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Doctoral School of Economic and Regional Sciences

**CREATIVITY AND INNOVATION EXPLORATION: MEASURING THE IMPACT OF
CULTURAL DIVERSITY OF AN ORGANIZATION**

Ph.D. Dissertation

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1 INTRODUCTION

1.1 Overview and Significance of the Topic

Since the original theory of innovation was developed by Joseph Schumpeter hundred years ago (1912), innovation is in the centre of research of social, economic, and technical sciences. The changing business environment including globalization and increasing competition have made innovation the key element of strategy on macro and micro levels as well. Michael D. Intriligator, paper presented on 21-23 March 2002 to the conference organized by the Instituto Affari Internazionali on “Globalization of the world economy; potential benefits and costs a net assessment” wrote the concept of globalization as applied to the world economy and is a powerful real aspect of the new world system and with many dimensions.

Schumpeter’s book on “the theory of economic development” published in German language in 1912 and in English in 1934 defines innovation as a process of making new combinations and complementarities. This means, additional effort in one element increases the marginal returns of effort in the other element. The complementarities in innovation activities can refer to multiple objectives, development methods and different knowledge sources, where the diverse parts are integrated in a way that benefits the whole system. For firms, innovation associated to the knowledge base becomes more diverse and so does the cultural and ethnic background amongst employees. This increasing diversity in the knowledge bases increases the need for interaction and communication, while increased cultural diversity might lead to conflict within the organization. However, employee diversity might create a broader search space and make the firm more open towards new ideas and more creativity.

Cultural diversity is the act of recognizing, realizing and accepting the differences or multiplicity among people which may rise from their origin, religion, ethnicity, gender, age, education or race. Mullins, 2010: pg. 28 presented the study provided by Fons Trompenaars whose later work is co-authored with Charles Hampden –Turner. Trompenaars original research spanned 15 years and covered a database of 50,000 participants from 50 countries. It was supported by cases and narratives from 900 cross-cultural training programs, mainly questionnaires based on their

underlying norms, values and attitudes. Trompenaars resultant framework identified seven areas in which cultural differences may affect aspects of organizational behaviour and innovativeness:

- Universal or particular: In terms of universal societies, the rule based behaviours are relatively rigid. Where as in particular societies, relationships may show flexibility in the interpretation of situations.
- Individual or collective: societies with collective orientation could take different forms: the corporation in Japan, the family in Italy or the Catholic Church in the Republic of Ireland. The individual societies may take different forms such as separable responsibility or taken ownership.
- Neutral or emotional: in neutral societies prefers not show their feelings when they are upset. The emotional societies displays of feeling. Trompenaars cited a survey in which 80 employees in each of various societies were asked whether they would think it wrong to express upset openly at work. The number who thought it wrong were 80 in Japan, 75 in Germany, 71 in the UK, 55 in Hong Kong, 40 in the USA and 29 in Italy.
- Diffuse or specific: diffuse cultures refer to the involvement in a business relationship that would take time to build. In specific cultures, such as the USA, the relationships are limited to the contractual terms.
- Achievement or ascription: in the achievement based societies, the success or overall record of accomplishment are highly valued. The ascription societies in other hand rely more on status bestowed on one through factors such as age, gender or educational record.
- Time: the societies view on time is in different ways which may in turn influence activities. The American dream is the French nightmare. Americans generally start from zero and what matters are their present performance and their plan to make it in the future. This is 'nouveau rich' for the French, who prefer the 'ancient Pauvre'; they have an enormous sense of the past.
- Environment: this refers to attitude towards environment. In western societies, individuals are typically masters of their fate. In other parts of the world, however, the world is more powerful than individuals.

Trompenaars concluded that linking the dimensions of culture to characteristic of organizational behavior are of direct importance, particularly to people approaching a new culture for the first time.

The effects of cultural diversity in workplaces have increasingly demanding because of the foreign direct investment (“FDI”) and migration of workforce driven by globalization. The business world, especially the multinational corporations, starts to recognize the advantage of cultural diversity and uses as a key factor of business success in more and more areas of their activities, such as in marketing or customizing their products. The cultural diversity also effects on internal operation of firm. Hence, cultural diversity is one of the most crucial factors in the success of the organization. It is a sine qua non for a firm that moves towards innovation or creativity.

It is obvious in the world today; we witness cultural transformation and changes, competition and flexibility in the market. There are demands of new products and services, developments and mergers which can be seen as customers’ reactions towards the changes. This is the reason for organizational or business skills recruitment which is motivating force behind the success of any organization or firm. This is also the reason behind the changes in the World economic status. Also, the coming together of culturally diverse workers to achieve one goal has brought in innovation and creativity within the organizations and firms. There also need to manage such diversities to avoid conflict which might hinder the communication and networking within an organization or workforce.

The study pays more attention on enquiring if there is existence of cultural diversity and also if the act of managing cultural diversity can impact innovations and creativity in the company and also the methods and tools that can be use in the management of cultural diversity among the employees of the company.

Combined and intensive effort of workforce is required to achieve goals of an organization. All the attitudes, skills and efforts must be properly managed in a way they can efficiently and effectively overcome the day to day challenges. Since the world is becoming a village due to several reasons such as technological improvements, transport infrastructure development, and

the ever increasing globalization and privatization of companies, the view in working places has been changing from different perspective such as age, profession, gender, religion, etc.

Identifying how majority of employees define diversity helps understand what really matters to enhanced institutional growth and innovativeness in workplaces. Therefore, the topic “Creativity and Innovative exploration” is very important from the perspectives of individuals, employees of labor, company management and governments. However, the research paper is focused mainly on the diversity of workforce and its contribution to the innovativeness to firms. Comprehending how different cultures interact within a given work environment, how networking and communication strategies of employees from different culture within the given companies, how the leader manages the diversity of culture in workplace, how cultural diversity increases the effectiveness and relationship among employees will enable national and multinational companies to understand the contribution of diversity of workforce and hence to focus on how to readjust their strategies to be fit in the growing competitive global economy.

1.2 Statement of the Problem

Since globalization has made people from all over the world who share different races, culture and background to come together in a small setup and interact; and it has enabled interactions in the field of innovation and marketing aspects which makes organizations better than before through competitive advantages.

Definitions given to diversity in workplace are quite different across the globe such as diversity in geographic location, age, gender, race, professional qualification, religion, perception and attitude etc. yet, it is not well identified to how the majority perceives to how to define diversity in workplace. In addition to this, some of the European countries are still have anti-migrant policy. Besides, professional working opportunities are limited in many countries. Moreover, the level of intentional welcoming to diversity in working places is poor when looked to the reality. The importance of diversity in enhancing growth of a company is not well measured.

Leveraging growth potential requires various innovation tools such as patents, copy rights, new products and diversity of employees, ownership and managers. The problem is does some of

these factor correlates in any form to give competitive advantage to organization and if so, what are the extent of the result.

Studies on cultural diversity such as skill complementarities and ethnic background of the employees didn't take into consideration in many studies. People carry their knowledge when they move from place to place. According to Poot (2008), employees knowledge acquisition and their mobility is affected by age, education, and cultural background. Cultural background of peoples affects their outlook even for the people with in the same occupational group. This indicates that cultural diversity in workplace have an impact on innovation and creativity of employees. This is strengthened by Efrat (2014) concluding that culture matters for innovation.

Although there is significant attention on innovation achievement, but less attention is paid to measure to what degree different cultural interaction has within an organization in order to achieve innovative solutions and competitiveness. Diversity at workplace can lead to enhanced decision making and problem-solving process, high creativity and innovation, improved product development (Cox, 1991; Harvey & Allard, 2012).

The presence of strong organizational culture enables the leaders to fascinating and powerful (Mehta and Krishnan, 2004). Yet, the contribution of organizational culture towards innovation is quite low (McLean, 2012; Valencia et al., 2010).

Several studies have been conducted and finding on the impact of diversity on innovation still unresolved (Stahl et al. 2010; Zhan, Bendapudi, and Hong 2015). There are studies supporting the importance of diversity towards innovation (Earley and Mosakowski 2000; Niebuhr 2010; Tadmor et al. 2012); while other research findings show the reverse or no relation at all (Bell et al. 2011; Harvey 2013; Østergaard, Timmermans, and Kristinsson 2011). Therefore, the main problem of this study is that several studies, as mentioned in the literatures above, have different opinions on the impacts of factors affecting innovation. This study will therefore try to examine the main factors that are assumed to affect innovation, especially the workplace diversity and its attributes and contribute to the existing literatures.

1.3 The Research Questions and Hypothesis

According to Christian et.al., (2009), the knowledge base becomes more diverse and so does the cultural and ethnic background among employees. Thus, increasing diversity in the knowledge base increases the need for interaction and communication within the firms, while increase cultural diversity might lead to conflict. However, employee diversity might create a broader search space and make the firm more open towards new ideas and more creativity. Ideally, diversity should increase a firm's knowledge base and increase the interaction between different types of competences and knowledge. This creates possibilities for new combination of knowledge and innovation. Therefore, it's worth researching and would help business managers and policy makers in nurturing and scooping talents in order to achieve optimal output of creativity and innovations solutions.

These solutions help free up resources and assets to be re-directed for revenue generating initiatives and make organizations more responsive to customers and market needs. In order words value-oriented creativity pinned into firms' capabilities and organizations management.

In an increasingly competitive marketplace, firms and organizations cannot afford to carry any additional weight that doesn't help them to succeed; therefore, the research paper would like to examine the relation between a diverse composition of the workforce and the innovation and creative performance of firms. In other words, to check the ability of diverse cultural workforce creativity and innovativeness measured against education, age, race, gender and organizational change criterion. Also, there is variance in performance pertaining productivity between the companies which chose to use cultural diversity as opposed those which do not. This thesis intends to find out and measure the impact of the cultural diversity in an organization. The research would like to examine and measure the impact of cultural diversity within an organization.

Hence, the aims of this research are based on the followings:

- To identify the effects of cultural diversity, mainly from perspectives of innovation, management and personality influence.
- To examine the effect of organizational culture-lead-strategy influences on creativity and innovation.

- What influences the employees of those companies to be creative and innovative in nature?
- To evaluate the leadership roles of the organizations, purely from relations, culture and diverse workforce.

The research premise is tested by comparing literatures against questionnaires distributed to people of different nationalities and professional backgrounds. On that base, the paper tested if diverse cultural workforce could trigger innovation, subsequently a higher performance can be achieved which is crucial to continuing success of any organization with the following hypotheses:

- **Hypothesis One**

HO: There is no outstanding difference in the study's perception between the male and female with regards to cultural diversity.

H1: There is an outstanding difference in the study's perception between the male and female with regards to cultural diversity.

- **Hypothesis Two**

HO: There is no outstanding difference in the study's objective among the age group with regards to communication.

H1: There is an outstanding difference in the study's objective among the age group with regards to communication.

- **Hypothesis Three**

HO: There is no outstanding difference in the perception of the study's objectives among the various race groups.

H1: There is an outstanding significance difference in the perception of the study's objectives among various race groups.

- **Hypothesis Four**

HO: Significant differences in years of experience can not affect the flow of innovation in an organization.

H1: Significant difference in years of experience can also affect the flow of innovation in an organization.

- **Hypothesis Five**

HO: The diversity of religious beliefs among the employees can not affect their innovative and creative minds.

H1: The diversity of religious beliefs among the employees can affect their innovative and creative minds.

2 LITERATURE REVIEW

2.1 Meaning of Innovation

One consequence of the global economy change is that it has led to an increase in competition among business sectors, organizations and firms. The high cost organizations are now more dependent on innovation. Etymologically, the term innovation originates from the Latin word “innovare”, which means to create or to bring something new. Innovation is considered a subject matter based on its influences and interpretations as defined by researchers and industry actors. The business dictionary defines ‘innovation’ as a process of conversion of ideas or invention into products or services that creates value and for which customers will pay for. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application of information, imagination and initiative in deriving of greater or different value for processes by which new ideas are generated and converted into useful products. Additionally, the Merriam-Webster online dictionary describes it as “the introduction of something new, a new idea, method or device”.

Innovation raises essential strategic dilemmas for strategists. According to Johnson et al, (2008) innovation is more complex than just invention. Invention involves the conversion of new knowledge into a new product, process or service, while innovation adds the critical extra step in the private sector typically via the marketplace and in the public sector through service delivery. The strategic dilemmas stem from this more complex and extended process. The ability to develop new ideas, innovation has become a priority for many organizations. Intense global competition and technological development have made innovation be a source of competitive advantage. According Baregheh et al., (2009: 1334), innovation is defined as multi-stage process of meeting and competing in the marketplace by delivering improved products transformed from idea. According to Peter, (1999) research on innovation has addressed a number of ways, such as using levels of innovation in individuals, team and projects or organizations. He defined innovation as “the act that endows resources with a new capacity to create wealth”. Accordingly, his definition sees innovation as a change that creates a new dimension of performance and key accountability of the management.

In Drucker's view, innovation is the tool or instrument used by entrepreneurs to exploit change as an opportunity because he argued that it could be learned and practiced. Doubtfully, Drucker pointed out that innovation as value chain to achieving growth. Tom Kelley, (2012) also wrote that "we all are innovators in some sense to the other". Be it while designing a plan, while cooking something new, forming novel technique to study, etc. These roles are inadvertently played by each one of us.

According to Kelley, (2005) there is a strong acknowledgement that fostering a culture of innovation is critical to organization success, as important as mapping out competitive strategies as well as maintaining good margins. Kelley pointed ten personas for a group and team to achieve economic values through innovation: These ten personal are not inherent personality traits or "types" that are permanently attached to one (and only one) individual; it is people – centric – "people creating value through the implementation of new ideas".

1. **Anthropologist:** "brings new learning and insight into the organization by observing human behaviour and developing a deep understanding of how people interact physically and emotionally with products, service and spaces".
2. **Experimenter:** "The combination of experience and experimentation will ultimately yield a personal sound. Prototype new ideas continuously, learning by a process of enlightened trial and error".
3. **Cross Pollinator:** "explores other industries and cultures, and then translate those findings and revelations to fit the unique needs of your enterprise".
4. **Hurdler:** "knows the path to innovation is strewn with obstacles and develops a knack for overcoming or outsmarting those roadblocks".
5. **Collaborator:** "there is no "I" in team but there is in win. Helps bring electric groups together and often lead the middle of the pack to create new combinations and multidisciplinary solutions".
6. **Director:** "not only gather together a talented cast and crew but also helps to spark their creative talents".
7. **Experience Architect:** "designs compelling experience that go beyond mere functionality to connect at a deeper level with customers' latent or expressed needs".

8. **Set Designer:** “creates a stage on which innovation team members can do their best work, transforming physical environments into perfect tools to influence behaviour and attitude”.
9. **Caregiver:** “builds on the metaphor of a health care professional to deliver customer care in a manner that goes beyond mere service”.
10. **Storyteller:** “builds both internal morale and external awareness through compelling narratives that communicates a fundamental human value or reinforces a specific cultural trait”.

Therefore, innovation is an art of acquisition of inner abilities, in other words, human capital. Additionally, these could be the stock of knowledge, habits, social and personality attributes, including creativity, embodied in the ability to perform labor so as to produce economic value. Alternatively, human capital is a collection of resources, all the knowledge, talents, skills, abilities, experience, intelligence, training, judgment and wisdom possessed individually and collectively by a population. These resources are the total capacity of the people that represents a form of wealth which can be directed to accomplish the goals of the nation or state or a portion thereof. Companies, including countries differ significantly in terms of their innovative capacity. Notwithstanding, the magnitude of the innovation gap are vis-à-vis are functions of organizational cultures and dimensions. Cultural differences and innovativeness are multi-faceted social phenomenon with innumerable manifestations. Innovation takes place as an art of exercises routed into cultural viewpoints and attitudes.

2.1.1 Innovation and Economic Growth

Innovation has a great role on an economic development performance (Freeman, 1990). According to the financial management theory, mainly on the arbitrage pricing theory an alternative view of risk and return by Ross et al., (2008) the statement on innovation and growth discussed on how to construct portfolios and to evaluate their returns. The returns of any stock consist of two parts: the first part is the normal or expected return and the second part is the uncertain or risky return of the stock. This portion comes from information that will be revealed within the month or year, otherwise known as event drive approach. This is called innovation or surprise, being the economic growth. In this example, the way to write the return on the stock is

$$R = \hat{R} + U$$

Where

R is the Actual Total Return in the month,

\hat{R} is the expected part of the return and

U stands for the Unexpected Part of the Return (event drive approach)

Additionally, Ross et al., (2008) suggested that some care must be exercised in studying the effect of these or other news items on the return. For example, the government might give the gross national product (GNP) or unemployment figures for the month, but how much of that is new information for shareholders? Surely, at the beginning of the month, shareholders will have some idea or forecast of what the monthly GNP will be. To the extent to which the shareholders had forecast the government's announcement, that forecast should be factored into the expected part of the return as of the beginning of the month. On the other hand, insofar as the announcement by the government is a surprise and to the extent to which it influences the return on the stock, it will be part of U , the unanticipated part of the return.

