422	0.755	0.387

	Dominance	2.551	0.744	0.390
	<b>Empathy</b>	39.721	12.906	<b>0.000</b>
	Motivation to help	7.413	2.482	0.118
	Self-observation	0.251	0.109	0.742
	Achievement motivation	0.194	0.061	0.805
	Frustration tolerance	3.035	2.301	0.132

Hypothesis 1 was confirmed in one case, because we found statistically significant differences between Slovak and Ukrainian employees ( $p= 0.001$ ). Ukrainian employees dispose with higher level of Motivation to help than Slovak employees. Hypothesis 2 was confirmed in one case, because we found statistically significant differences in level of Extraversion ( $p=0.024$ ) between employees working in private and public sector. Hypothesis 3 was confirmed in one case, because we found statistically significant differences between Slovak and Ukrainian employees in relation to interaction effect of work sector in the level Empathy ( $p\leq 0.001$ ).

**Fig. 1:** Interaction between Work sector and Nationality of Employees in the level of Empathy

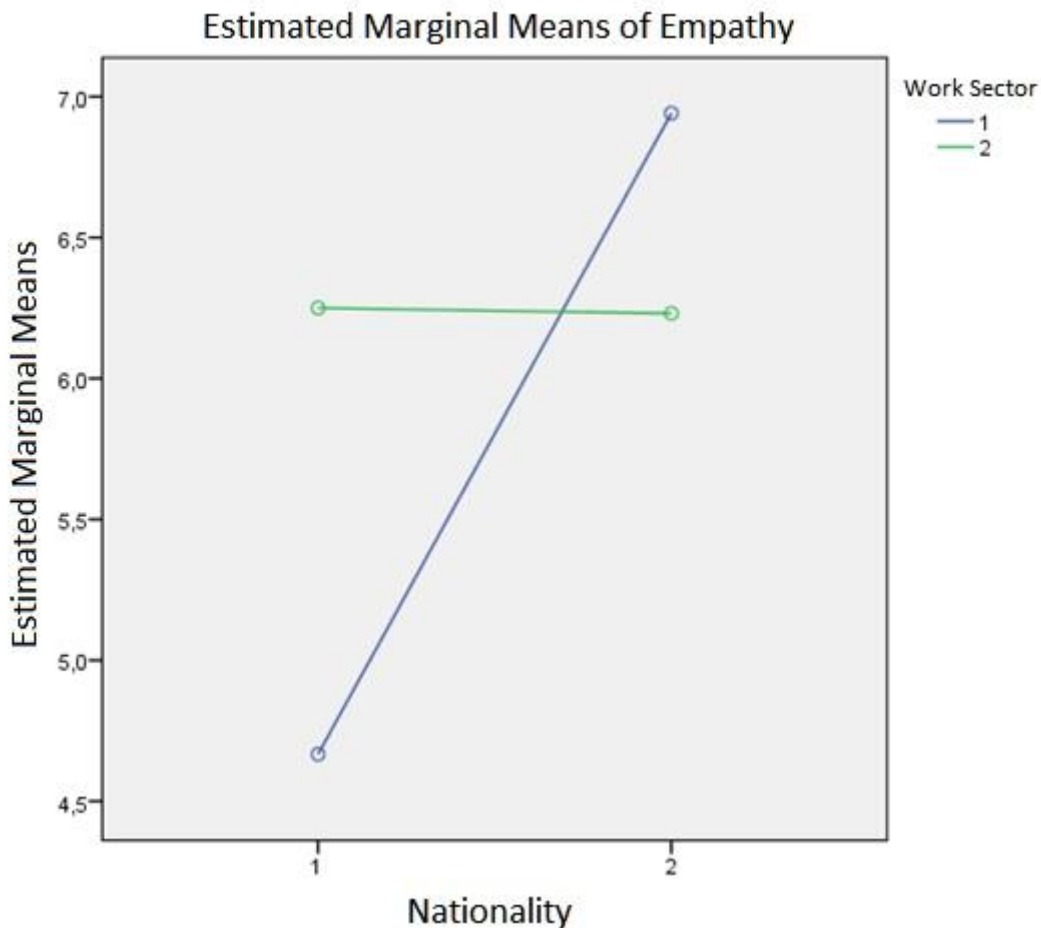


Figure 1 illustrates interaction between work sector and Nationality of employees in the level of Empathy. Comparison of estimated marginal means in the level of Empathy showed that Slovak employees working in private sector ( $M=4.97$ ) expressed a significant lower level of Empathy than Ukrainian employees working in private sector ( $M=6.94$ ). Slovak employees working in public sector ( $M=6.25$ ) did not express a significant higher level of Empathy than

Ukrainian employees working in public sector ( $M=6.23$ ). We found that Slovak employees working in private sector ( $M=4.67$ ) expressed significant lower level of Empathy than Slovak employees working in public sector ( $M=6.25$ ). On the other hand Ukrainian employees working in private sector ( $M=6.94$ ) expressed significant higher level of Empathy than Ukrainian employees working in public sector ( $M=6.23$ ).

## DISCUSSION AND CONCLUSION

In this chapter we will interpret the research results which are related to potential to work with customer in the context of work sector and nationality of employees. We found statistically significant differences between Slovak and Ukrainian employees in the level of motivation to help. Ukrainian employees dispose with higher level of motivation to help than Slovak employees. Although Batson et al. interpreted their results as evidence that empathic emotion can evoke altruistic motivation to help, they readily admitted that two experiments do not provide sufficient evidence to justify acceptance of the empathy-altruism hypothesis (Toi, Batson, 1982). Research results showed that Ukrainian managing employees dispose with higher level of motivation to help which is associated with personality trait altruism.