As an example, suppose shareholders in the market had forecast that the GNP increase this month would be 0.5%. If GNP influences the company's stock, this forecast will be part of the information shareholders use to form the expectation, \hat{R} of the monthly return. If the actual announcement is exactly 0.5 %, the same as the forecast, then the shareholders learned nothing new, and the announcement is not news. On the other hand, suppose the government announced that the actual GNP increase during the year was 1.5 %. Now shareholders have learned something that the increase is one percentage point higher than they had forecast. This difference between the actual result and the forecast, one percentage point in this example, is sometimes called the innovation or surprise.

In other hand, the management theory championed by Igor Ansoff matrix explicitly contemplates growth options as focus of innovation. Igor Ansoff created the Product / Market diagram in 1957 as a method to classify options for business expansion strategy and growth model. This growth objectives matrix is used by firms and organization and offers strategic choice to achieve

their objectives. There are four main categories for selection (1), Market Penetration (2), Market Development (3), Product Development (4), and Business Diversification. In this capacity, a lot of innovation definitions sometimes go towards growth objectives. As per this view, company are considered innovative if investors are ready to take extra measures as organization innovation premium built into stock; typically the difference between their market capitalization and a net present value (NPV) of cash flows from existing businesses. The difference between them is the bonus given on equity to the investors on the educated guess that the company will continue to come up with profitable new growth.

The calculation is made by projecting a company's income (cash flows) from existing businesses, plus anticipated growth from those businesses and look at the NPV of those cash flows. Firstly, the measurement can produce firm valuation, mainly estimation of earnings and revenues. Secondly, test the organizations future free cash flows based on fade algorithms, a sort of a regression to the mean measured in Return of Investment (ROI). Thirdly, the measurement of organization total market value of equity plus total debt as a function of the organization value of existing business that constitutes the innovation premium, expressed as a percentage of the enterprise value. As organizations fade algorithm is based specifically on the historical and future projected performance of the given firm, it may appear to reflect sector identification or industry position. To the extent that firms in an industry or sector share the characteristics of ROI level, variability and reinvestment, the pattern of fade will also be similar. There is also an apparent correlation between a company's fade expectations and its position in the industry, since most industry leaders have higher and more stable rates of ROI having been through their growth phase in achieving their leadership position, no longer need to grow at above-average rates.

2.1.2 Innovation and Corporate Success

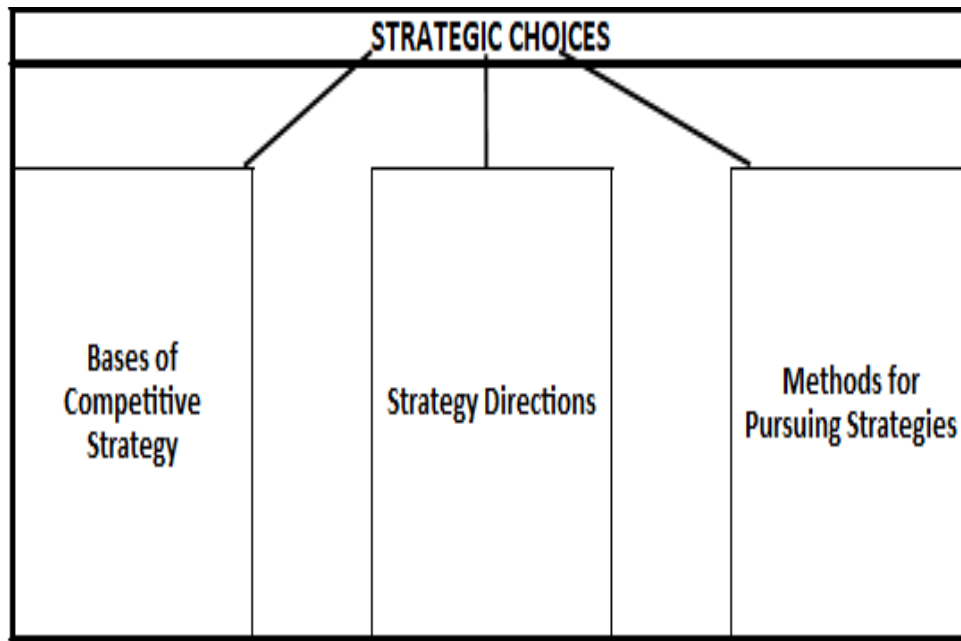
As competition across products and services becomes more and more the primary focus for firms, the search for innovation becomes crucial. The competition has come a long way to create worldwide scale and hereby increasing the competitive pressures within companies. Innovation signifies the ability of an organization to utilize disposable resources and new technologies to be successful. In essence, deployment of new technology presents complex opportunities and

challenges of organizations, leading to managerial approach and emergency of new organizational forms. Organizational forms, strategies, corporate culture and technological innovations are intertwined. Schumpeter, (1950) described organizational changes, together with new products, processes, and new markets as factors of “creative destruction”. However, to be creative and innovative, organization must embrace inclusive approach and methodology to the workforce.

A study on Strategy + Business from Columbia Business School published on October 25, 2011 by BOOZ & Company showed that spending more on research and development won't drive results. The most crucial factors are strategic alignment and a culture that supports innovation. Consequently, innovation and the factors that contribute to it have been widely studied in the past few years. The interactions between organizational management, marketing, manufacturing, research and development are main contributor to a firm overall innovativeness. Conversely, Johnson et al., (2008) explain that innovation and entrepreneurship are fundamental drivers in today's economy. The authors mentioned various innovators such as Steve Jobs technological innovation, whose creativity in computers, electronics and film led to Apple Computers and built Pixar in a world leading animation company. Another innovator the authors stated was Sir Stelios Haji-Ioannou whom he called a business model innovator, whose introduction of online ticketing and simplified airline routing has been at the heart of the easy jet airline. The 2006 Nobel peace prize winner Muhammad Yunus with Grameen bank for their efforts to create economics and social development from below. A social entrepreneur and innovator, who pioneered microcredit, his small loans to entrepreneurs considered too poor to get ordinary banks loans. He founded the Grameen Bank in Bangladesh with his innovative ideas.

Consequently, innovation and entrepreneurship are concomitant by a common concern for the creation of new spectacles, new organizations, new products, services and processes. Conversely, successful innovation and entrepreneurship was predominantly done through relationships, strategic choice and strategic directions. As a result, strategic choice and strategic direction analyzed were required that was mainly focus on innovation with the aim of feeding the growth options.

Figure 1: Illustration of the strategic choice of organisation to achieve innovation



Source: Own creation based on Johnson, Scholes, Whittington, (2008).

The strategic choices are primarily concerned with results about an organization's future and the way in which it needs to respond to the many pressures and influences across the business. The consideration of future strategies must be mindful of the realities of translating strategy into action which, in turn can be significant constraints on strategic choice. The focus as to how an organization positions itself in relation to competitors which creates innovation appetite. This is a matter of deciding the overall basis of how to compete in a market which is viewed as an organized rational innovation, a function concerned with identifying opportunities for change, inducing the action required and monitoring the change once induced such as market, system, customer satisfaction, choice, exchange, conflict and influence.

Furthermore, strategic choice of products and markets for an organization is partially an innovation alignment. These alignments come into force when strategic options are pooled to identify different combination of the internal factors (strengths and weaknesses) and the external factors (opportunities and threats). Apparent considerations of options that use the strengths of the organization to take advantage of opportunities in the business environment are main key to

innovation capturing. Another action prompts options that minimize weaknesses and also avoid threats boost the innovative capabilities and enhanced capturing. The firms utilize strategic choices to influence their strategic direction. The key two influences are internal influences which are the corporate complexity, the organization structure and organization culture while external influences are market-based criteria and capabilities-based criteria (Johnson et al., 2008).

These influences are highly correlated to a firm innovation appetite and approaches. Technically this would lead to differentiation and to succeed, this firm must be innovative in nature. This means providing products or services that offer benefits different from those of competitors and which are widely valued by buyers. The aim is to achieve competitive advantage by offering better products or services at the same price or enhancing margins by pricing slightly higher. The success of a differentiation approach is likely to be dependent on key innovation factors, clustering via strategic directions. H. Igor Ansoff, an applied mathematician and business manager, developed a matrix that helped many marketers and business leaders understand the risks of increasing and developing their businesses. Ansoff matrix shows the strategic directions for innovation-growth adoptability.

Table 1: Dependence on key innovation factors, clustering via strategic directions

		Products	
		Existing	New
MARKETS	Existing	A	B
		Market Penetration / Consolidation	Product Development
	New	C	D
		Market Development	Diversification

Source: Own creation based on Johnson G., Scholes K., Whittington R., (2008)

Based on Ansoff matrix, (table 1) indicates the four basic strategic directions to generate innovation led growth: (1), Market development, which includes building new markets for existing products or overseas in new customer segments. (2), Product development designates product enhancement and innovative solutions to meet the needs of the existing market. (3), Diversification involves a significant broadening of an organization’s scope in terms of both markets and products. The firm intends to enter in a new market with a new product even though it is the most risky strategy as market and product development is required and (4), Market penetration strategy leads firms to use its products in the existing markets targeting growth of its market share by reducing products prices, promotion schemes or other strategies. The classification of the matrix is based on value creation possibilities of innovativeness to achieve growth. The combination of market share and market growth is critical variable for determining attractiveness and balance growth. Of course, innovation success gives a corporation a high market share and high progress.

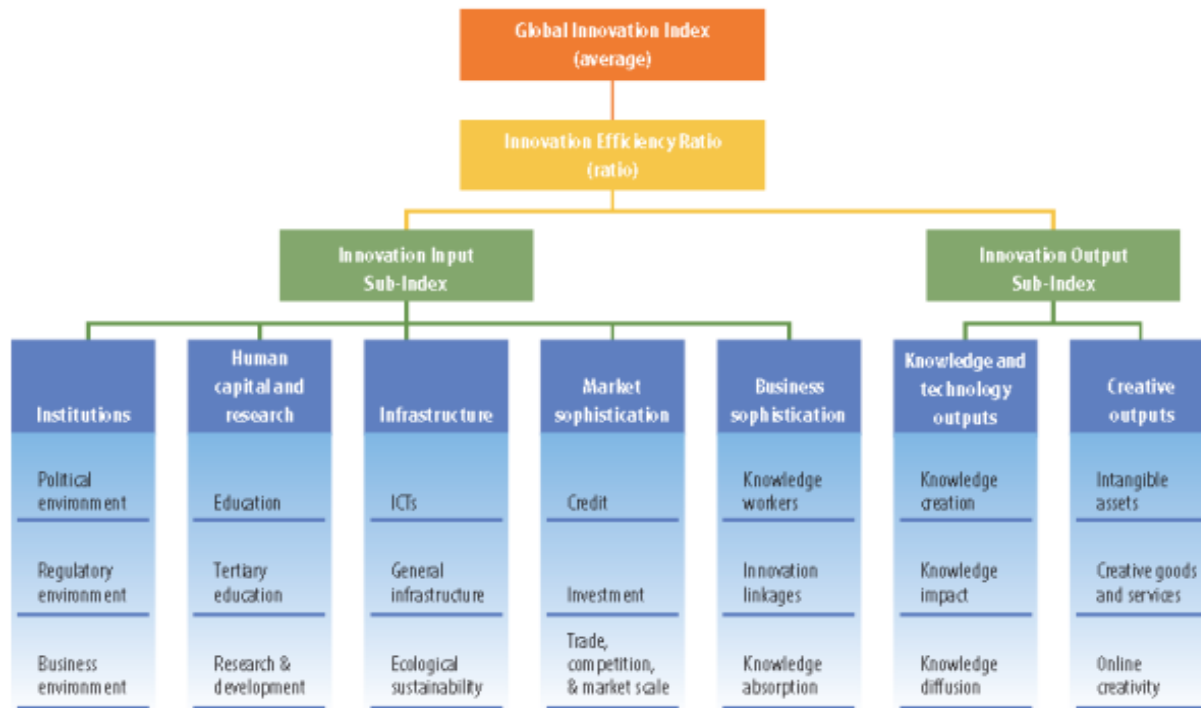
Therefore, innovation in a business requires the creation of considerable new values for customers and company by developing strategic dimensions, choices, and directions of the entire business system. A combination of various strategies, development of new products and services, target of new markets through well designed innovative management will empower company's value chain to help achieve their growth ambitions. Organizational innovativeness could be seen as the deliberate use of procedures, products, processes and ideas inside a group or organization to the intended unit of adoption which is supposed to be significantly beneficial for the person, the group, organization or wider society in general. The culture of the organization is very crucial as it is a set of shared value that support organizational members to understand the organizational functions, guides their thinking and behaviour in the organization to achieve innovative solutions.

Companies that underperform their peers have much to gain if they can close gaps and achieve much higher degrees of cultural and strategic alignment. The research advised companies that the way to do so lies in gaining a greater understanding of the cultural attributes that any given company needs to foster, given its particular innovation strategy.

The same Booz & Company (2010), published on November 3, 2010 / Winter (2010), Issue 61, the research authors concluded that what matters instead is the particular combination of talent, knowledge, team structures, tools and processes (known to be the capabilities) that successful companies put together to enable their innovation efforts and thus create products and services they can successfully take to market.

Figure 2 displayed innovation output by countries. The table is denoted by countries with strong knowledge and technology capabilities and outputs pillar, in which is led by Switzerland. The main pillars the index measured where institutions, knowledge infrastructure and creative outputs.

Figure 2: Framework of the Global Innovation Index 2017



Source: Global Innovation Index 2017/ Tenth Edition

Innovation plays an important role in the development of companies and firms. Taking a lift from the figure below is the sub index rankings of some countries. Figure 2, shows the effect of workforce diversity and the output is innovation solution. The figure demonstrates the after-effect of the countries with high level of cultural diversity to the overall innovation index.

Figure 3: Innovation Output Sub-Index rankings.

Table 3: Innovation Output Sub-Index rankings

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Median: 25.60
Switzerland	65.78	1	HI	1	EUR	1	
Netherlands	60.92	2	HI	2	EUR	2	
Sweden	57.92	3	HI	3	EUR	3	
Luxembourg	55.43	4	HI	4	EUR	4	
United States of America	53.93	5	HI	5	NAC	1	
United Kingdom	53.52	6	HI	6	EUR	5	
Germany	53.46	7	HI	7	EUR	6	
Ireland	53.41	8	HI	8	EUR	7	
Korea, Rep.	52.06	9	HI	9	SEAO	1	
Iceland	51.42	10	HI	10	EUR	8	
China	50.87	11	UM	1	SEAO	2	
Denmark	48.71	12	HI	11	EUR	9	
Finland	48.06	13	HI	12	EUR	10	
Israel	46.75	14	HI	13	NAWA	1	
Malta	46.29	15	HI	14	EUR	11	
Czech Republic	46.24	16	HI	15	EUR	12	
Singapore	45.14	17	HI	16	SEAO	3	
France	44.94	18	HI	17	EUR	13	
Estonia	44.87	19	HI	18	EUR	14	
Japan	43.99	20	HI	19	SEAO	4	
Austria	43.27	21	HI	20	EUR	15	
Norway	42.29	22	HI	21	EUR	16	
Canada	41.73	23	HI	22	NAC	2	
New Zealand	41.59	24	HI	23	SEAO	5	
Hong Kong (China)	40.81	25	HI	24	SEAO	6	
Spain	40.34	26	HI	25	EUR	17	
Belgium	40.17	27	HI	26	EUR	18	
Cyprus	39.75	28	HI	27	NAWA	2	
Italy	39.50	29	HI	28	EUR	19	
Australia	39.06	30	HI	29	SEAO	7	
Portugal	38.30	31	HI	30	EUR	20	
Bulgaria	38.08	32	UM	2	EUR	21	

The Global Innovation Index showed different innovation performance of 127 economies with key terms such as adoptability of diversity culture as fundamentals to innovative and R&D embodiments. Below are list of 12 top ranking innovative countries. Interestingly, these countries are highly cultural diverse populations in terms of industries workforces.

In 2016, Luxembourg population was 582,972 people but the rate of foreign nationals in the active population was 71% (45% cross – border employees and 26% resident foreigners). The cross-border employees were 167.000 (February 2015); outgoing resident employees were

11.500 (February 2015); the proportion of cross-border workers increased from 3% in 1961 to 44% in 2010; nearly half of all the cross-border employees come from France.

Figure 4: Global Innovation Index.

Global Innovation Index 2017 rankings

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Efficiency Ratio	Rank	Median: 0.62
Switzerland	67.69	1	HI	1	EUR	1	0.95	2	
Sweden	61.82	2	HI	2	EUR	2	0.83	12	
Netherlands	61.36	3	HI	3	EUR	3	0.93	4	
United States of America	61.40	4	HI	4	NAC	1	0.78	21	
United Kingdom	60.89	5	HI	5	EUR	4	0.78	20	
Denmark	58.70	6	HI	6	EUR	5	0.71	34	
Singapore	58.69	7	HI	7	SEAO	1	0.62	63	
Finland	58.49	8	HI	8	EUR	6	0.70	37	
Germany	58.39	9	HI	9	EUR	7	0.84	7	
Ireland	58.13	10	HI	10	EUR	8	0.85	6	
Korea, Rep.	57.70	11	HI	11	SEAO	2	0.82	14	
Luxembourg	56.40	12	HI	12	EUR	9	0.97	1	

Source: Global Innovation Index 2017/ Tenth Edition

Take for instance the USA, as at December 2016 has a total population of 323.1 million. The Labor Statistics, in 2016 there were 27.0 million foreign-born persons in the U.S. labor force, comprising 16.9 percent of the total (www.bls.gov/cps). Singapore, with a population of 5.6 million as at December 2016 has 1.4 million foreign workforces as at December 2016. United Kingdom, with a population of 65.64 million as at December 2016, 11% (3.4 million +/- 0.2 million) of the UK labor market (30.3 million +/- 0.3 million) were non-UK nationals; EU nationals contributed 7% (2.2 million +/- 0.1 million) and non-EU nationals 4% (1.2 million +/- 0.1 million). As observation, highly diverse cultural workforces these countries maintain help push the innovative buttons into the country's GDP per capita, positioning their capabilities in innovativeness.

2.1.3 Innovation and Creativity

Innovation and creativity are vitally important organization success and growth orientation. To innovate, creative individuals are essential and are put into action by organizational action pack, which meant to be people, process and strategy (PPS). PPS is organizational making or referred to organizational strategy (Mullins, 2010). In essence, for atypical organization to be innovative,

creative solutions are required. On frontline, creativity is the application of imaginative thought which results in inventive solutions to many problems. Creativity refers to breeding new ideas, the competency of conceiving something original that others have missed. It could be a form of expression and a way of solving problems. Creativity draws crucially on our ordinary abilities. Noticing, remembering, seeing, speaking, hearing, understanding language and recognizing analogies. All these are important cognitive functioning and talents of everyday man.

Mullins, (2010) highlighted 4 stages of creative thinking process

- Preparation stage conscious attempt to understand and absorb information
- Incubation stage conscious mind is focused elsewhere but below the level of consciousness the ideas are being continually combined
- Illumination solution appears suddenly – flash of insight
- Verification Solution is tested in a conscious and deliberate way

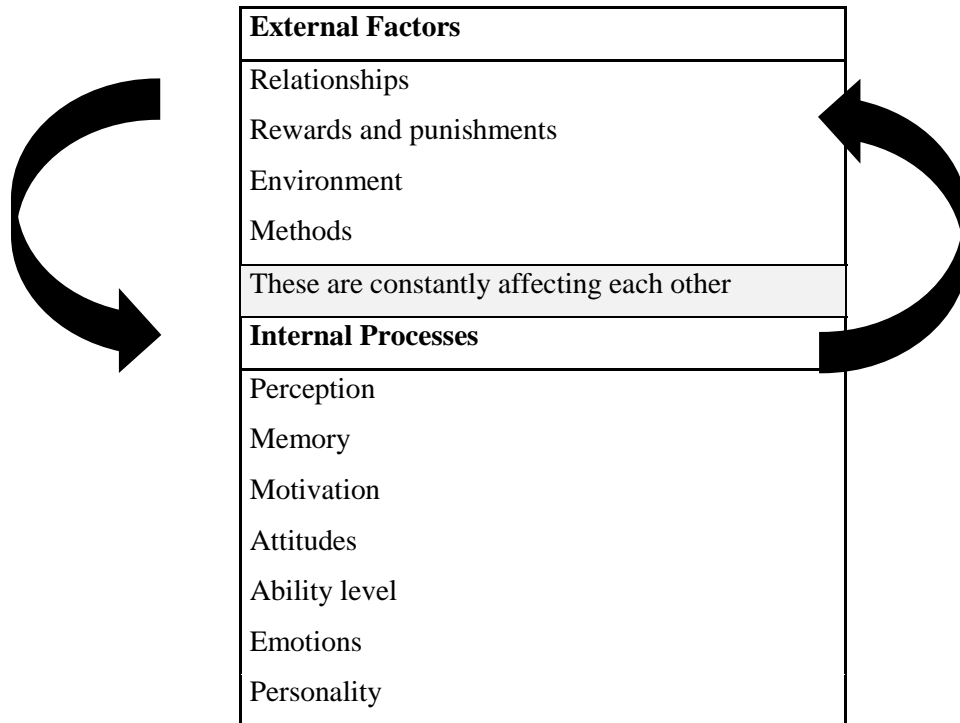
These stages as Mullins pointed out are vital to understand someone creativity, which in many organizations is suppressed and not apprehended. To get best fit creativity and innovative solutions, the firm must identify clusters of skills-led-opportunities that imply reaction to problems or challenges and contribute to change and evolution. Nevertheless, creativity is one of the engines of cultural evolution that has root in cultural diversity, relationship with education, age, race and gender of the workforce. A study conducted by McKinsey (Hunt et al., 2014) found that the companies with high rate of diversity in gender were found to be more effective in their financial performance while companies with highly diversified ethnicity were 30% better than the median industry performance. On the contrary, Alessina & Ferrara (2005) indicated that diversity may lead to conflicts in choices, racial discrimination among ethnic groups as a result of resource allocations.

Organizational culture needs to be a process that allows the varied perspectives, priorities and styles of various types of individuals of different social backgrounds and cultural roots. An alignment model known as the McKinsey 7-S Framework highlighted 2 key groups – Hard group and Soft group. The hard elements are: strategy / structure / systems while the soft elements are: shared values / skills / style/ staff, primarily showcasing the hard elements as the organizational

culture and soft elements as person cultural elements (www.mckinsey.com). In the context of diverse workforce, the impact to reach innovative goals and objectives placed on the center of the management interpretation and integration of working group.

Many influences of creativity come from personality-learning-capability. Learning means change but changes of a relatively permanent kind. A common definition of learning is “a relatively permanent change in behaviour or potential behaviour, that result from experience” (Mullins, 2010). These temporary changes are of a different nature to those associated with the process of learning that result in knowledge and a change in behaviour. There are two main set of factors of learning namely: external factors and internal process as Table no. 2 describes.

Table 2: Analysis of the external and internal factors of person creativity



Source: Own creation based on Mullins, (2010)

Early classic studies of learning offer explanations for simple learning situations. The principles arising from the laboratory experiments remain applicable to an understanding of materials. Of course, there are more complex forms such as cognitive format that considers different preferences and styles according to Table 3.

Table 3: An Illustration of styles of learning from Kolb

Kolb Styles of Learning	
Accommodative	Strong preference for concrete experiences and active experimentation (hands-on)
Divergent	Preference for concrete experiences, but to reflect on these from different perspectives
Assimilative	Prefers to swing between reflection and conceptualisation and will use inductive reasoning to develop new theory
Convergent	Prefers to apply ideas, will take an idea and test it out in practice

Source: Own creation based on Mullins (2010)

These four ways of learning are a reflection of the followings:

- What’s new, I’m game for everything – Activists technique
- I’d like time to think about this - Reflectors technique
- How does this relate to that – Theorists technique
- How can I apply this in practice – Pragmatists technique

Organisations are able to produce better creative ideas in less time with better business outcomes if models of learning become part of the organisational culture. Organisations need to develop employees as “thinking performers”, learn how to think for themselves and as a consequence more productive meetings and stronger relationships will lead to creative solutions.

As organisations interact in the dynamic space and in full notion of continuity, creating a culture of creativity requires unique leadership capabilities. Meaning the organizational culture and strategy are keys to create and disseminate culture of creativity leading to innovativeness. As organization is a dynamic construction enacted by the members of the organisation overtime, therefore they require diverse of group of senior managers with different personalities able to perceive the world differently, yet able to participate in a process that transcends these different views to enact a complex organisational reality. Such view is echoed that personality, sensitivity,

creativity and communication skills are required from the managers. Furthermore, managers required to have skills to find root causes of problems and imaginative in solving them. It is essential for managers to be able to know and understand how to push-through these creativities to be innovation into the whole organisational system. Innovativeness encompasses the ability to nurture and use natural creativity, develop new ideas and bring them to life (Mullins, 2010).

Accordingly, organizations should identify their capabilities through clusters of opportunities. These clusters encompass people, financial resources, organisational culture, leadership and diversity. Workplace diversity not only covers the differences between co-workers and colleagues, but also the acceptance, understanding and celebration of those differences. Diversity in a company offers a variety of perspectives during decision making, access to a wider audience or client base and increased productivity. However, establishing and managing a diverse environment has preventable and curable challenges that can be damaging to the company. Many challenges and implications were underlined (Agu and Fekete Farkas, 2011).

Some clusters of opportunities which organisation could adopt are the followings:

- Organizational agility or liveliness will ensure that organizations have and utilize the inherent potential and energy of their employees;
- Organizational clarity is recognizing what is and what is not important in relation to the business context. This is about decision making, sound judgment and clarity about core organizational issues;
- Organizational flexibility is the ability to adapt and change at the rate of change required;
- Organizational genuineness is about operating in line with values, innate wisdom and common sense that grows from different cultural orientations and dimensions;
- Organizational openness allows for fluid of different cultural interactions within and between the inner world of the organization and its outer world.

The strategic dilemmas stem from this more complex and extended process. When talking about innovativeness, we are expressing knowledge based conversion that results to creativity. The knowledge are codified (explicit) and tacit (implicit). Codified knowledge is transformed into information which can be transmitted through information infrastructures. Tacit knowledge cannot be easily transferred because it has not been put in an explicit 'information' form.

However, to convert and transmit tacit knowledge, which is always in form of “unknown” knowledge such as shared beliefs and ways of interpretation. To transfer this kind of knowledge is through social interaction as in apprenticeship or working/group solving relationships. It implies that transfer is sensitive to a social context, with different levels of dimensions mostly using Hofstede national cultural dimensions to capture.

Rugman & Collinson, (2009) revealed that certain elements from different countries and cultures can lead to comparative advantage or basically factor endowment strategies which an organization can achieve while employing diverse work force. Accordingly, Rugman & Collinson to demonstrate their argument on people cultural oriented strategy and or national cultural dimensions, they pointed out porter’s four factor conditions mentioned below:

- Factor conditions: capacities and factors required for a given industry, for example, skilfulness and creative mind-set required from the organization.
- Demand conditions: extent and nature of demand of skilfulness and creativity.
- Related industries: the existence, extent and international competitive strength of employees to stand competitors.
- Corporate strategy, structure and rivalry: the conditions of leadership and hierarchical structures, composition of groups, representativeness of diversity, level of decision making and synergies pulled from diverse group.

Other authors Johnson et al, (2008) showed the classical management model known as “strategy and people” (people as resource, people and behavior, organizing people) which is centered on management of people to achieve a goal. Johnson et al., (2008) reasons that human resource policies that target diversity and creativity are keys to competitive advantage of an organization. Mullins, (2007) agreed with Johnson et al., (2008) in the importance of the relationship between people and successful strategy. To achieve that, management will be required to use creativity and motivate people emotionally to think outside of the box. The ability to change people’s behaviour may be the key ingredient for success. The creative process demands a mix of diverse individuals. For an organization to benefit this creative art there is a need to be an organizational culture that allows for varied perspectives, priorities and styles.

In conclusion, creativity is a set of tools that allows different people from various groups to connect ideas and to create, to transform or to produce something different from their competitors. It may involve breaking down and reorganizing the knowledge about a subject in order to achieve new insights.

2.2 Culture

The definition of culture has been different for different scholars like anthropologist, sociologist, psychologist, and politicians. The researcher believes that those who have lived, worked, and studied outside their places of origin would probably notice cultural differences. Even if the person is not observant at all, he or she would recognize different styles of dressing, language, food, or mannerisms. Even if you are fluent with another language, there are also some hidden differences such as how and when people use humour, how formally or informally they behave towards each other's in different contexts and how different meanings and use of silence, power, influence, gender positions and so on. Therefore, from these expressions you can see that culture goes beyond us.

In general, learning different things and believing in those forms of cognitive action is termed as "culture". It then becomes the root of our behaviour, attitude, and life. Hoechlin et al., (2003) defined culture as a shared system of meanings and behaviour, respectively. Hoechlin continued to say that culture dictates what groups of people pay attention to and guides how the world is perceived, how self-experience and the life itself is organized. Rugman & Collinson (2009) defined culture as the sum of beliefs, rules, techniques, institutions, art, products, and facts that characterize human populations and thought that there are strong consensus between the key elements of culture such as language, religion, system of values, qualities, habits and norms of a group or society.. They believed that there is strong consensus that key elements of culture include language, religion, values, attitudes, customs and norms of a group or society.

Whereas many authors tried to find a suitable definition to culture, Schneider & Barsoux (2003), wrote that culture serves as a lens through which we perceive the other. She continued to say that we tend to use our own culture as a reference point to evaluate the other. As human being inhale air to live, our daily practice also strongly related to our cultures to live, work, solve problems, behave to our peer groups, and attend to customers and so on. The journey of our cultural

approach starts from the socialization process influenced by parents, friends, status, communities, education, countries, and other forms of interactions. These influence results in learned patterns of behaviour common to members a given society (Rugman & Collins, 2009).

Culture has a huge influence on innovation (Rosenbusch et al., 2011; and Baumol, 2002). To strengthen this, (Noriko et al., 2001) explains the difference in level of creativity using cultural orientation between Asian and westerners showing Asians are less creative and limited culture can be damaging to producing new ideas (Chua et al., 2015).

Hofstede called it the collective programming of mind. According to Schneider & Barsoux, (2003), an American in Madrid may experience discomfort, feeling stared while in London may did not experience discomfort. Culture determines the ‘ ‘ intensity of looking’ ’ permitted.

Probably there are many sets of subcultures that impact our adulthood behaviours. These subcultures can be distinctive because of the age, ethnicity, class, location, and/or gender of an individual or group. The qualities that determine a subculture as distinct may be linguistic, aesthetic, religious, political, sexual, geographical or a combination of these factors.

Schneider & Barsoux explored that subcultures evolved largely on these dimensions. The author mentioned categories of subcultures such as industry cultures which consist mainly of different characteristics of the industry, predominantly nature of decision making, product and market characteristics, regulation, technology, core competencies acquisition and interaction effects.

An example is the soft drink industry such as Coca-Cola when competing with the rival Pepsi Cola would consider the set-up of its advertising campaign and try to understand whom the target customers are, how to gain more market share or how to acquire or develop more patent rights to make their business performance better than Pepsi’s. Accordingly, Schneider & Barsoux wrote that industry cultures affect the industries and its environments.

Schneider also mentioned professional cultures, functional cultures and finally corporate cultures which explores deeper into role of founders, leadership method, administrative heritage, stages of development, nature of product and interaction effects.

Rugman & Collins, (2009) defined corporate culture as a term used to characterize how the managers and employees of companies tend to behave. This terminology or rather sub-cultural scenario helps to share the senior management leadership styles to proactively categorize the kind of behaviour that would nurture innovativeness, openness, dynamic and better communication to achieve its objectives. Accordingly, when a firm promotes and setup distinctive corporate culture that enhances the sense of community, diversity, and shared identity, it builds a sustainable synergic tool to overcome problems.

However, most corporate cultures depend on where the firm evolved, and which cultures and subcultures of the interest groups encompass. As cultures influence the behaviours and preferences of our decision structures, systems, and relationships, it is the key stumbling block for managers and employees to achieve their goals.

Today, firms are global citizens which existence a perfectly integrated world economic system. In such a global system there would be perfect mobility of financial capital, goods, and people. Globalization usually brings cultural differences. According to Taylor (1994), this is always interpreted in terms of nationality, but he also questions the narrow view on this interpretation. He reckons that national differences have six orientations such as time and space orientation, leadership style orientation, individualism versus collectivism, competitive versus cooperative behaviour, locus of control and communication styles would always bring in different types of conflicts within any organization.