We found statistically significant differences in the level of extraversion between employees working in private and public sector. Barrick and Mount (1991) found that conscientiousness, extraversion, and openness to experience are related to performance criteria across occupational groups, that extraversion is related to job performance of salesmen and managers but not to job performance of professionals, policemen, and skilled workers, and that openness to experience is related to training proficiency. Matthews and Deary (1998) compared and summarized the metaanalyses conducted by Barrick and Mount (1991) and Tett et al. (1991), and concluded that conscientiousness is the most consistent predictor of job proficiency. Hough (1992) divided conscientiousness into narrower traits of achievement and dependability, and found that achievement showed the stronger associations with job proficiency, training success, and educational success (Berg and Vrije, 2003). Research results demonstrated that extraversion is related to job performance of businessmen in private sector.

We found statistically significant differences between Slovak and Ukrainian employees in relation to interaction effect of work sector and nationality of employees in the level of Empathy. Empathic concern is the ability to respond emotionally to the experiences of others (Lindsey and Hill, 2007). Comparison of estimated marginal means in the level of Empathy showed that Slovak employees working in private sector expressed a significant lower level of Empathy than Ukrainian employees working in private sector. Slovak employees working in public sector did not express a significant higher level of Empathy than Ukrainian employees working in public sector. We found that Slovak employees working in private sector expressed significant lower level of Empathy than Slovak employees working in public sector. On the other hand Ukrainian employees working in private sector expressed significant higher level of Empathy than Ukrainian employees working in public sector.

Limitation of the study is that potential to work with customer was measured by self-report questionnaire. A second limitation of our study is that we used just one self-report questionnaire, which measured potential to work with customer because of the complexity of the constructs. The results of this study suggest that Slovak employees working in private sector expressed a significant lower level of empathy than Ukrainian employees working in private sector. Research results are partially consistent with the research hypothesis. Slovak employees working in public sector did not express a significant higher level of empathy than Ukrainian employees working in public sector. We found that Slovak employees working in private sector expressed significant lower level of empathy than Slovak employees working in public sector. On the other hand Ukrainian employees working in private sector expressed significant higher level of empathy than Ukrainian employees working in public sector. Our research results can

contribute to development of the features and skills that are efficient for effective working with customers.

### ACKNOWLEDGEMENTS

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**LEADERSHIP STYLES OF MANAGERS AND NON-MANAGERS**LUCIA ZBIHLEJOVÁ<sup>1</sup>, MIROSLAV FRANKOVSKÝ<sup>2</sup>, ZUZANA BIRKNEROVÁ<sup>3</sup> AND LADISLAV SUHÁNYI<sup>4</sup>**ABSTRACT**

The main objective of the paper is to detect whether there are any statistically significant differences in the assessment of the selected leadership styles between the two respondent groups (129 managers and 211 non-managers). By means of the differential analyses of the research file, statistically significant differences in perceptions of leadership between managers and non-managers were revealed. For these analyses, two methodologies for measuring perception of leadership were used: MG – Managerial Grid (Blake and Mouton, 1964) and PL – Paternalistic Leadership (Frankovský, Birknerová and Zbihlejová, 2017). Acquired results confirmed the existence of statistically significant differences between managers and non-managers in assessing the leadership factors of PL and MG. Managers achieved higher scores in the PL factors Benevolence and Authoritarianism and in the MG factors Concern for people and Concern for production. On the basis of the research results, the final part of the paper brings forward recommendations for managerial practice.

**Keywords:** leadership, manager, non-manager, Paternalistic Leadership

**INTRODUCTION**

Within the rich mosaic of human resource management, the form and ways of leadership play a significant role. Rose and Kumar (2006) report that the implementation of the right practices in human resource management, leadership, and alignment of these practices with the company's business strategy, as well as the current situation requirements, have an important impact on the performance of the organization as a whole. It is obvious that companies, which aspire to be market leaders, must have capable leaders in their portfolio (Lipiec, 2001). Leaders, leadership, and the innovative nature of human resource management are, in this sense, some of the decisive factors in the competitive advantage (Lufthans, Hodgetts and Lufthans, 1997).

According to Lipiec (2001), the latest functional approach needs to be changed into a strategic one. The source of the success of all these processes is the quality and development of the specific characteristics of a particular person, both in the position of a subordinate employee and in the position of a manager. This is also the case in the theory by Lufthans, Hodgetts and Lufthans (1997), who claim that organizations can be classified according to the degree of innovation of their human resource management into: leading innovators, followers, and lagging followers. Managers are expected to be leaders and decision makers in the context of both the day-to-day and the strategic solutions that, for example, direct the company's further development. This position of leaders is compounded by the fact that, according to Drucker (2001), the current economic environment is characterized by an unprecedented turbulence and a staggering flow of change. Nothing is constant except the change. The chance to survive is

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1 Lecturer, Department of Intercultural Communication, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail: - lucia.zbihlejova@smail.unipo.sk

2 Associate Professor, Department of Managerial Psychology, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail: - miroslav.frankovsky@unipo.sk

3 Associate Professor, Department of Managerial Psychology, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail: - zuzana.birknerova@unipo.sk

4 Associate Professor, Department of Marketing and International Trade, Faculty of Management, University of Prešov in Prešov, Slovakia. E-mail: - ladislav.suhanyi@unipo.sk

given only to those organizations the managers/leaders of which love changes and see not damnation, but an opportunity in them (Peters and Waterman, 1982).