Schneider & Barsoux, (2003) pointed out that one of the major seeds in potential conflicts and misunderstandings are cultural differences. Taylor and Schneider viewpoints goes also in line with Hofstede, (1980) national cultural dimensions which are high versus low power distance, individualism versus collectivism, high versus low uncertainty avoidance, masculinity versus femininity, time orientation behaviour. These authors argued that countries, regions, states, and

communities differ in these cultural dimensions and once an organization has cultures of such multiple plagues; there are high tendencies of conflicts. Taylor pointed out an example with space orientation where he said that physical distance between people from Arabian countries are much closer compared to people from the USA and the British. Violations of space norms creates psychological discomfort and that most Americans often moves away to create the distance that they are comfortable with. Such movements may be interpreted as rude by persons from other cultures and set the stage for interpersonal misunderstanding (Taylor).

2.2.1 Role of Culture on Personality

Individual behaviours are different and very complex in nature. Social customs and culture different from one country to another, and there is simply no way to fit in and be at home unless you learn what is and is not appropriate behaviour in the given country or region. It is impossible to generalize that can be applicable to every situation.

What make humans different according to Mullins (2010) includes ethnic origin, physique, gender, early family experiences, social and cultural factors, national culture, motivation, attitudes, personality traits and types, intelligence and abilities and perception frontiers. Some of these characteristics are shared with others while some are unique due to inherited and environmental factors. These frontiers lead to understand one of self and others, in other words, personality. Personality is viewed as consisting of stable characteristics that explain why a person behaves in a particular way.

However, it is only when we see/hear//observe a person that we can gain an understanding of their personality (Mullins, 2010). Personality studies can be divided into two main approaches, labelled as homothetic and idiographic frontiers. These main approaches identify our personality characteristics and show our behaviours, attitudes and approach towards nature and creative ability. As a function, culture becomes imminent. Therefore, our preference to define culture is “acquisition to learn-ability and believability, and creative-ability”. In the Article of Agu & Farkas, (2011), culture was viewed from different frontiers. In general, learning different things and believing in those things forms a cognitive action known as “culture” and an integral unit to creative act and art. It then becomes the root of our behaviour, attitude, and life.

In addition, Hofstede pointed out the combination of personality and culture to create innovativeness, in which he describes culture as the 'collective programming of the mind' and explains that it is structured between human nature on one side and individual personality on the other (Hofstede, 1994 and 1991). Cultural differences can create conflict in organization due to different perception, fear, norms, and beliefs. It can obstruct the innovativeness. It is necessary to emphasize the critical points of a culture and the main differences between territories because it is essential to take them into consideration during an international cooperation. Although cultural values refer to almost any basic human activities, the most important is regulating behaviour that is the interplay of individuals.

Hofstede also pointed out the differences between cultures according to different aspects. Individualism or collectivism, femininity of masculinity, present or past preferences, or the attitude to the time is also very important distinguishing features.

Culture has a determinant role in formulating the individuals themselves. As there are different interpretations of culture according to anthropologists, sociologists, psychologists, and politicians. Schneider and Barsoux, (2003) identified the common behavioural marks of culture.

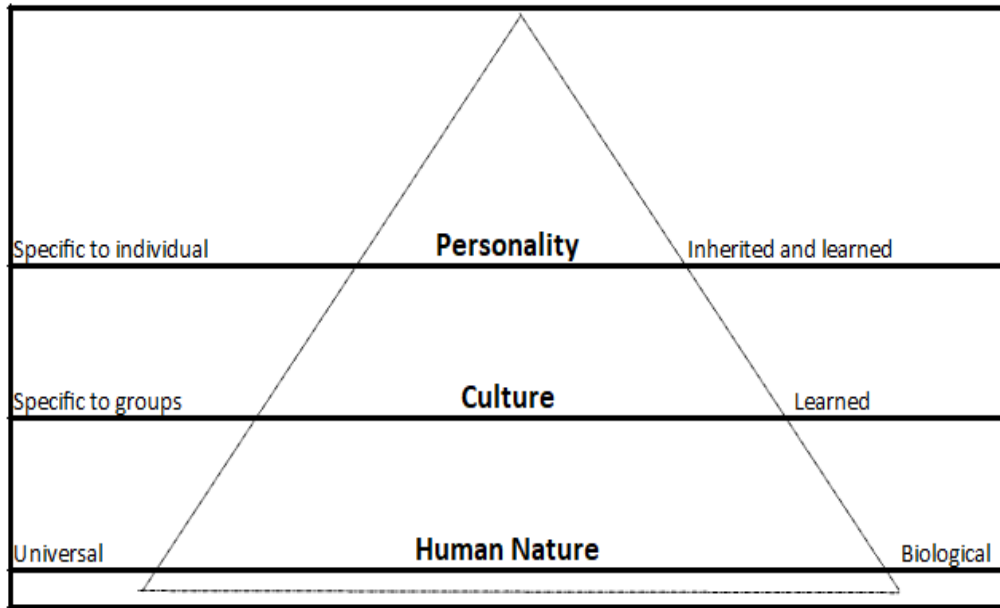
Individuals have different abilities, personalities, learning experiences and attitudes. It is not surprising that they perceive work in different ways. Differences between individuals can be a source of developing creativity or the root of conflict and frustration. There is a strong relationship between culture and personality leading to various behaviours (Leung & Cohen, 2011).

Talking about organizational culture generating innovativeness, we are expressing knowledge-based conversion that results to creativity through structural characteristics of the organization.

Culture dictates what we pay attention to, guides how we perceive the world, how the self is experienced and how life itself is organized. Individuals of a group share patterns that enable them to see the same things in the same way and this holds them together. As a matter of facts, everyone in the group carries within them learned ways of finding meaning in their experiences.

The notion of inter-relationship between personality and social context are elaborated in the following Table 4.

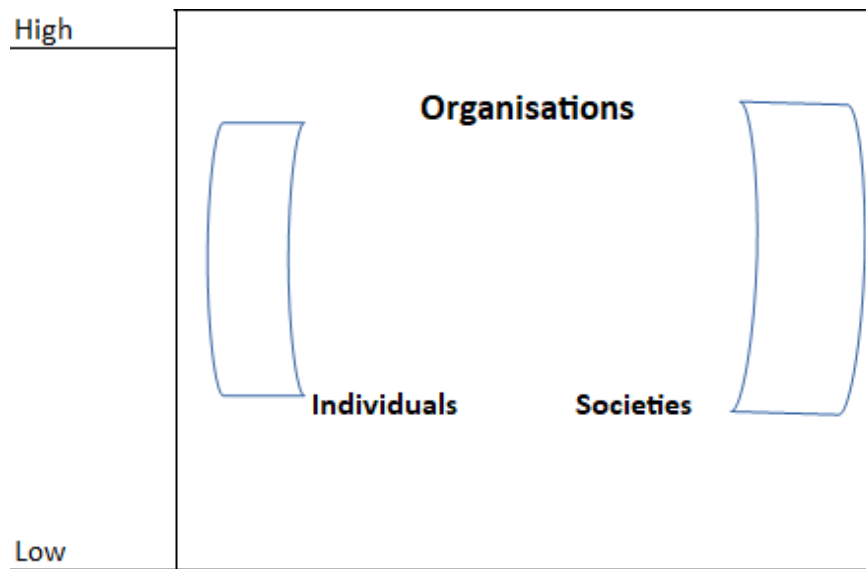
Table 4: Atypical Inter-Relationship between Personality and Social Context



Source: Three Level of Uniqueness in Mental Programming by Geert Hofstede, (1991): pg. 6 &7.

As individuals act as a collective programming attitude, so they become same, primarily transcend into the organizational culture. As organizations are born and start to live up to their expectations, there comes the interaction of different kinds of expansions, of different geographies, countries, including different groups of workforce with different personalities and cultures leading to emergency of cultural duplicability or organizational culture. The cultural inter-link of the organization, society and individual are shown in the Figure 5.

Figure 5: Cultural Inter-link of the Organization, Society, and Individuals



Source: Own creation: Human Resource Management in International Firms: Change, Globalization, Innovation by Paul Evans, Yves Doz, Andre Laurent, 1989. An overview of organization cultural duplication method: Change capability.

From the chart above, we can see that the authors centred on balancing the opposite forces that international enterprises appear to experience the forces of centralization and decentralization, of individuality and teamwork, of change and stability, of strategic development and operational performance, of diversity and control, of innovation and commercialization. Each component has its low effect and high effect proportionality to achieve innovativeness.

2.2.2 Cultural Diversity linked Innovativeness

Societal changes and organizational demands driving by globalization and competitions amongst other factors create difficulty in having a homogeneous workforce. Today's labor force is becoming more and more heterogeneous: aging, migration, women's increased labor participation, and technological change are key drivers of this phenomenon. Moreover, in many countries' companies are under legislative pressure to diversify their workforce either through quotas or affirmative action. Workforce diversity has thus become an essential business concern.

Firms must manage diversity both internally (i.e., among management and staff) and externally (i.e., by addressing the needs of diverse customers, suppliers, or contractors).

As heterogeneity compose of different cultural background – mainly having different cultural backgrounds and motivational values tend to vary by national culture for example, with Eastern nations endorsing more collectivism and Western nations endorsing more individualism (Hofstede, 1980; Schwartz, 1992).

As a result of these structural changes, an increasing number of firms employ a manager whose task is to ensure that diversity does not hamper productivity but may contribute to attaining the firm's objectives. From the workers' point of view, labor diversity may also generate benefits or losses. The latter may be the result of a more (or less) enjoyable working environment but may also derive from a higher (or lower) wage.

Michael Intriligator, 2002 paper on “Globalization of the world economy; potential benefits and costs a net assessment” professed globalization as the major increases in worldwide trade and exchanges in an increasingly open, integrate and borderless international economy. With the global system there are remarkable growth in trade and exchanges, in capital movements, in technology transfer, in people moving through international travel and migration, and in international flows of information, collaborations and ideas.

Taylor, in his paper reckons that national differences has six orientations such as time and space orientation, leadership style orientation, individualism versus collectivism, competitive versus cooperative behaviour, locus of control and communication styles would always bring in different types of conflicts within any organization. Schneider and Jean-Louis Barsoux (2003) pointed out that one of the major seeds in potential cultural conflicts and misunderstandings are cultural differences. Taylor (1994) and Schneider and Jean- Louis Barsox (2003) viewpoints goes also in line with Hofstede’s national cultural dimensions which are high versus low power distance, individualism versus collectivism, high versus low uncertainty avoidance, masculinity versus femininity, time orientation behaviour. These authors argued that countries, regions, states

and communities differ in these cultural dimensions and once an organization has cultures of such multiple plagues, there are high tendencies of conflicts.

Cultural diversity has an overall effect on how the organization operates. When considering the cultural differences and its influence on an organization, it is pertinent to know that it goes far as affecting the behavioural and thinking pattern of every employee within an organization. Hence, the culture of a person defines him, his action and way of thinking.

The rational, ethnic, and religious cultures account for differences within countries. Ethnic and religious group often transcend political country borders. The groups from minorities at the crossroads between the dominant culture of the nation and their own traditional group culture are called “cultural diversity”. Both assimilation (the melting pot) and general understanding of the society and work ethics, it becomes apparent how relating with people from different setups can have a significant impact on innovation. Diversity is a requirement nowadays than ever and cuts across the organization. The idea of cross-cultural interactions becomes a crucial topic primarily because it is the driving force for the way employees think in relation to innovation. Social stigmas, personal ideals, and religious beliefs are some matters which are influenced and affected by culture.

Organizations heads must be aware of the ideologies and the customs their employees have when giving out the importance of working for them. In some culture, the kind of language used every day can be offensive. Management and anyone else involved need to be aware of all the diversities that exist across all workers so that they can use correct wording when conversing with their groups.

Mullins (2010) highlighted some central principle of cross-cultural communication theories that one does and the perception of everyone must be taken account through one's cultural knowledge. People communicate through various modes which among them are gestures, body language, speech and they have different meaning across the culture.

It is necessary to have diverse workforce in order to promote creativity and enhance innovation. According to Parrotta et al., (2014) in his firm level study, a 10% change in Ethnic diversity increases innovation by 2.2%. Diversity creates a room for greater innovation (Cox and Blake, 1991). Horbach and Jacob (2018), indicates that gender diversity has significant impact for environmental innovation. It also facilitates the link among capability and innovation (Ruiz-Jimenez et al.; 2016). McGuirk and Jordan (2012), supports the idea of diversity stating it enhances product innovation. Moreover, Mohammadi et al., (2017) in his research indicated that higher ethnic diversity positively affects innovation.

On the other hand, studies that link diversity to economic growth tend to display a negative relationship (Easterly & Levine, 1997; Alesina et al., 2003, Montalvo & Reynal-Querol, 2005). Goren (2014) also found a direct negative relationship between ethnic diversity and real Gross Domestic Product per capita growth. In addition, Quintana-Garcia and Benavides-Velasco (2016) and Shehata et al., (2017) explained the negative impact of gender and age diversity in firm performance. This idea is also supported by (Ozgen et al., 2011) indicating that firms with high foreign workers tend to be less innovative.


Most organization are working hard to ensure that to be inclusive when it comes to the issues of the cultural diversity and ensure that no single person is left out since that is an opportunity. More so, people with different communication styles are finding their way into the organization laying a common ground for the success of the business and organization, and through this, the cultural diversity has optimized things especially those affected by complex techniques.

2.3 Organizational Culture

First of all, what makes a culture? Each culture is unique and myriad factors go into creating one. A great culture starts with a vision or mission statement. These simple turns of phrase guides organizations value and provide it with purpose. That purpose, in turn, orients every decision making. Good vision statements can even help orient employees, customers, suppliers and other stakeholders.

According to Mullins, (2010), organizational behaviours are many facets of examination to behavior of individual and group, patterns to structure in order to enhance the performance of organization. Arguably, organizational behavior and management are synonymous and equally synchronized in nature. This is because organizational behavior and the effective management of people at work take place in the context of the wider environmental setting, including the changing patterns of organizations and work. The view of organizations existing as systems of interrelated elements operating in multi-dimensional environments is becoming widely accepted. That being said, the popular belief that organization as an iceberg, the visible part of the iceberg, shows the formal aspects of the organization while the informal aspects of the organization hide under water, both formal and informal nature creates organizational cultural attributes. Mullins, (2010) simply highlights that organizational behavior embraces the following understandings as in Figure 6.

Figure 6: Illustration of the Visible and Non-Visible Part of Organization Iceberg

	FORMAL ASPECTS OF ORGANISATION (Overt)	
Visible culture elements	<i>Goal and Strategy</i> <i>Structure, Standards and Procedures</i> <i>Products and Services</i> <i>Management and Financial Resources</i> <i>Technology and Physical Facilities</i> <i>Organisational Design - Surface Competencies and Skills</i>	<i>Actions and Structures</i>
		
	INFORMAL ASPECTS OF ORGANISATION (Covert)	
Invisible culture elements	<i>Values, Attitudes and Beliefs</i> <i>Leadership Style and Behaviour</i> <i>Organisational Culture and Norms of Behaviour</i> <i>Power, Politics and Conflicts</i> <i>Informal Groupings</i> <i>Communication Patterns</i> <i>Personality</i> <i>Underlying Competencies and Skills</i>	<i>Values</i>

Source: Own creation based on Mullins L. J. (2010) book: *MANAGEMENT AND ORGANISATIONAL BEHAVIOUR*.

Organizations values are the core of its culture. While a vision articulates organization’s purpose, values offer a set of guidelines on the behaviors and mind-sets needed to achieve that vision. A clearly articulated set of values that is prominently communicated to all employees and involves the way the organization vows to serve clients, treat colleagues and uphold professional standards. Of course, values are of little importance unless they are enshrined in a company’s practices. According to Johnson et al., (2008), no company can build a coherent culture without people who either share its core values or possess the willingness and ability to embrace those values. That is why the greatest firms in the world have some of the most stringent recruiting policies by enshrining the term “people are our greatest asset” and the ability to unearth that history and craft it into a narrative is a core element of aesthetically oriented culture creation. The diagram in the Figure 7, explains the relationship between people as resources and strategy.

Figure 7: Explanation of People as Resources that Influence Culture and Strategy both through their Competence and Collective Behavior (Culture).



Source: creation based on the book of Johnson G., Scholes K., Whittington R., (2008).

Johnson et al., (2008), wrote that people centred organizational culture sparks rendition cultural frame of reference. The cultural frame of reference is the most important ingredient of creativity lead innovativeness. It is network of values, norms, views, concepts etc. on the basis of which an individual perceives and interprets data, events or ideas and on the basis of which actions are effectuated.

Organizational culture basically is layered into four categories namely: values, beliefs, behaviors and paradigm (Johnson et al., 2008). The organization values are sets of written rules and statements of the organization's missions, objectives, and strategies. The beliefs are the most basic dimension of organizational behavior. A belief is an assumed truth and enshrined loyalty. The behaviors are the routine (day-to-day) operation of the organization which is visible internally and externally. What are considered serious or not serious are the organizations paradigms. Johnson et al., (2008) presented paradigm as the set of assumptions held in common and taken for granted in an organization.