There is an ongoing debate in the literature about who is a manager (e.g. Lelková and Lorincová, 2017; Štefko, Fedorko and Bačík, 2015), who is a leader, and whether they are two individual personalities or a common label for a single personality. The objective of the proposed paper is not to judge or find out the truth about this matter but rather provide an insight into leadership styles in terms of comparison of these styles between managers and non-managers. The main aim of the contribution is, therefore, to detect whether there are any statistically significant differences in the assessment of the selected leadership styles between these respondent groups. At the same time, the identification and specification of leadership styles can be discussed in the context of prediction of behaviour of managers, selection of people for managerial positions, preparation and training of managers.

## LEADERSHIP

In recent years, there has been an increasing interest in examining leadership styles, which can be defined as sets of behaviours by which leaders influence their subordinates (Antonakis, Cianciolo and Sternberg, 2004; Bass and Riggio, 2006).

In their attempts to analyse leadership behaviour and personality traits, the authors rely on different styles of leadership, trying to work on creating a general typology of the leader's personality. According to the concepts examined and provided by literature so far, it can be concluded that there are four main groups of the leadership styles theories, namely the theories based on personality traits (e.g. Gardner, 1989; Zaccaro, Kemp and Bader, 2004; Derue, Nahrgang, Wellman and Humphrey, 2011; and others), behavioural leadership theories (e.g. Blake and Mouton, 1964; Goleman, 2000; Pellegrini et al., 2007; and others), situational leadership theories (e.g. Hersey, Blanchard and Johnson, 1996; Blanchard, 2008; and others) and transformational leadership theories (e.g. Bass and Riggio, 2006; Marschall, 2010; and others).

Contemporary authors (e.g. Dauber and Tavernier, 2011; Einarsen et al., 2007; Ferris et al., 2007; Schillig, 2008; Brown and Trevino, 2006; Wijewardena, Samaratunge and Härtel, 2014), who try to deviate from this leadership typology, claim that it is important to distinguish between the positive and the negative (or ineffective) leadership approaches to subordinates and examine the impact a specific behaviour has on the employees/subordinates/ followers.

In this context, Sojka (2014) defines leadership as a process or ability to lead people, in which the leaders seek, through their authority, to voluntarily involve their subordinates in meeting the common goals, thus meeting the goals and needs of the organization. Jago (1982) argues that leadership is a property and a process. Leadership as a property is a structure of characteristics and qualities that belong to those who use the influence successfully. The leadership process means applying a non-enforcing influence on the coordination of the activities of the members of an organizational group and the fulfilment of common goals.

Leadership is an aspect explored from many angles. It is often regarded as something extraordinary, something that requires special tools and abilities. Alvesson and Sveningsson (2003) have proposed redefining the leadership theory with respect to the worldly, almost trivial aspects of what managers and leaders actually do. Specific leadership behaviour, or part of a particular leadership style, must either be stressful or positive for employees, and as a result it may affect their level of stress and emotional well-being. Leadership may not only represent a positive approach to problem solving or interpersonal relationships. Research by Dauber and Tavernier (2011) also suggests that leaders can have a negative and/or ineffective impact on their subordinates and induce negative emotions and stress which these subordinates then have to cope with.



Nevertheless, literature contains numbers of definitions of leadership and management and their interconnections but provides only limited information about how the particular leadership styles are perceived and assessed by those who are not in managerial positions. Hall (2012) claims that not all workers aspire to be managers; a person does not have to be a manager to lead, as leadership is more about „displaying courage and passion that persuades people to follow your course, whether they’re direct reports or not“. Arruda (2016) adds that, contrarily, being promoted into a managerial role does not automatically mean becoming a leader.

The following report is, therefore, aimed at detecting the possibility of using particular leadership styles by non-managerial workers and examining the possible differences in their perception and assessment between the non-managers and their supervisors. Methodologically, it presents verification of the PL – Paternalistic Leadership questionnaire in the context of analysing the differences in assessment of the attributes of leadership behaviour between managers and non-managerial workers.

## RESEARCH

The aim of the presented research was to enrich the field of knowledge related to leadership and leadership behaviour. The presented contribution relates to the identification and specification of differences in the assessment of the selected leadership behavioural attributes by managers and non-managers.

### Research sample

The research file consisted of 340 respondents, of which 129 were managers (37.9%) and 211 were non-managers (62.1%). The sample of 129 managers consisted of 55 men (42.6%) and 74 women (57.4%) aged between 19 and 54 years ( $M = 29$  years,  $SD = 8.601$  years). 103 managers (79.8%) were from the private economic sector and 26 managers (20.2%) were from the public sector. The sample of 211 non-managers consisted of 69 men (32.7%) and 142 women (67.3%). 93 non-managers (44.1%) were from the private economic sector and 34 non-managers (16.1%) were from the public sector, and the option “other” was marked by 84 non-managers (39.8%).

### Research methods

Two methodologies were used to conduct the presented research. They are described in the following part of the paper.

#### 1. Questionnaire PL – Paternalistic Leadership

The original methodology by Frankovský, Birknerová and Zbihlejšová (2017) labelled as Questionnaire PL – Paternalistic Leadership was inspired by the theory of paternalistic leadership as such. Item formulation was based on the theory by Farh and Cheng (2000), who describe three attributes of paternalistic behaviour of a leader, i.e. authoritarian behaviour, benevolent behaviour, and moral behaviour.

The original Questionnaire PL (Frankovský, Birknerová and Zbihlejšová, 2017) contains 30 items relating to the leadership behaviour. Respondents are to imagine themselves in a role of a manager/leader and evaluate their own possible behaviour on a 6-point Likert scale, where 1 = absolutely disagree, and 6 = absolutely agree. The methodology enables identification of three attributes of leadership behaviour:

- **Authoritarianism** – leader exhibits an absolute authority, power and control over subordinates and requires their unquestionable obedience, respect, and rule following ( $\alpha = 0.754$ ),
- **Clemency** – leader demonstrates individual, holistic and complex care for their subordinates and their subjective well-being ( $\alpha = 0.858$ ),

- **Morality** – leader demonstrates excellent personal qualities, integrity, self-discipline, role-modelling, and unselfishness ( $\alpha = 0.737$ ).

The extracted factors (leadership attributes) explain 40.3% of variance.

## 2. Questionnaire MG – Managerial Grid

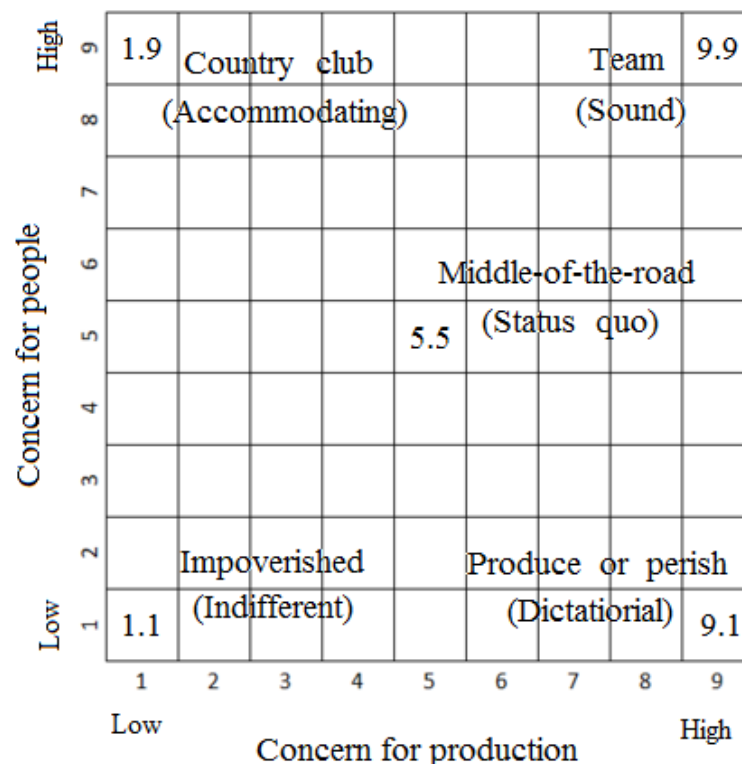
Managerial Grid (Blake and Mouton, 1964) is a scheme used to evaluate leadership styles. It consists of two main dimensions (axes):

- Concern for production (x-axis)
- Concern for people (y-axis)

Each dimension has nine levels according to which it is possible to identify five typical leadership styles, namely (see Figure 1):

- = Impoverished/Indifferent style (low management/direction and low requirements for performance and task fulfilment);
- 1.9 = Country club/Accommodating style (high orientation at people and interpersonal relationships, low orientation at task fulfilment and performance);
- 5.5 = Middle-of-the-road/Status quo style (middle-level orientation at relationships, satisfactory task fulfilment and performance);
- 9.1 = Produce or perish/Dictatorial style (low people-orientation, high orientation at performance and task fulfilment);
- 9.9 = Team/Sound style (highest orientation at people and interpersonal relationships, as well as performance and task fulfilment).

**Figure 1:** Managerial Grid



(own elaboration according to Blake and Mouton, 1964)

This questionnaire, through which it is possible to detect the aforementioned leadership styles, consists of 18 items evaluated on a 6-point Likert scale, where 0 = never, and 5 = always.

In practice, the Managerial Grid is used, for example, in crisis management, where the Concern for people has often a decreasing tendency and the Concern for production rapidly increases.

## RESEARCH RESULTS

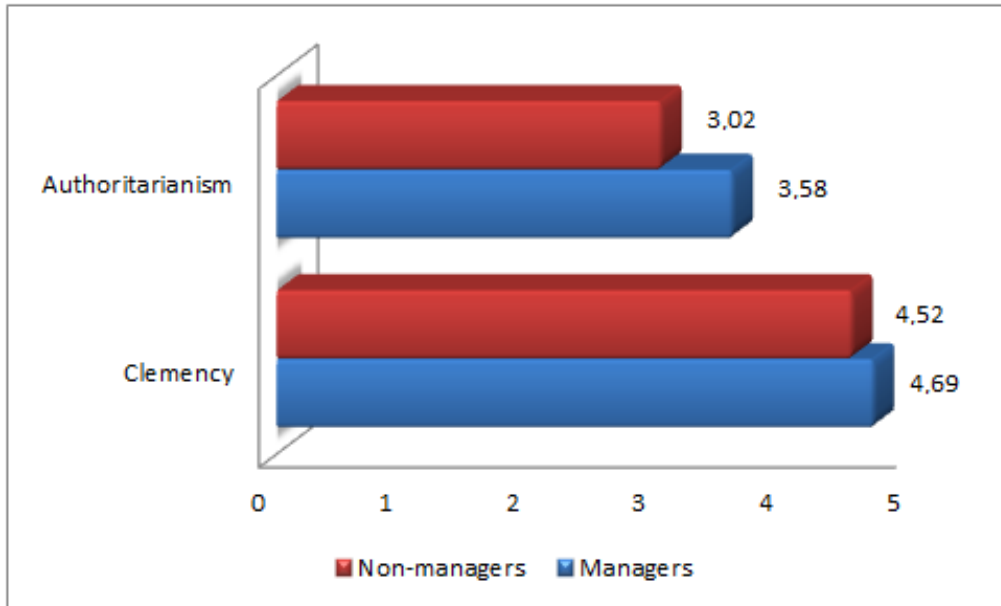
Differences in assessment of the leadership behaviour attributes between the managers and the non-managers were analysed by means of t-tests for two independent selections in the statistical software SPSS 20. The acquired results confirmed the existence of statistically significant differences between the managers and the non-managerial workers in assessment of the leadership factors of the methodologies MG and PL (Table 1, Figures 2 and 3).