In seeking to understand the relationship between culture, organization and the individuals that work for the organization, there comes the organizational "cultural web" which authors, Mullins and Johnson et al., (2008) presented in their respective books. According to Johnson et al., (2008), cultural web shows the behavioural, physical, and symbolic manifestations of a culture that inform and are informed by the taken-for-granted assumptions or paradigm of an organization. At its most basic this might be assumptions about what the organization is there to do, or the reasons for its success historically. As culture can be also "artefacts" of the organization - such as organizational routines, systems, and structures. However, these are likely to be taken for granted as the "way things are done here" paradigm as shown in Figure 8.

Figure 8: Presentation of the Cultural Web of an Organization in the Context of Individual.



Source: Presentation of the cultural web of an organization by Johnson G., Scholes K., Whittington R., (2008).

The routine ways, in which members of the organization behave towards each other, and that, linked different parts of the organization. These are the "way we do things around here" which at their best lubricate the working of the organization and may provide a distinctive and beneficial organizational competency. However, they can also represent a taken-for-granted-ness about how things should happen which is extremely difficult to change and highly protective of core assumptions in the paradigm.

The stories told by members of the organization to each other, to outsiders, to new recruits and so on, embed the present in its organizational history and flag up important events and personalities, as well as mavericks that "deviate from the norm" (Johnson et al., 2008). Other symbolic aspects of organizations such as logos, offices, cars and titles or the type of language and terminology commonly used, these symbols become a short-hand representation of the nature of the organization.

These organizational cultures influence the organization's strategy, objectives and forms cultural web. It is necessary to understand the conceptual basis of the cultural web and its links to strategy development within the organization. This is because culture impacts most aspects of organizational life, such as how decisions are made, who makes them, who hires and whom to be hired, how rewards are distributed, who is promoted, how people are treated, how the organization responds to its environments, and so on. The covert set of organizational culture can be quite dysfunctional and also costly. This is because organizational culture, the assumptions, beliefs, values and norms that drive "the way we do things here" is the largest and most controlling of the systems because it affects not only overt organizational behavior but also the covert, that is the shadow-side behavior adopted as the culture of the organization and as the

social system. Culture tells what kind and sort of politics are allowed and just how members of an organization are allowed to the political game.

2.3.1 Organizational Culture and its Impact on Innovation

The subject of organizational culture leading to innovativeness is a hot topic of the era of globalization. The world is becoming a global village. Almost everyone has a social media account, have used internet to check through Google and other apps. These technological adventures are driving the way forward of our life and also making life easier and thus, these companies requires constantly to be innovative. When taking into consideration of consumer awareness of today, in other words consumer behavior to have many preferences to choose from, companies are hiring everybody in order to move into every direction in search of growth and profit. Companies are becoming more and more innovative.

A research from Booz & Company's annual study on 'The Global Innovation Index 2012: Stronger Innovation Linkages for Global Growth' shows that spending more on R&D won't drive results. The most crucial factors are strategic alignment and a culture that supports innovation. In the research, Booz & Company pointed out several elements that make up a truly innovative company such as a focused innovation strategy, a winning overall business strategy, deep customer insight, great talent and the right set of capabilities to achieve successful execution. However, they finalized these elements by denoting that the most important of all these individual elements, is the role played by culture (the organization self-sustaining patterns of behaving, feeling, thinking and believing, in tying them all together).

As Porters Cluster of Skills Led Opportunities highlighted, the primary goals of organizational culture are economic benefits, which comes as a function of clustered skills within organizations that leads to innovativeness. Organizational culture and attitude enable long-term creativity and innovation, even though the approaches are ambiguous.

Just as organization, cultural norms may shift due to many factors such as organization structures, functions, operations and team interactions. Motivational values also shift in a way that team members develop a shared set of motivational values guiding their work as a team.

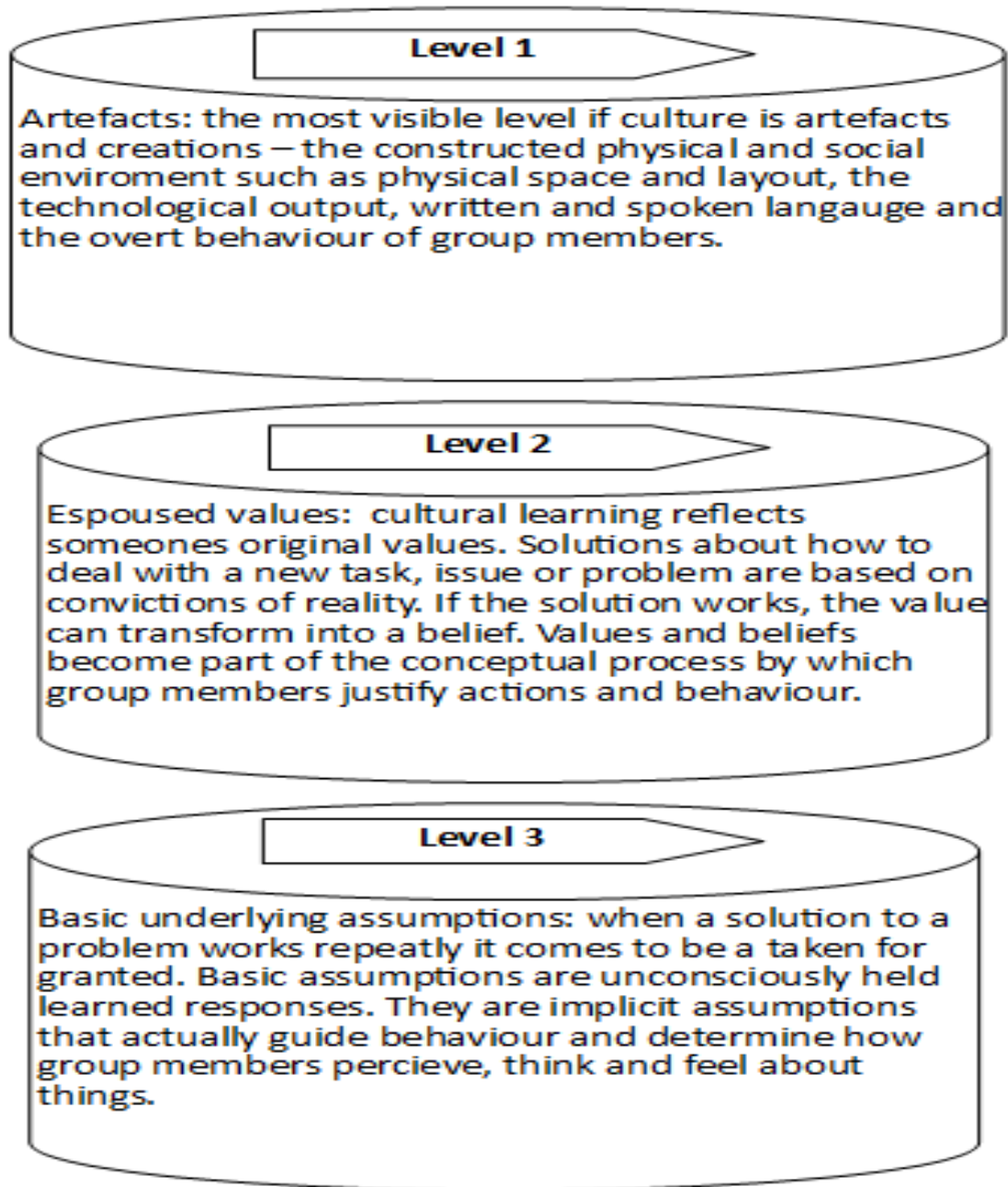
Cultural diversity has both negative and positive impact on an organization. It is likely, that the positive impact is greater than the negative impact, in the sense that involving or incorporating cultural diversities help to initiate new skills and new ideas and thus enhancing innovative ideas.

Workplace diversity not only covers the differences between co- worker and colleagues, but also the acceptance, understanding and celebration of those differences. Diversity in a company offers a variety of perspectives during decision making, access to a wider audience or client base and increased productivity. However, establishing and managing a diverse environment has preventable and curable challenges that can be damaging to the company and many challenges and implications were underlined in several researches (for example, Agu and Fekete, 2011). Cultural differences in the other hand can create conflicts in organization due to different perception, fear, norms and belief. One should be aware of difficulties caused by cultural differences and dimensions as a real source of most conflicts in an organization.

Culture as we know is a powerful influence and when linked to the overall business aims, coupled with an espoused commitment from senior leaders, offers a powerful organizational resource. That's why organizational culture enshrined certain doctrines in terms of guiding principles that include being mission-driven, result-oriented, improvement-directed, relationship-centred and participation-base. Therefore, understanding the organizational culture is very important and one of the practice leadership functions. Mullins, (2010) presented 3 levels of organizational culture in Figure 9 based on system of management authority and or "culture".

This is because if the organizational culture is accepted by employees, then the cultural values become the power and the authority of the management, that is, the guiding principles. The employees identify themselves with the organizational values as well as they internalize the values and get motivated to achieve the objectives of the organization. This process is known as system of management authority.

Figure 9: Explanation of Management Authority and or 'Culture'



Source: Own creation: based on Mullins, L. J. (2010), pg. 760: presentation of levels of organizational culture.

Mullins also highlighted different types of organizational culture – power culture, role culture, task culture and person culture. These different types of organizational cultures puts emphasized on the followings:

Power culture: concentrated of central power sources with ray of influence from the central figure throughout the organization – leading to power held by few selected individuals.

Role culture: often stereotyped as bureaucracy and works by logic and rationality – leading to position power.

Task culture: related to job-oriented or project-oriented – leading to expert power.

Person culture: where an individual is the central focus and structure exists to serve the individuals within it – leading to personal power.

The Paradigm that organizational culture defines the way employee complete tasks and interact with each other ties heavily on people’s capabilities and the outcome are enormous. Organizational culture creates the empowerment atmosphere to employee creativity. Empowerment and motivational atmosphere stimulate creativity steaming from the employee persona traits. Creative people share a particular group of personality behavior such as being self-confident, attracted to complexity, tolerant of ambiguity and intuitiveness. As a result of the creative persona, a variety of outfits have emerged for measuring these characteristics, encouraged and nurtured by the organisational culture and environment and by so, generate creativity lead innovation through its cultural web. From organizational culture perspectives, creative and innovation generation are main functions of power mechanism.

Maher, (2014), found that organizational culture is the key component that impacts the pace and rate of innovations. Moreover, he added that it is the important factor that either preclude or accelerate the implementation of innovation in an organization.

According to (Bullinger, Bannert, and Brunswicker; 2009), presence of a strong positive organizational culture is vital to knowledge sharing and development of skills. Oparanna (2010) added that it has a power to generate and involve in activities which might lead to the success of the organization. Moreover, Marcoulides and Heck (2013) added the presence of strong organizational culture have a direct impact of firm's performance. Vincent et al., (2009), also strengthen the positive impact of organizational culture on innovation.

2.3.2 Organization Strategy (Corporate Strategy)

Every organization has a corporate strategy it must follow to achieve a cohesive work environment and goals. Corporate strategy is concerned with the overall scope of an organization and how value will be added to the different parts of the organization (Johnson et al., 2008). This could include geographic coverage, diversity of workforce, products and services and how resources are to be allocated, while the increasing importance of work-life balance issues also should be mentioned.

In general, corporate strategy is also likely to be concerned with the expectations of owners, sometimes viewed as 'mission' statement. From here, there could be conflicts between the two players (the principal verses the agent problems and also the management verses the employees). The dimensions and gravities of the conflicts differ with power and control and might be different in different national cultures (Nagy et al., 2015). Johnson et al., (2008) described sources and indicators of power that could be potential conflict within an organization and for external stakeholders. Some powers are derived from resources or position controlled by a group. The group that has power and control resources would form a view and find a way to express it as an explicit statement. The explicit statement is atypical corporate governance viewpoints. There are many different ways in which such purpose (explicit statement) may be expressed explicitly through statements of corporate vales, vision, mission and objectives.

According to Schneider and Barsoux, (2003), there is close link between corporate strategy and culture. Indeed, Schneider, (2003) provided a definition of culture as solutions to problems of external adaptation and internal integration could be taken as a fitting definition for corporate strategy. This is because organizations normally access their external environments as well as

their internal capabilities. Schneider and Barsoux, (2003) mentioned that corporate strategic decisions are intended to achieve external adaptation by configuring internal resources and capabilities which includes people.

These planning and analyses are just like rituals, norms, beliefs and practices which in turn are culture. The planning is wired and coordinated all-round the organization network that apparently affects the suppliers, local or regional offices and also the employees. On one hand, there is strategy that spells out the goals of the organization. While on the other hand, the resources and capabilities of playing the goals out is also controlled by the power brokers within the organization. If the power brokers establish the culture of the organization, then the people with less power will be crashed into different cultural environment which could spark conflict. Kirton & Greene, (2005) defined it in terms of shared symbols, languages, practices and deeply embedded beliefs and values of an organization. Companies spells out their cultural practices in their handbook or policy book which contain information such as founding story, the mission/vision, strategy, core objective and guiding principles.

Johnson et al., (2008) outlines four layers of organizational culture argued that there is link between organizational culture and strategy of an organization. The link is written down in organization's mission, objectives or strategies. Also, the beliefs is how people talk about the issues the organization faces. Again, how the behaviors of the decision makers or the group with larger power occupancy or the most cultural group affect the organization day-to-day- operations or activities and the management assumption of taken-for-granted individual or collective goals.

Johnson et al., (2008) also mentioned subculture as epitome of organizational culture such as work based groupings, industry or sector, political and legal environments, technological and socio-economic scenarios. However, both Johnson et al., (2008) and Kirton & Greene, (2005) emphasized power-relationship factor as a key player of organizational culture. Kirton. & Greene, (2005) argued that manifestation of organizational culture is gendered towards meanings, identities, practices and power relations. This is because some groups in organizations are more powerful than others and it is senior people who are in position to manipulate the cultural signals and messages that the organization projects both internally and externally.

Therefore, an understanding power, its locations and its exercise (as mentioned above) is essential in order to understand how dominant cultures are produced and reproduced. Organizational cultures are likely to reflect power and show important roles and relationships. For examples in the early 1990s, power-relationship-domination is shown in survey of Fortune 1500 companies conducted by Korn/Ferry International and Catalyst. It depicts US organizational culture: white male (who has power and use the power to build relationships) and minorities such as women, African Americans, Europeans, Latinos, etc. (who does not have power and cannot build relationships).

According to the surveys, 95 to 97 percent of senior managers — vice presidents and above — were men during the years between 1989 and 1992. The 3 per cent and 5 per cent of the top managers of the same years were white women. There was no Latinos or African American women. Only in 1994, two white women were CEOs of Fortune 1000 companies. The representation of women and minorities on Fortune 1500 boards of directors are quite limited.

Conversely, the American workforce is increasingly diverse. In 1950, white men comprised 65 percent of the labour force, while in 1990 white male representation had dropped to 43 percent. During the same period, representation of white women in the labour force increased from 24.2 percent to 35.3 percent. At the same time, minority representation in the labour force doubled to 15.2 percent. Over the last decade, the size of the Asian and Pacific Islander American population has doubled, becoming the fastest growing of minority groups in the United States. Even though, the U.S. Bureau of Labour Statistics projected an increase in women participation on the US job market, there is still conflict on the power-relationship-dominance participation of men.

In practice, organizational structure as both cause and effect of managerial strategic choice in response to market opportunities is the perspective as many micro-economists tries to view it. This is from two variables mainly strategy and structure and both are interrelated and are of people-lead-innovation. The purpose of strategy is mainly to have a pattern of major objectives, goals and essential policies and defined very accurately and in a constant manner. While

structure is the division and coordination of tasks among members of the organization to achieve goals and objectives, it brings into organization new ways of doing things which is basically "innovation" (Mullin, 2010). There are mainly two variables that determine the competitive advantage (innovative solution) of the business enterprise. First is the governance mode and second is the organization value. These are powerfully influence to its rate and direction towards innovative activities, as the fundamentality of the activities of an organization and the role of management cannot be isolated precisely. Principally, people are the key resources of any organization and as such management and relationship building is unavoidable.

Bold statement was made by Booz & Company after when they saw no statistically significant relationship between financial performance and innovation spending, in terms of either total R&D dollars or R&D as a percentage of revenues of the world's biggest spenders on research and development in each of the past seven years. In the research, Booz & Company singled out Apple, consistently under-spend their peers on R&D investments while outperforming them on a broad range of measures of corporate success, such as revenue growth, profit growth, margins, and total shareholder return.