**Table 1:** Assessment of the PL and MG factors by managers and non-managers

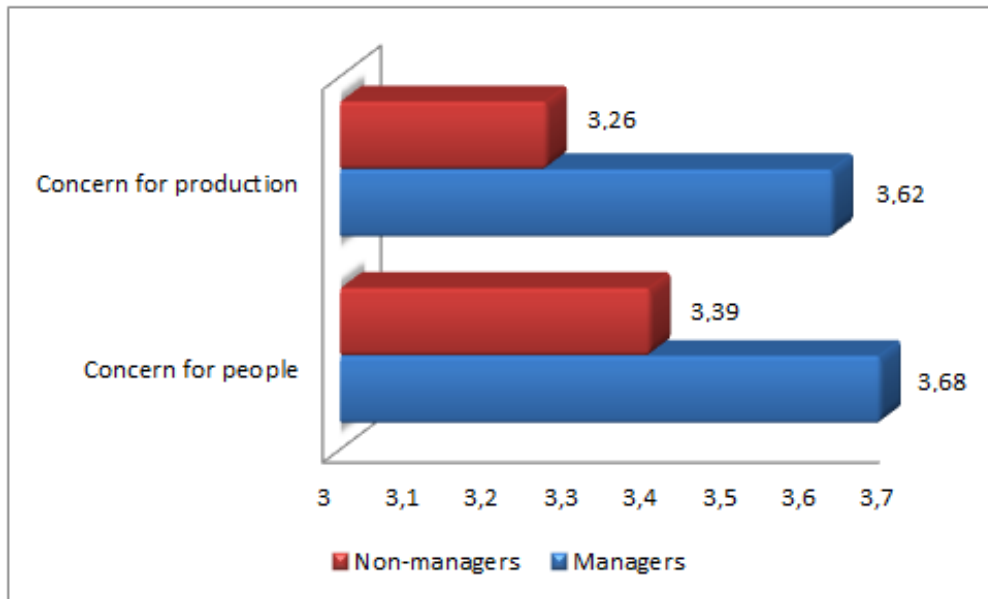
<b>PL</b>	<b>Position</b>	<b>M</b>	<b>t</b>	<b>p</b>
Clemency	<b>Manager</b>	<b>4.69</b>	2.080	<b>.038</b>
	Non-manager	4.52		
Morality	Manager	4.50	1.207	.228
	Non-manager	4.38		
Authoritarianism	<b>Manager</b>	<b>3.58</b>	2.401	<b>.017</b>
	Non-manager	3.02		
<b>MG</b>	<b>Position</b>	<b>M</b>	<b>t</b>	<b>p</b>
Concern for people	<b>Manager</b>	<b>3.68</b>	3.498	<b>.001</b>
	Non-manager	3.39		
Concern for production	<b>Manager</b>	<b>3.62</b>	4.515	<b>.000</b>
	Non-manager	3.26		

The results obtained demonstrate that there are statistically significant differences in the assessment of the individual attributes of leadership behaviour between the managers and the non-managers. These differences were found in the assessment of the PL methodology factors Clemency and Authoritarianism, and the MG factors Concern for people and Concern for production. In all cases, the managers achieved higher scores. This means that they are more authoritative but also more lenient. At the same time, they are more performance-oriented, but also more people-oriented than the non-managers. The managers also scored higher in the Morality factor but this difference was not statistically significant.

**Figure 2:** Assessment of the PL methodology by managers and non-managers



**Figure 3:** Assessment of the MG methodology by managers and non-managers



It should be noted that the assessment of Clemency as well as Authoritarianism by both managers and non-managers are on the same sides of the scale used. Therefore, the identified difference is only within the extent to which the respondents agree with the given leadership attributes. A similar trend can also be specified from the point of view of the MG factors Concern for people and Concern for production.

**DISCUSSION AND CONCLUSION**

The obtained results confirmed the existence of statistically significant differences between managers and non-managers in assessing the leadership factors of the PL and MG methodologies.

The results of the analysis prove that in relation to the assessment of leadership behaviour by managers and non-managers, the managers achieved higher scores in the factors of the methodology PL Clemency and Authoritarianism, as well as the factors of the MG methodology Concern for people and Concern for production as compared to the non-

managers. In this context, Yagil (2006) states that if employees see their superior as overly authoritarian, rude or offensive, they will experience a higher level of exhaustion and a lower level of personal success. Contrarily, if they perceive their superiors as providing support, these relationships will be the opposite. Harvey et al. (2007) support these findings by claiming that, on the one hand, rude and insulting leadership relates to tension and emotional exhaustion. On the other hand, such a relationship is moderated by positive affection and gratitude in a way that the employees see their superior in a more positive light and try to minimize the rudeness with flattery and kindness towards this person. Harris et al. (2006), for example, found out that the links between the quality of the relationship between leaders and employees and stress in lenient leadership are bent because too close a relationship with a leader may result in difficulties in saying "no" to some of the tasks. Thus, we can say that managers are more active leaders than non-managers, which is true of different leadership styles, whether they are clement leadership, authoritarian leadership, people-oriented leadership, or the production-oriented one.

Finally, it should be pointed out that the original PL methodology can be applied in the context of several processes that are related to the management of people and in this context also with the managerial practice. Specifically in the area of managerial work, it is possible to specify the use of this methodology in terms of selection of personnel for managerial positions, their further education and training, and preparation of operational and strategic materials in the field of management of employees.

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**4-AX16-5498****ARE THE MULTIFACTOR ASSET PRICING MODELS ARE METHODOLOGICALLY ROBUST?**PROF. SANTOSH KUMAR<sup>1</sup> AND DR KVSS NARAYANA RAO

This study empirically tests the five factor Durand et al. (2011) model in addition to other multifactor models (Fama and French, 1993; Carhart, 1997) to identify the factors responsible for common variation in equity returns using time series data from July 1999 to June 2013. In order to augment the rigour of the tests, several measures are taken. Firstly, the best measure of factors is selected having relatively higher standalone contribution in the return generating process out of various alternative measures for size, value and momentum premium to maintain parsimony in tests and to reduce biases in factors selection. Secondly, total nineteen test portfolios are selected from size-value sorting and momentum sorting for multi factor asset pricing models testing. Thirdly, in view of changing factor coefficients in different markets and in different time periods, this study has used three different structural periods (1999-2004, 2004-2009, 2009-2013) to observe the stability of return generating process. It is also observed that the factors of variation in test assets are intact across different structural periods. Finally, results also fully conform to the desired forecasting estimates of Theil Inequality Coefficients and variance inflation factors. These measures have benefitted the empirical testing of multifactor models in Indian stock market with following findings.

Five factor Durand et al. (2011) model does not add significant value to the asset pricing models explaining return generating process of equity portfolios in Indian stock market. Four factor Carhart (1997) model works better in momentum portfolios in the order of market factor, size factor (SMB), momentum factor (WML) and book to market factor (HML). Three factor Fama French (1993) model gives better explanations of double sorted portfolios in the order of market factor, size factor (SMB) and book to market factor (HML).

These findings are of great use for estimating the expected returns on stocks, appraisal of skills of fund managers, smart beta management etc. However, it is cautioned to the practitioners that the choice of models, selection of factors, measures of factors have to be empirically determined.

**Key Words:** Multifactor Asset Pricing Models, Common Variation, SMB, HML, WML, Return Generating Process.

**7-AX13-5476****COMBATING THE EFFECTS OF ENVIRONMENTAL DEGRADATION- CASE STUDY OF NIGER DELTA REGION OF NIGERIA**MS. AGNES WILLIAMS ODEN<sup>2</sup>

This paper takes a critical look at environmental degradation and provides an overview on its causes and effects. I gives an in-depth discussion on the Niger Delta Region of Nigeria – the industrial activities in the region, the level of damage caused, the recipients of the effect, efforts made to save the situation and the extent of success recorded. The paper proffers practical and replicable solutions to the issues raised as a way forward for achieving sustainable development.

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<sup>1</sup> Prof. Santosh Kumar, Assistant Professor, Chandragupt Institute of Management Patna.

<sup>2</sup> Ms. Agnes Williams Oden, Lecturer, University of Calabar.

**8-BB04-5548****THE IMPACTS OF GLOBAL ENGAGEMENT ON EMPLOYMENT QUALITY AND WAGES IN ETHIOPIAN MANUFACTURING SECTOR**MR. ALI YIBRIE ESMAILE<sup>3</sup> AND PROF. MARIA LETIZIA GIORGETTI

This paper analyses the effect of exposure to international trade and foreign ownership on the employment quality (workforce composition) and wages in manufacturing industries. This study used the unbalanced panel of Ethiopian manufacturing firms over the period 2000–2011 and deploying alternative econometric estimation technique (OLS, FE and GMM-SYS) by estimating dynamic models of employment and wages. The results show that firms' international exposure has a positive contribution to employment creation and wage growth in Ethiopian manufacturing. This affirms the fact that Ethiopian's exports are more labor-intensive and this has mitigated the country's labor surplus. In other words, integration into the international market has generated new jobs for workers with a higher wage and may play in shaping the demand for labor in a developing country like Ethiopia. Besides, trade and foreign ownership are found to have an absolute quality-bias which affirms the presence of learning by exporting on Ethiopian manufacturing sector. We also found that Foreign Direct Investment (FDI) magnifies the wage gap between casual and permanent workers. That is, foreign-owned firms are paid higher wages for permanent workers and worsen income distribution by increasing wage differentials between the two types of workers which in turn assures the presence of quality differences. This assures that FDI is a conduit for the transfer of skill-based technologies and increase the relative wages of permanent workers, thus widening wage inequality like in (Feenstra & Hanson, 1997). Whereas, export participation has a positive but not significant effect on the wage of permanent workers, while it has a weakly positive significant effect on casual workers' wage. This finding confirms the results of Breau & Rigby (2006), who found an insignificant relationship between exporting and wage differentials.