Meanwhile, entire industries, such as pharmaceuticals, continue to devote relatively large shares of their resources to innovation, yet end up with much less to show for it than they and their shareholders might hope for. As a result, Booz & Company noticed that what create innovation are sets of intangible capabilities such as risk, creativity, openness and collaboration, these are critical for success as opposed to the vintage capabilities. This conclusion was made after when they surveyed almost 600 innovation leaders in companies around the world, large and small, in every major industry sector. They noticed that almost half of the companies reported inadequate strategic alignment and poor cultural support for their innovation strategies.

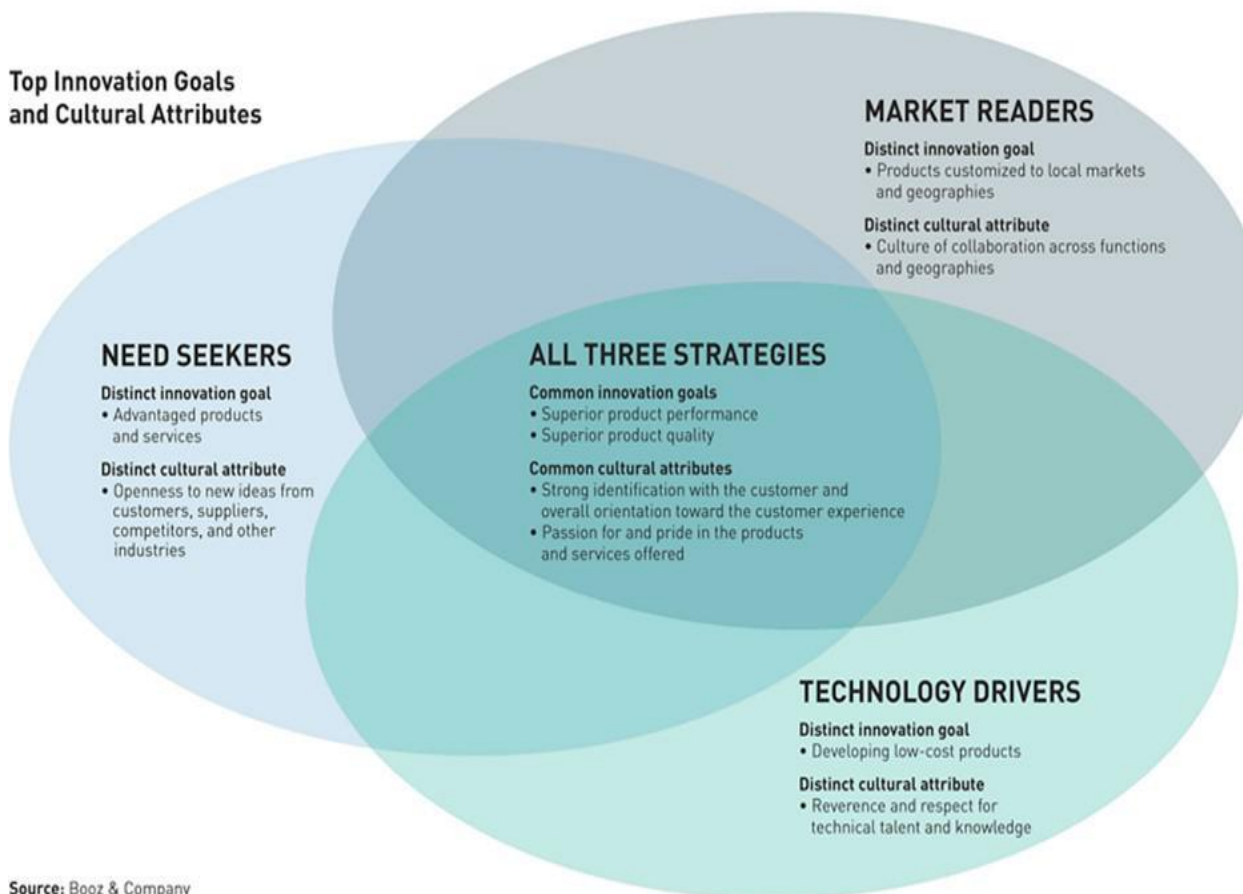
Possibly even more surprising, nearly 20 percent of companies said they didn't have a well-defined innovation strategy at all. Understanding these issues is particularly important now that innovation spending is on the rise again after the financial crises of 2007-2008. The report authors pointed out that issues of culture have long been of great concern to corporate executives and management theorists alike, whether they apply to companies as a whole or to selected areas

such as innovation. In conclusion, they said the reason is obvious: culture matters, enormously and it trumps strategy and enhances the leadership and upgrading of the companies.

Example was made of 3M as company whose strategic goals are clear and whose cultures strongly support those goals, possess a huge advantage. “For over 100 years, 3M has had a culture of interdependence, collaboration, even co-dependence. Our businesses are all interdependent and collaboratively connected to each other, across geographies, across businesses and across industries. The key is culture.”

Figure 10: Three Strategies to Innovative Searching and Finding.

All companies following any of the three innovation models share some of the most important innovation goals and cultural attributes. Each model, however, also has distinct goals and attributes.



Source: Booz & Company

Source: by Booz & Company, 2011.

In general, companies continue to show a range of significant gaps in how their strategic goals and cultural attributes contribute to performance and support their innovation. That gap raised

the questions of organizational cultural applicability, marking the authors to identify three strategies to measure innovation search (Need Seekers / Market Seekers / Technology Readers) as the Figure 9 above presents.

2.3.3 Leadership and Relationship Management

In practice, the activities of an organization and the role of management cannot be isolated neatly into categories of life. As a matter of principle, people are the key resources of any organization and so people require leadership. Leadership can be as the art of motivating a group of people to act towards achieving a common goal. We can, however, say the leader is the inspiration and director of the action. He or she is the person in the group that possesses the combination of personality and skills that makes others want to follow his or her direction. Mullin, (2010) defined leadership as ‘getting others to follow or getting people to do things willingly’ and the use of authority in decision making’. Leadership might be based on function of personality or it is a behavioral category with ability to achieve effective performance from others. Leadership can be in form of persuasion and power relationship models. Leadership can influence people by providing purpose, direction and motivation while operating to accomplish the mission and improving the organization capabilities.

According to Mullins, (2010), the behavior of people and management style cannot be studied in isolation. It is necessary to understand interrelationships with other variables that together comprise the total of an organization.

The view of many researchers suggests that long-term key of organization relies on its ability to build on existing competencies while simultaneously exploring new possibilities to achieve competitive advantage over competitors. This could be interpreted in this form that organization should create the capacity for learning, values, interest and culture in shaping organizational change and innovation through leadership competency. Leadership is one of the key factors that shape employees cultural behaviors, thinking and feelings and the ability to share knowledge that would be very useful to the organization.

Leadership behaviorism always comes from different forces within and outside the organization. If the leadership style creates trust, then it can apprehend a sort of "collective memory" of the employees which is basically what Hofstede called "culture". It can either be a "stock" of knowledge stored as hard data or represent knowledge in a state of "flow" emerging from interaction. Both individuals and organizations are learning entities. All learning activities take place in a social context and the nature and boundaries of the context make a difference to the learning outcomes.

In broad context, leadership could play out in the following forms:

Autocratic leadership style: an extreme form of transactional leadership, where leaders have absolute power over their workers or team. Staff and team members have little opportunity to make suggestions, even if these would be in the team's or the organization's best interest. Most people tend to resent being treated like this. Therefore, autocratic leadership usually leads to high levels of absenteeism and staff turnover. For some routine and unskilled jobs, the style can remain effective because the advantages of control may outweigh the disadvantages.

Bureaucratic leadership style: follow rules rigorously and ensure that their staff follows procedures precisely. This is a very appropriate style for work involving serious safety risks such as working with machinery, with toxic substances, at dangerous heights or where large sums of money are involved such as handling cash.

Charismatic leadership style: can seem similar to transformational leadership, because these leaders inspire lots of enthusiasm in their teams and are very energetic in driving others forward. However, charismatic leaders can tend to believe more in themselves than in their teams and this creates a risk that a project, or even an entire organization, might collapse if the leader leaves. In the eyes of the followers, success is directly connected to the presence of the charismatic leader. As such, charismatic leadership carries great responsibility and it needs a long-term commitment from the leader.

Shamir et al., (1993) argue that building a sense of shared identity is vital to be a charismatic leader. Several studies showed that charismatic leaders typically fascinate followers by envisioning a promising future rather than creating disappointment with the status quo (Nadler and Tushman, 1990; Ford and Ford, 1994; Pawar and Eastman, 1997). Nevertheless, there are strong indications that charisma alone is not enough to create innovations a viable success (Nadler and Tushman, 1990). In a study by Bossink (2004), the malfunction of an innovation project was found to be related to the incapability of a charismatic leader to contribute in a knowledge network and collect professional information.

Participative leadership style: although participative leaders make the final decisions, they invite other members of the team to contribute to the decision-making process. This not only increases job satisfaction by involving team members, but it also helps to develop people's skills. Team members feel in control of their own destiny, so they're motivated to work hard by more than just a financial reward.

Because participation takes time, this approach can take more time, but often the end result is better. The approach can be most suitable when working as a team is essential and when quality is more important than speed to market or productivity.

Laissez-faire leadership style: this is a French phrase means "leave it be," and it's used to describe leaders who leave their team members to work on their own. It can be effective if the leader monitors what's being achieved and communicates this back to the team regularly. Most often, laissez-faire leadership is effective when individual team members are very experienced and skilled self-starters. Unfortunately, this type of leadership can also occur when managers don't apply sufficient control.

People-oriented leadership or relations-oriented leadership style: this is the opposite of task-oriented leadership. With people-oriented leadership, leaders are totally focused on organizing, supporting and developing the people in their teams. It's a participative style and it tends to encourage good teamwork and creative collaboration.

Task-Oriented leadership style: focus only on getting the job done and they can be quite autocratic. They actively define the work and the roles required, put structures in place, plan, organize and monitor. However, because task-oriented leaders don't tend to think much about the well-being of their teams, this approach can suffer many of the flaws of autocratic leadership with difficulties in motivating and retaining staff.

Servant leadership style: describes a leader who is often not formally recognized as such. When someone, at any level within an organization, leads simply by meeting the needs of the team, he or she is described as a "servant leader." In many ways, servant leadership is a form of democratic leadership, because the whole team tends to be involved in decision making.

Transactional leadership style: this style of leadership starts with the idea that team members agree to obey their leader totally when they accept a job. The "transaction" is usually the organization paying the team members in return for their effort and compliance. The leader has a right to "punish" team members if their work doesn't meet the pre-determined standard.

Team members can do little to improve their job satisfaction under transactional leadership. The leader could give team members some control of their income/reward by using incentives that encourage even higher standards or greater productivity. Alternatively, a transactional leader could practice "management by exception" – rather than rewarding better work, the leader could take corrective action if the required standards are not met.

Transactional leadership is really a type of management, not a true leadership style, because the focus is on short-term tasks. It has serious limitations for knowledge-based or creative work.

Transformational leadership style: Transformational leadership was originally established by Burns (1979). People with this leadership style are true leaders who inspire their teams constantly with a shared vision of the future. While this leader's enthusiasm is often passed onto the team, he or she can need to be supported by "detail people". That's why, in many organizations, both transactional and transformational leadership is needed. The transactional

leaders or managers ensure that routine work is done reliably, while the transformational leaders look after initiatives that add value.

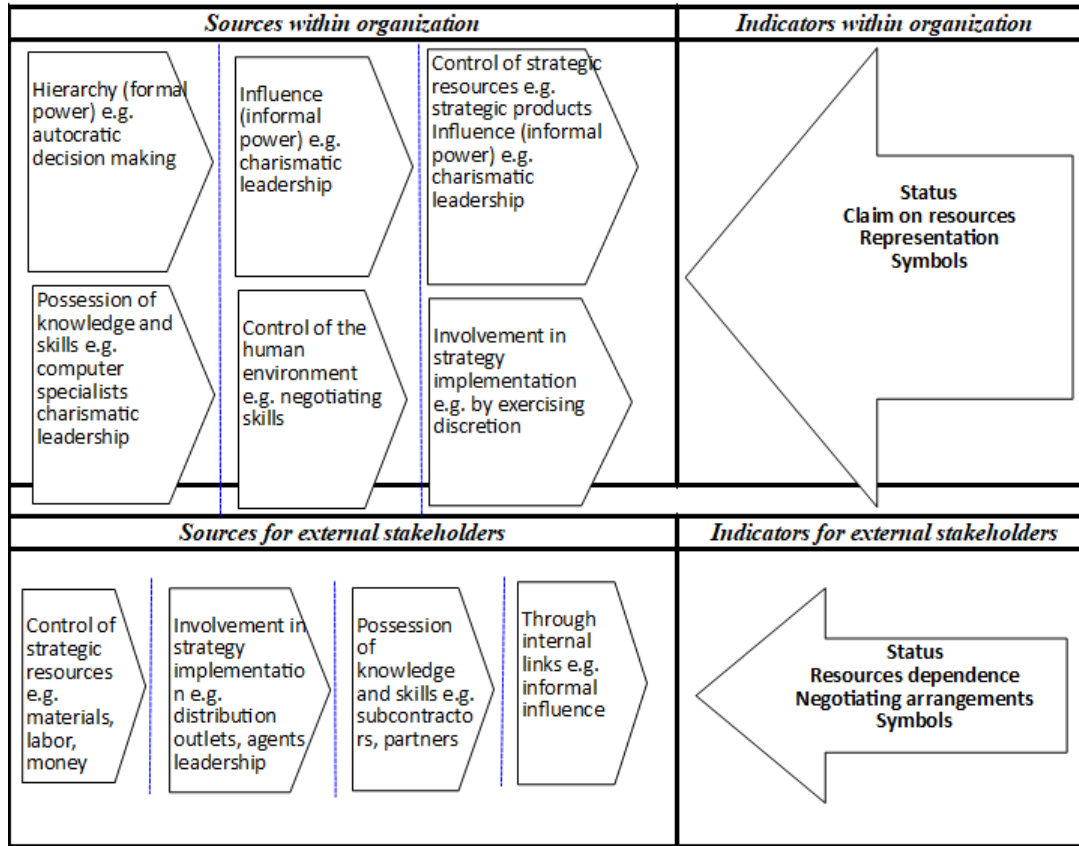
Transformational leaders raises self-effectiveness, raises innate motivation, and contributes to employees' psychological empowerment (Gumusluoğlu and Ilsev, 2009; Paulsen et al., 2013); inspires followers' attitudes enthusiastically and creates an overall positive culture (McColl-Kennedy and Anderson, 2002); and raises followers' concert prospects, converts their personal values and self-concepts, and moves them to a higher level of needs and aspirations (Jung et al., 2003; Kahai et al., 2003). Moreover, some authors have found that transformational leadership could increase the level of trust (Dirks and Ferrin 2002; Jung, et al., 2003).

As leaders of the organization converge to solve problems, they develop different relationships of different tones and values. The relativity brings in innovative solutions. Johnson et al., (2008) described sources and indicators of power that could be potential innovative solution within an organization and for external stakeholders in Table no. 5.

For the purpose of this discussion, power can be a source of innovative solution and of non-solution too. Power is defined by Johnson et al., (2008) as the ability of individuals or groups to persuade and induce or coerce others into following certain courses of action. This is a mechanism by which one set of expectations will influence strategic development or seek compromise with others. Power sets the framework of culture, leading to collective memory, which can be a form of organizational cultural strength.

Cultural strength by Taylor (1994), pinpointed the combination of the extent to which norms and values within the organization are clearly defined and are rigorously adopted. Hoecklin, (1997) listed six dimensions of organizational cultures namely: motivation, relationship, identity, communication, control and conduct. These dimensions are in line with Kirton & Greene, (2005) and Taylor, (1994) versions.

Table 5: Power and Control Within and Outside the Organization Culture



Source: Own creation: based on Johnson G., Scholes K., Whittington R, (2008).

Elenkov et al. (2005) showed that leadership can be helpful to achieve organizational innovations. This is also supported by Derakhshandeh and Gholami (2012) concluding that there is a positive relationship between leadership style and perceived organizational effectiveness. Leadership style affects innovativeness and creativity of employees (Abdolmaleki et al., 2013).