**9-AX02-5215****AGRICULTURAL TRADE UNDER WTO REGIME: OPPORTUNITIES AND CHALLENGES**MR. MOHD ADIL<sup>4</sup>

India, one of the largest agrarian economies in the world, ceased to be globalized until the early 1990s. Later on, in order to find greater market access for agriculture products, enhancing food security for the people, protecting interests of domestic farmers and their livelihood as well as for export maximisation, liberalization of this sector became necessary.

But, the post WTO period posed significant issues in Indian agriculture as domestic prices of several agro-commodities exceeded that of the international prices. Indian agriculture works in a system wherein as demand rises, prices rise and supply responds accordingly. Therefore, when agriculture trade is liberalised the first effect is change in relative prices of various agricultural commodities. This further leads to changes in the pattern of production, consumption and trade.

The present paper using secondary data sources analyzes the trade performance of Indian agriculture during pre and post WTO period. It compares the import-export pattern of several agricultural commodities and attempts to make an assessment of their trend. Statistical tools

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<sup>3</sup> Mr. Ali Yibrie Esmale, PhD Student, University of Milan.

<sup>4</sup> Mr. Mohd Adil, Research Scholar, Aligarh Muslim University.

viz. simple mean, coefficient of variation, correlation coefficient and simple regression analysis have been applied to reach a definite conclusion and formulate policy suggestions.

**Keywords:** Agricultural trade, Indian agriculture, WTO

### 11-AX03-5374

#### **ROLE OF MARKET ORIENTATION IN ATTAINING HIGHER CUSTOMER RELATIONSHIP OF THE ORGANIZATION**

MS. NISHU AYEDEE<sup>5</sup>

Today as the companies are growing and expanding there is a need to retain customers to have long term relationship with them so that the companies can survive the competition and build a promising image for themselves as well as the customers. Marketing orientation is a business model that focuses on delivering products designed according to customer desires, needs, and requirements, in addition to product functionality and production efficiency, i.e., production orientation. ( Bernard J. Jaworski and Ajay K. Kohli,1990). This paper examines the relationship between market orientation and customer relationship with the data received from 350 managers from different organizations from Delhi, NCT-India and finds out that market orientation is strongly related with market orientation and the customer relationship whether it be – service, quality of the product, customer satisfaction, or the trust of the customer. As the organizations are starting to expand they are becoming well aware of the fact that if their got to survive and sustain in the market they need to adopt of market orientation which will ultimately lead them to perform and build up a greater brand value along with satisfying customers and customer retention. Specifically, the study finds out that market orientation is the central key to achieve various goals of the company whether it be company performance, customer satisfaction, product innovation or winning the market competition. Being precise, this study addresses two research questions: (1) to what extent can market orientation be transformed into customer relationship and lead to customer retention via marketing and innovation capabilities; and (2) does the complementarily between market orientation and customer satisfaction lead to a higher company performance and employee's performance. Drawing upon the survey conducted, a model is developed that integrates market orientation, customer satisfaction and performance of the firm. Customer relationship is a concept where the companies understand the needs and want of the customer. With the easy and rapid adoption of Internet, social media, and e-commerce the customers have clearly become the driving force and co-partners behind contemporary business strategies.

### 12-AX20-5525

#### **PERCEIVED RISK IN TECHNOLOGY ADOPTION: THE CONTEXT OF THE USE OF INTERNET DISTRIBUTION SYSTEMS– HOTEL BOOKINGS**

MR. ABDULLAH ALOMRAN<sup>6</sup>

This study examines the effects of Perceived Risk & Trust believe on the Intention behaviour using the Unified Theory of Acceptance and Use of Technology two (UTAUT2), within the context of use hotel booking website among consumers. The aim is to develop and test a new model for use in determining the factors that affect Hotel booking customers' intention behaviours, with a special focus on the role of perception of risk, and trust believe.

<sup>5</sup> Ms. Nishu Ayedee, Assitant Professor, Bharati Vidyapeeth Institute of Management and Research.

<sup>6</sup> Mr. Abdullah Alomran, PhD Candidate, University of Hull.

The study is a respond to a call for further investigation and utilizing of factors to expand the UTAUT2. It intends to incorporate some new constructs “Trust Believe” and “Perceived Risk”; comprises of six dimensions, Financial Risk, Performance Risk, Privacy Risk, Social Risk, Psychological Risk and Service Risk to UTAUT2.

This research uses cross-sectional survey questionnaire methods within a quantitative approach. 465 valid responses were tested. Partial Least Square- Structural Equation Modelling (PLS-SEM) was used to test the hypothesised relationships within the research model.

The results present a new contribution to the body of knowledge by validating a theoretically backed integration of the above models into one structural model. This model broadens the understanding of the factors that influence IS Behaviour Intention. Compared to previous studies, the explanatory power of this model is a major improvement, with ability to explain 71 per cent of the different variance of intention to use hotel booking technology among consumers.

**13-AX18-5488****AN ENQUIRY INTO THE FDI INFLOW CLIMATE IN JORDAN - ELIMINATING BARRIERS TO INVESTMENT**MR. AHMAD AL-AWAMLEH<sup>7</sup>

Jordan ranks among the top twenty nations in the world in terms of attracting foreign direct investments according to the classifications made by UNCTAD investment benchmarking system. The removal of the restrictions on the repatriation of capital and of profits, introduction of a liberalized system of foreign exchange. The objective for taking up this research is to enquire into efforts of the government of Jordan for the development of fiscal and investment policies.

**Methodology:** The research methodology the researcher has chosen for the purpose of this research is the qualitative method of research. The experts are of the opinion that this methodology proves to be very useful for the purpose of a detailed and complete description of the research avenues in the topic and area chosen for research. It can be done by adoption of various methods of data collection such as by the process of interview, sampling and observation.

**Discussion:** One of the important areas that needs improvement is the arrangement for investment incentive to the investors which may be in the form of tax reductions and tax exemptions in certain cases or aid from the government in some of the financial projects. The measures for bringing in the foreign investments need to be restructured.

**Conclusion:** Jordan has been successful in the recent years in terms of attracting FDIs. There is a need for the government to have a cautious approach in FDI promotion and works towards maintaining such level of investments in future.

**16-AX03A-5350****CONTRIBUTION OF TRANSFORMATIONAL LEADERSHIP IN INNOVATIVE PRACTICES AT AN INDIAN B-SCHOOL**MS. NISHU AYEDEE<sup>8</sup> AND MR. ANUJ KUMAR<sup>9</sup>

This paper is related to the field of strategic management. The main aim of this paper is to study the impact of transformational leadership on the innovative practices followed in the organization. Both the authors of paper are working at B-school named Bharati Vidyapeeth Institute of Management and Research, New Delhi. The institute is providing management and computer education to under-graduate and post-graduate students. In this paper literature review will talk about traits of transformational leadership and need of innovations at workplace. Previously the researchers have worked to find out a linkage between transformational leadership and innovations at workplace. Transformational leadership brings new innovative practices at workplace to make it more competitive and productive.

In this paper the researchers will discuss about the Indian B-school and various innovative practices introduced at the B-school under his leadership. The B-school is now more prone to technology and innovative learning styles. The innovations can be seen in teaching, exams, library and other aspects of management. The primary data for this paper will be collected from the institute itself. Authors will conduct the formal interview of college director to have a detail about his planning on innovative practices. The authors will also go through

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<sup>7</sup> Mr. Ahmad Al-Awamleh, Phd Research, Southampton Solent University.

<sup>8</sup> Ms. Nishu Ayedee, Assitant Professor, Bharati Vidyapeeth Institute of Management and Research.

<sup>9</sup> Mr. Anuj Kumar, Assistant Professor, Bharati Vidyapeeth Institute of Management and Research.

previous research papers which provide a positive linkage between transformational leadership and innovation. The crux of the innovation practices at the institute is the use of technology and ICT in the organization. The new leader is emphasizing more on ICT enabled tools so that organization can also achieve its goal of sustainability. In this era of globalization competition is increasing in every field and the field of tertiary education is no more an exception. Bharati Vidyapeeth is located in New Delhi, the capital of India. There are more premier institutes which are providing same type of tertiary education to the students. It is necessary for the leader of the organization to become innovative otherwise it will be hard to survive in the competition.

**Keywords-** Innovation, Transformational leadership, B-school, Technology, Globalization

## 29-BB03-5424

### PAID SOCIAL ADS, RETARGETING AND CONVERSION TRACKING: A REVOLUTION FOR CONVERSION OPTIMIZATION IN B2C E-COMMERCE

MR. DIVYANSH GOEL<sup>10</sup> AND DR. KUMAR SANKAR BHATTACHARYA,  
ASSISTANT PROFESSOR

Over the past 20 years, the key development is the emergence of social media. Social media has not only reduced the distance between people around the globe but also has opened new possibilities for business owners where they can connect to their customers from anywhere in the world.

The key feature that determines the success of a brand is the marketing policies made by the company. As the viewership of social media websites grow, the companies start to post their ads to gain customers. The traditional ways of advertising, such as organic marketing, including content marketing and awareness campaigns come at a cost of a lot of energy and human resources. To execute a successful 'organic' social media campaign, one requires a lot of strategy in the early stages, where multiple creative minds join together to formulate innovative ways of keeping customers engaged. This includes coming up with shareable original content, while also featuring varied content collateral.

However, the greatest challenge for the above mentioned marketing strategies are faced by small businesses. So, the advent of paid social ads and audience retargeting revolutionize the ways the small businesses run their marketing campaigns. Such ad campaigns and their targeting of niched audience with specific demographics have more number of conversions.

But, unfortunately, such conversions are generally as low as 2%. So, "Retargeting" is introduced that revolutionized the entire process and brings in the other 98%. This paper probes into retargeting platforms by doing a comparative analysis with the organic retargeting methods like email marketing. In the process, we would look at the new platforms such as Facebook's "Pixel" and LinkedIn's "Matched Audiences" as their key role in website conversions and lead generations.

Additionally, we would refer to different platforms like Facebook's Custom Conversion Pixel and Google Analytics where businesses can track their sources of conversions and create custom reports, even for specific actions, for their website conversions. Such exercises reveal the cost cutting of the advertisers and ways of making their businesses more sustainable and profitable through targeted audience advertisements.

Thus, in our paper, we highlight some of the strongest advantages of using paid social ads by providing concrete examples of the platforms for carrying out these exercises and testimonials of their successful returns. While doing so, we endeavor to show how conversion tracking and audience retargeting is the key to develop and run a profitable e-commerce.

<sup>10</sup> Mr. Divyansh Goel, Student, Birla Institute of Technology and Science, Pilani.

## LIST OF LISTENERS

Prof. Douglas Branson<sup>11</sup>

Mrs. Winnie Akpagu<sup>12</sup>

Mr. Paul Ndako Suman kolo<sup>13</sup>

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<sup>11</sup> Prof. Douglas Branson, Professor, University of Pittsburgh.

<sup>12</sup> Mrs. Winnie Akpagu, Administrative Staff, University of Calabar.

<sup>13</sup> Mr. Paul Ndako Suman kolo, Director-General, Niger State Government House Security Department.



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