Successful leadership to these virtuous circles could spark innovative solutions with economic growth. Frank and Bernanke, (2009) in the book “thinking like an economist” argue that an action should be taken if, but only if, its benefit is at least as great as its cost. Therefore, leaders benefit from different engaged relationships. After all, what triggers the engagement is to benefit,

Several studies have shown that the role of leadership for innovation and its management is significant (Nadler and Tushman, 1990; Denti and Hemlin, 2012). It plays a prominent role in improving creativity (Mumford et al., 2002; Amabile et al., 2004), and in leading and succeeding in innovation projects (Stoker et al., 2001; Bossink, 2007); and challenging resistance (Gilley et al., 2008). Similarly, Somech (2006) concludes that corporate leaders are the key drivers of innovation management. According to Bel (2010), leadership styles have different impacts on employee participation and devotion, which in turn influence the climate for innovation management. Deschamps (2005) goes even further, saying that the malfunction of innovation projects is likely because of ineffective leadership skills.

In summary, a diverse workforce needs to be managed effectively. Due to the competition in the market, there is need for a diverse improvement in firms, companies and organizations. Human resource management is very important which implies that organizations must look into having diverse workforce in order to deliver objectives. Hofstede envision the leadership behaviourism that originates from different forces within and outside the organization. The leadership capability can generate confidence and then lead to the "collective memory" of the employees, in order words, "culture".

Cultural diversity management is all about the implementation of organizational systems and doings in other to utilize the potentials of the employees in order to increase their advantages and lessen their disadvantages in the organization. Cultural diversity management, when effective, gives an advantage to flexibility and creativity of the employees. This will help the organization to reach the demands of new customers. It will help in promoting creativity of the group and its members which will produce a better solution to problems through critical thinking and analysis. This is important when the organization is looking for innovative skills. Leaderships set the tone of cultural diversity management, empower, action and monitor it through the organization policies and procedures.

The execution through the human resource (HR) practices could be complex due to differences of people and behaviour. Some cultures are known for their individualistic nature. People want to be left alone sometimes. Other cultures also have the spirit of incorporation with others or among

themselves. Though, this can cause problems in the sense that if there is a culture that claims superior over another. In other hand, effective cross-cultural activities or team-working can create a work environment where people or employees can comprehend each other, think and implement their togetherness at work.

Good managers should be aware of some important skills and strategies that will create a successful, diverse workforce. They must have a full knowledge and effects of discrimination of cultural activities of others. Also, they must be aware of their own cultural prejudice and biases. Diversity is not all about group differences, but it deals more on individual differences. Each person or individual is distinctive and unique and in other hand cannot represent a whole group alone. Managers should be willing to accept and adopt changes in their organizations if necessary because for a workplace to be successful, it needs to learn how to manage diversity within it.

Success of an organization depends on the manager's ability to organize and understand the organisation through creation of teamwork and dynamic at workplace. Morais, (2014) puts it clear that managing diversity is a comprehensive process for creating an environment for work in which everyone is involved. There is also need to be aware and focus on personal awareness and personal biases. There is also need to initiate ongoing training and developments that will help in changing people's behavior. Though these changes might be slow but it is crucial to encourage it.

Safe place for the communication of workers is another important requirement for the diversity management and promotion (Morais, 2014). A place where people can be free to contribute their own quota to the promotion of the organization and given a listening ear or given information, opportunities and chance to learn from their mistakes and success.

With regards to communication, accurate information among workers can bring in an effective team performance. It will help in problem solving and handling. It will also yield immediate corrective measures of errors and mistakes. If there is a good means of communication among

the workers then it will not be a problem because each member will have to aid another in solving and resolving problems.

2.4 Conflict

Social psychology permeates all aspects of intractable conflict. While history, perceptions and identity are inherently present in the escalation of conflict, they are also intrinsic to managing conflict and contributing to a sustainable peace. Acknowledging history, building awareness, learning empathy, according legitimacy and recognizing fears are among the most powerful tools for building peace. Any analysis of conflict requires learning its history, the progression of events which led to the eruption of violence. As groups interact with each other, patterns of interaction develop over time. Repeated experience leads to the formation and solidification of beliefs and perceptions of self and others. While this can be a positively reinforcing process in which the relationship between the two parties is based on trust and cooperation, in situations of conflict such processes are largely negative.

Cultural differences can create conflict in organization due to different perception, fear, norms and beliefs. However, if different cultural backgrounds are well managed and coordinated, there are no doubts, cultures could offer value added and competitive advantage to an organization. One should be aware of difficulties caused by cultural differences and dimensions as a real source of most conflicts in an organization. Conflicts as defined by Taylor, (1994) are an overt expression of tensions between the goals or concerns of one party and those of another.

Mullins, (2010) defined conflicts as behavior intended to obstruct the achievement of some other people's goals. Mullins, (2010) continued to say that conflict is based on the incompatibility of goals, arises from opposing behaviors and can be viewed at the individual, group or organization level.

2.4.1 Conflict Resulting from Diversity Workforce

Atypical organization has diverse workforces characterized by age, race, religion, functional specialty, profession, sexual orientation, geographic origin, lifestyle, tenure with organization or

position and any other perceived differences. These are called diversity and essentially the fountain of conflicts. These individuals characterized by these differences work as an intergroup. According to Taylor, intergroup conflict in the context of culturally diversified organization has two distinguishing features.

The first is group boundaries where group differences are involved and the second is the conflict which directly or indirectly is related to culture group identities. These two distinguishing features are linked to core element of conflicts which is potentially “opposing interest based”. Taylor, (1994: pg.138) listed “opposing interest based” as the followings: competing goals, competition of resources, cultural differences, power discrepancies and assimilation verses preservation of micro-cultural identity.

Taylor’s “opposing interest based” intertwined with Mullins, (2010) potential organizational conflicts such as differences in perception, limited resources, departmentalization and specialization, the nature of work activities, role conflict, inequitable treatment, variation of territory, environmental change, individual, group, organization and the age gap. Mullin’s version goes with this example:

Differences of perception: the significance of individual differences is particularly apparent when focusing on the process of perception. As individual or group we all see things differently and have our own set of values, beliefs and opinions. We all have our own, unique picture or image of how we see the “real” world. Perception is the root of all organizational behaviour where any situation can be analyzed in terms of its perceptual connotations. Individuals or groups tend to reason and make decisions based on perceptual sensory system which can provoke conflicts to the other party who is not of the same opinion.

The way in which we categorize and organize this sensory information is based on a range of factors including the present situation, our emotional state any experiences of the same or a similar event. However, perception deals with psychological perspective of an individual. Explanation of human perception entails an active psychological process in which external

stimuli are selectively organized and interpreted into meaningful patterns. It is the way we perceive and view the world around us and the way we gather information.

Although the perceptual process can be rather subjective than objective because people often tend to select the information they need and screen out the information that they do not need. Human has three perceptive acts. First, a human is mobile. That is, we make our way through the environment. Second, a human manipulates objects. They turn things around themselves. Third, a human makes decisions on the basis of symbols or effects. He continued that “humans require a continually updated image or a model of the environment, a representation of the world within our brains that we use to consciously perceive, make decisions and behave”. Mullins also wrote that perception gives rise to individual behavioral responses to particular situations.

Departmentalization and specialization: since organizations are divided into different functions could lead to conflicts. Instead of the whole group working as one, they concentrate on the achievement of their own particular goals. Mullins (2010), noticed that differing goals and internal environments of departments are a potential source of conflict.

The nature of work activities: as the case maybe, if people’s work depends upon one another could lead to potential conflict situation especially if reward and or punishment is a function of how well or how bad they perform. The reward or punishment would trigger conflicts. Even within departments, struggle for rewards and budgets would also provoke conflicts.

Role conflict: The manner in which then people in charge act may not be consistent to the expected behavior and this could trigger conflict. In sociological terms, roles operate as important guidelines for behavior. Incompatibility of enactment of two or more different roles that one person can enact at a certain time or place. Role conflicts tend to cause friction and frustration, but the effects can vary with personality. Certain people are simply more able to assume different roles and avoid friction when the roles overlap. Others find the conflict extremely stressful and are unable to maneuver their multiple responsibilities without causing more tension or resentment. Despite individual levels of comfort with contradictory roles, role conflicts generally have a negative effect on group dynamics.

Inequitable treatment: the perception that someone is unjustly treated could lead to resentments and trigger conflicts. A number of theories of motivation suggest that people have needs which are satisfied by working. These may be tangible such as the need for food or less tangible such as the need for social contact or respect from others and inherent high esteem. Violation of territory: people tend to become more attached to their territory and so and interferences could generate conflict.

Environmental change: events at organization have real emotional impact on participants. The consequences of emotional states in the workplace, both behavioral and attitudinal, have substantial significance for individuals, groups, and organization. Both positive and negative emotions such as fear, anger, stress, hostility, sadness, and guilt in the workplace, however, increase the predictability of workplace deviance and conflict.

Individual: such as attitudes, personality characteristics or particularly needs, illness or stress.

Group: such as group skills, the informal organization and group norms can lead to conflict.

Age gap: is one of the characteristics of group decision-makers that must be concerned, and it is also an important factor which influence the performance of group decision-making. Relationships between older and younger employees, where experience is on one side and side power on the other, can lead to conflict.

Diversity: Culture affects all people, leaders and those led and it affects the way they organize. The management of cultural diversity is becoming a significant issue for companies of all sizes, not just multinationals. Problems can arise because of cultural ignorance or insensitivity. Some of the advantages of diversity in the workplace are: increased creativity, increased productivity, new attitudes, new language skills, global understanding, new processes and new solutions to difficult problems. This approach in workplace leads to innovation and creativity which is the end product an organization desires.

2.4.2 Strategy for Integrating Cultural Conflict Management Program to Achieve Innovativeness

Fons & Charles, (1998), has a more pragmatic view of culture as social interaction or meaningful communication, presupposes common ways of processing information among the people interacting. The author defines the concept as the way people solve dilemmas, particularly in connection with relationships, time and the external environment. Organizations that excel at leveraging their know-how (people) in a systematic way will create and sustain a competitive advantage that will exceed the current and future demands placed upon them.

It is important to take a pragmatic approach to creating a Knowledge Management strategy corresponding architecture and deploying effective knowledge systems. Key to leveraging the knowledge of an organization is providing insight, thought leadership and context to those who have the most at stake in generating and using organizational knowledge. In order to generate this pragmatic strategy, it is important to provide a framework for the discussion.

The primary goal of strategic management is the achievement of sustainable competitive advantage. Rugman & Collinson, (2009) wrote that certain elements from different countries and cultures can lead to comparative advantage or basically factor endowment strategies which an organization can achieve while employing diverse work force.

Other authors such as Johnson et al., (2008) showed the classical management model known as “strategy and people” (people as resource, people and behavior, organizing people) which is centered on management to press out from people to achieve a goal. Johnson et al., (2008) argues that human resource policies that target diversity are keys to competitive advantage of an organization. They outlined the following cultural policies:

- Job Analysis and Description
- Target country, the degree of cultural similarity between the countries
- Personal characteristics in terms of the group member’s ability to function within a foreign cultural setting.

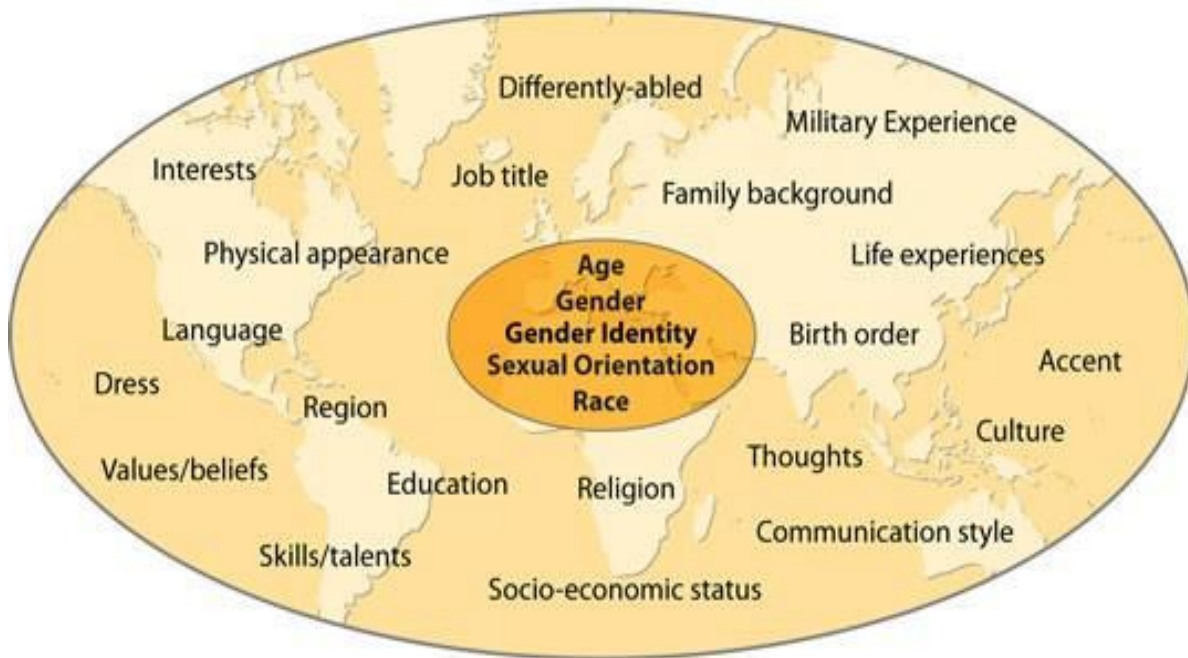
Mullins wrote that managing conflict takes time and effort but attempting to establish a climate of mutual trust, consideration and respect is worthwhile. She chooses solutions such as:

- Clarification of goals and objectives of the organization
- Ethical resource distribution among employees
- Human resource management policies and procedures that permits diversity and encouragement of best practices
- Use of non-monetary rewards as encouragement tools
- Development of interpersonal / group process skills
- Encouragement and development of group activities
- Best class leadership and management skills that suits employees
- Proper functional organizational process
- Embracement of socio-technical approach
- Negotiation acceptable outcomes and abilities

In summary, social interactions within the organisation are part of knowledge capturing methods. It means the more social interaction and relationship are maintained across different cultural group, the higher the innovativeness to solve problems and skills to achieve creativity.

As for innovation to occur, it requires turning knowledge based to achieve results. The knowledge can be explicit and implicit. Explicit knowledge is changed into information format transmitted through infrastructures. But implicit knowledge, which is always in form of “unknown” knowledge, is transfer through social interaction and relationships. It implies that transfer is sensitive to a social context.

Figure 11: Cardinal Health Diversity Inclusion Model.



Source: by Cardinal Health Inc.

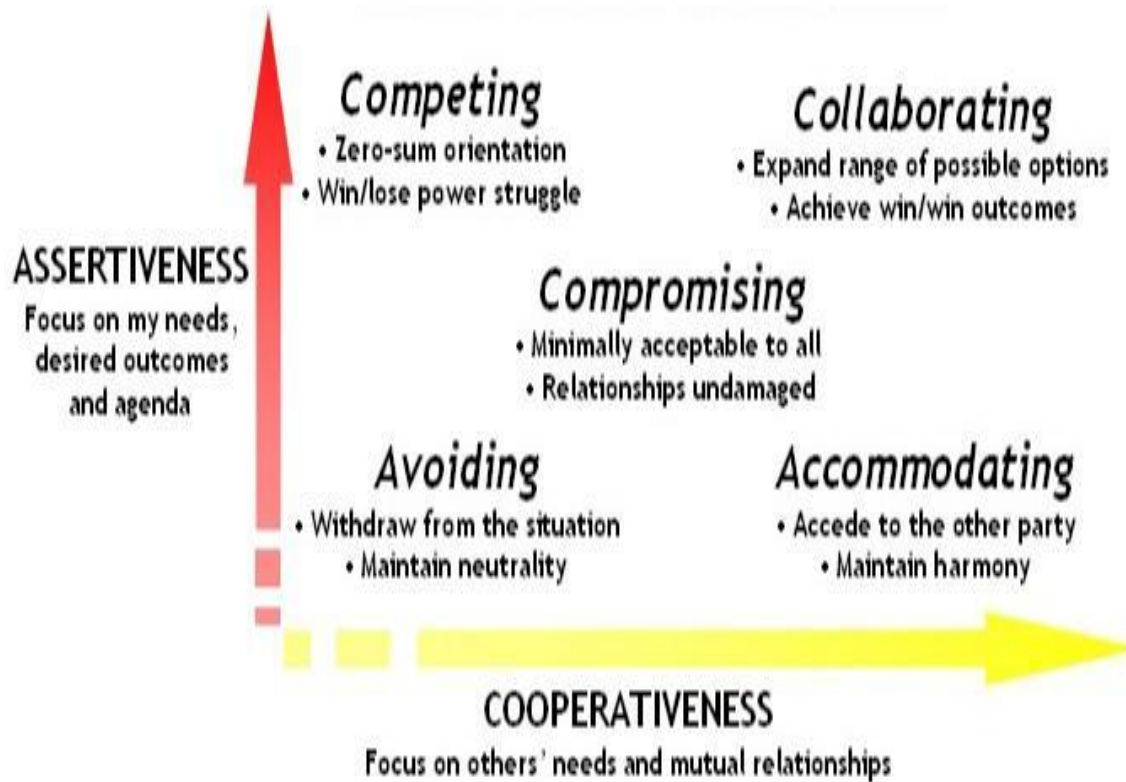
2.4.3 Method to Resolve Conflict

The process of communication and conflict management is very complex and frequently ethical questions are included (Skiba, 2015). The dangers of being misunderstood multiply when working with people in a cross-cultural setting. Because no two individuals have exactly the same expectations and desires, conflict is a natural part of our interactions with others. “Conflict situations” are those in which the concerns of two people appear to be incompatible. In such situations, we can describe an individual's behavior along two dimensions: (1) assertiveness, the extent to which the person attempts to satisfy his own concerns, and (2) cooperativeness, the extent to which the person attempts to satisfy the other person's concerns (Thomas and Kilmann, 1977, Pg 2-4).

In summary, human values are motivational in nature and can define what is important and how to consider what is important. The organisational agility, well-structured approach and

communication offer significant contributions for managing conflict and maximising performance.

Figure 12: Conflict Mode Instrument.



Source: Based on book of Thomas-Kilmann, 1999:pg.2 – Conflict Mode Instrument.

3 MATERIALS AND METHODS

3.1 Sampling Methods and Sample Size

Those big companies who have high number of diversified employees were purposively selected with multi-stage sampling techniques in order to meet the objectives of the research. First, all companies with more than 100 employees were purposively selected. Accordingly, 5 companies from Luxembourg and 5 companies from Belgium were chosen. Among these companies, the researcher selected three companies from each country using simple random sampling which then proportionally allocation has been implemented in order to reach out the companies. Finally, according to the proportion, respondents from each of the six companies were randomly selected and obtained the data.

Table 6: Number of employees in companies of Luxembourg and Belgium

	Luxembourg			Belgium			Total
	Company A	Company B	Company C	Company E	Company F	Company G	
Number of employees	142	176	201	160	187	184	1050

In order to determine the Sample size, the researcher took the simplified formula sample size determination formula suggested by Cochran's formula.

$$n = \frac{N}{1 + Ne^2}$$

Where N is the population size and e is the level of precision. Accordingly, for a 96% confidence level and e. = 0.04, size of the sample we get the sample size as

$$n = \frac{1050}{1 + 1050 * 0.04 * 0.04} = 391.7 \approx 392$$

And proportionally we selected the following number of respondents from each company.

Table 7: Sample Size Selected from the companies of the two countries

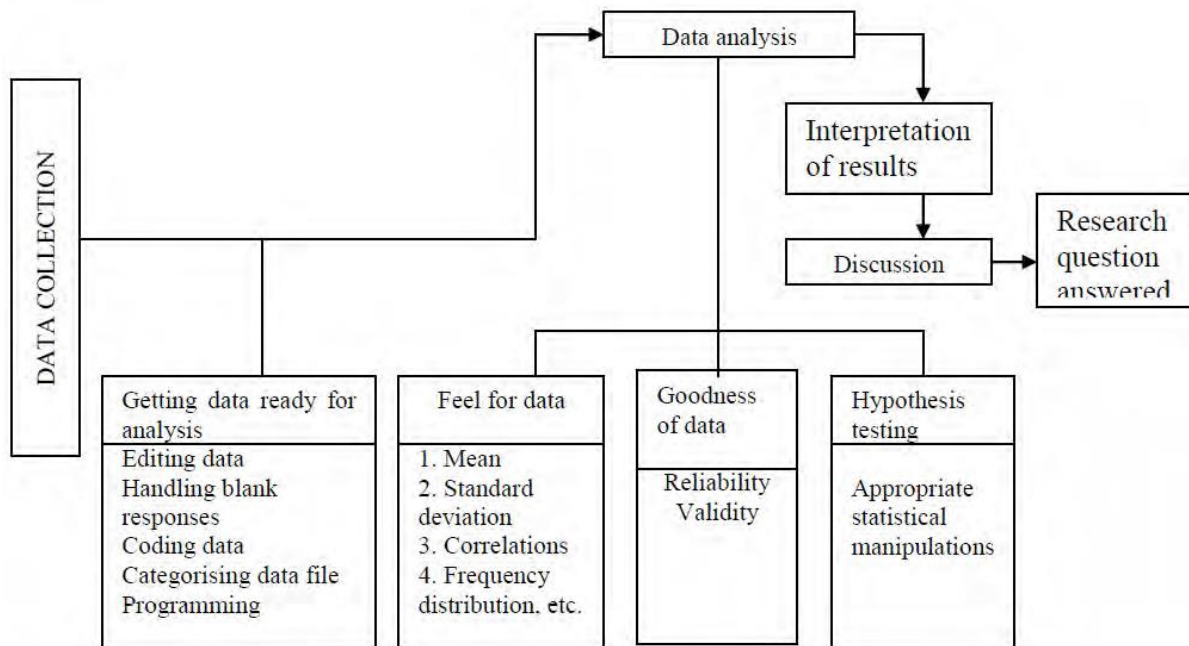
	Luxembourg			Belgium			Total
	Company A	Company B	Company C	Company E	Company F	Company G	
Number of employees	54	66	76	59	69	68	392

3.2 Validity and Reliability of the Data

Validity can be said to be a test of how well and precise an instrument that was used on the research measures a particular concept that it intends to measure. The validity of the questionnaire was done using pilot survey.

3.3 Data Analysis

Figure 13: A Typical Flow Diagram of Data Analysis Process



Source: Sekaran (2003:301)

Accordingly, quantitative methods were used to analyze the data output generated using R-program. The descriptive statistics by the means of percentage and frequencies was used to show the features of the samples and both t- test and Analysis of Variance (ANOVA) were used to statistically test the Hypothesis and the assumptions of the tests are fulfilled.

A t-test is an inferential statistical test that is used to test the hypothesis if there exist a significant difference between means of two groups which might be related to some features. It is often used in hypothesis testing to determine whether there is a significant difference among the two groups with the assumption of independence of the sample observations from their respective population and normality of the population distribution. Whereas Analysis of Variance (ANOVA) is a hypothesis-testing technique used to test if the means of two or more groups are significantly different from each other by examining the variances of samples that are taken. ANOVA checks the impact of one or more factors by comparing the means of different samples. If the between variation is much larger than the within variation, the means of different samples will not be equal. If the between and within variations are approximately the same size, then there will be no significant difference between sample means. It allows one to determine whether the differences between the samples are simply due to random error (sampling errors) or whether there are systematic treatment effects that cause the mean in one group to differ from the mean in another.

Assumptions of ANOVA includes

1. The data follow the normal probability distribution.
2. The variances of the two populations are equal.
3. The two samples are independent. There is no relationship between the individuals in one sample as compared to the other (as there is in the paired t-test).
4. Both samples are simple random samples from their respective populations. Each individual in the population has an equal probability of being selected in the sample.

4 RESULTS AND DISCUSSIONS

4.1 Descriptive Analysis

According Zamke et al., (2013), people, organizational identity and social identities has a link and high influence on how people respond to situations around them. Below table shows the gender share of participants of the survey. Accordingly, about 51.69% of the randomly selected participants of the survey from national and multi-national companies in Luxembourg were males while the remaining 40.3% females. Among the survey participants from national and multinational companies in Belgium, approximately similar percentage were taken randomly where 59.69% male and 40.31% were female participants. This share enabled the researcher to minimize the gender biasedness in the research output.

Table 8: Frequency and percentage of respondents age group

Country	Gender	Frequency	Percentage
Luxembourg	Male	117	59.69%
	Female	79	40.30%
Belgium	Gender	Frequency	Percentage
	Male	116	59.18%
	Female	80	40.81%

Source: Own work based on R Studio Results

Majority of the employees of the companies involved in this study were young with age ranging between 23 and 30 year with 65.3% share in Luxembourg and 50% in Belgium followed by the age group between 31 and 40 with percentage of 16.83 and 27.04 in Luxembourg and Belgium respectively while smallest share was 6.63% in Luxembourg and 8.67% in Belgium for those aged 55 years and above. This indicates that almost all active population groups are well represented in this research.

Table 9: Frequency and percentage of respondents age group

Country	Age Group	Frequency	Percentage
Luxembourg	23 – 30	128	65.30%
	31 – 40	33	16.83%
	41 – 55	22	11.22%
	55 and above	13	6.63%
Belgium	18 – 30	98	50.00%
	31 – 40	53	27.04%
	41 – 55	44	22.44%
	55 and above	17	8.67%
	Total	196	

Source: Own work based on R Studio Results

Table 10: Frequency and percentage of race of respondents

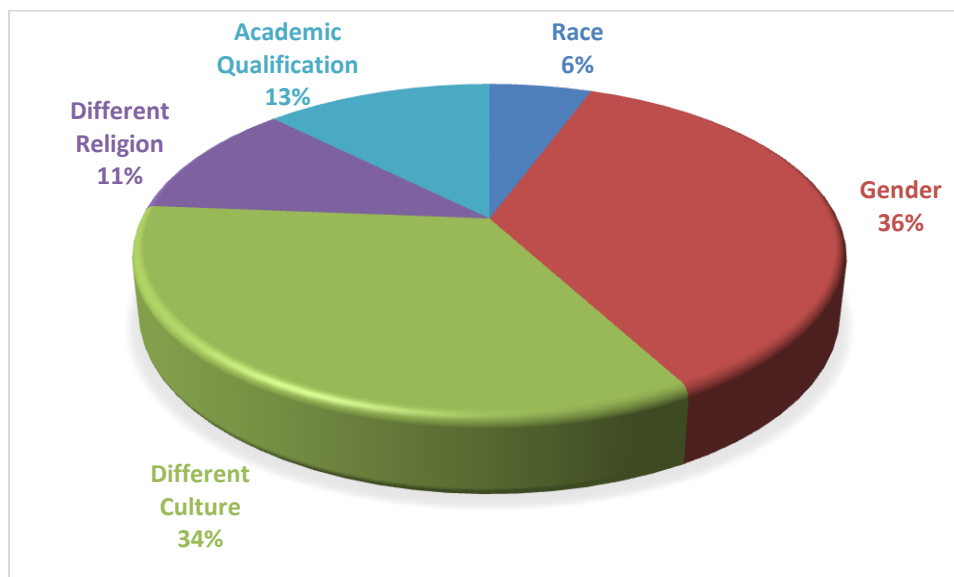
Variable	Race	Frequency	Percentage
Luxembourg	White European	85	43.36%
	Black African	50	25.51%
	Asian	35	17.85%
	Latin American	10	5.10%
	Others	16	8.16%
	Total	196	
Belgium	White European	71	36.22%
	Black African	57	29.08%
	Asian	40	20.41%

Latin American	18	9.12%
Others	10	5.1%
Total	196	

Source: Own work based on R Studio Results

The two study countries are racially diverse where Europeans, Black Africans, Asians and Latin Americans and others live and work together. Majority of the employed and participated people in the survey were White Europeans in both Luxembourg and Belgium followed by Black Africans, Asians and Latin Americans respectively. The detail is shown below in the figure 14.

Figure 14: Distribution of Diversity at workplace defining variables (In Percentage)



Source: Own computation, excel

About 36.48 % of the respondents defined diversity at workplace in terms of diversity in gender while 34.18% defined it as diversity in culture is what defines diversity at workplace. Academic qualification and religious difference were the third and fourth options of the respondents to define diversity. The percentages of respondents who define diversity in workplace as race diversity were only 5.61.

This research finding is consistent with the attributes used to define by Saumya Goyal, (2009). The author defined workplace diversity as a composition of different attributes such as age, gender, mental/ physical abilities, race, ethnic heritage, sexual orientation, geographic location, work experience, income, religion, first language, organizational role and level, communication style, family status, work style, education, military experience, work field, division, seniority, work location, union affiliation, management status, organizational dimensions, beliefs, assumptions, perceptions, attitude, values, group norms and region, qualification, caste, family status.

Besides, the finding is also consistent with a definition of workplace diversity found on the web ('What is Workplace diversity? | TalentLyft', n.d.). According to the web, workplace diversity, although primarily used to address racial ethnic diversity, in recent year with the globalization effect have defined as a composition of different characteristics such as race, ethnicity, gender, age, sexual orientation, physical abilities and disabilities, religion, political beliefs, education, socioeconomic background, geographical orientation, language, culture, military service. As for this research, the main workforce determinant characteristics depending on their percentage response are gender, cultural difference, academic qualification, religion and race, respectively. Therefore, the most important characteristics to define diversity; hence are diversity in gender and culture.

Table 11: Communication system among diverse culture

How are you able to communicate the information about your job to other cultures?	Frequency	Percentage
I do so by welcoming their culture	198	50.51
I do so by seeing their culture as a continuation of mine.	127	32.4
I do so by learning from theirs.	67	17.09
I do not communicate anything with other culture	0	0

Source: Own computation

People at workplace have different ways of communicating to other cultures, to opposite sex, another ethnic group. This research found that almost half of the respondents (50.51%) do communicate their jobs to other employees by welcome the cultures of others while about 32.4% of respondents perceive the other culture as part of theirs. The percentage of respondents who facilitate their on-job communication by understanding and learning others culture was 17.09. This implies that the participants of this research were very good at understanding the importance of diversity at workplace by smoothening the communication among one another.

Table 12: Coping mechanisms with a multicultural workforce

How do you cope with a multicultural workforce?	Frequency	Percentage
I am comfortable with other cultures.	159	40.56
I stoop low and learn from them	28	7.14
By understanding them	68	17.35
By accepting the differences between us.	137	34.95
By avoiding them completely	0	0

Source: Own computation

Diverse people have different ways of conveying to situations in workplace. Particularly, the impact of multicultural difference should be managed well if diversity is expected to have a significant impact on innovativeness and creativity of employees and hence led the company grow. Hence, sizable portion of the participants (40.56%) of this research revealed that they are comfortable with any other culture, some do cope with different cultures in the working environment by either accepting their differences (34.95%), understanding the culture of others (17.35%) or by learning from them (7.14%). This enables the company grow as a result of mutual understanding and knowledge sharing of the employees.

Table 13: Working environment Vs Discrimination

Does your organization have work environment free from cultural discrimination?	Frequency	Percentage
Yes	392	100

No	0	0
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Source: Own computation

According to table above, all the respondents from both countries replied the absence of culture-based discrimination in their respective companies. This allows employees to be self-confident and feel ownership which is a key to organizational work performance.

Table 14: Cultural diversity Vs performance

Is cultural diversity a problem to the better performance of your job?	Frequency	Percentage
Yes	0	0
No	392	100

Source: Own computation

All the respondents came with common sense that there is no culture-based discrimination in their organizations and believe that diversity cannot be a problem for their performance in their respective jobs. Moreover, they believe that cultural diversity brings people together and enables them to be creative and enhance their innovative performance.

Table 15: Importance of cultural diversity management

Can cultural diversity management stir up a better relationship among the employees?	Frequency	Percentage
Yes	392	100
No	0	0

Source: Own computation

Managing different culture group is not as easy job to leaders. But those who do well manage their diverse workforce, mostly succeeds. In this study, all the participants agreed to the fact that

managing cultural diversity at workplace enables them to have a good relationship which in turn helps the company grow fast as a result of creativity and innovation brought by the smooth working environment.

Table 16: Diversity Vs innovation and creativity

Do you think multiplicity in culture in the workplace can bring in innovation and creativity in the organization?	Frequency	Percentage
Yes	392	100
No	0	0

Source: Own computation

It is necessary to have diverse workforce in order to promote creativity and enhance innovation. According to Parrotta et al., (2014) in his firm level study, a 10% change in Ethnic diversity increases innovation by 2.2%. Diversity creates a room for greater innovation (Cox and Blake, 1991). Horbach and Jacob (2018) indicate that gender diversity has significant impact for environmental innovation. It also facilitates the link among capability and innovation (Ruiz-Jimenez et al.; 2016). McGuirk and Jordan (2012) support the idea of diversity stating it enhances product innovation. Moreover, Mohammadi et al., (2017) in his research indicated that higher ethnic diversity positively affects innovation.

The impact of well managed workforce diversity is a key to innovation and creativity. The table above shows that all the respondents from the two countries believe that workforce diversity have a positive impact on innovation and creativity in their jobs.

Table 17: Experience of working with diverse workforce

What are your experiences in working in a multicultural organization?	Frequency	Percentage
It a good experience so far.	185	47.19
All work towards achieving one goal.	131	33.42
Some are closer to the people from the same culture with them.	58	14.8

There is gender discrimination among the employees.	18	4.59
There are lots of conflicts encountered		

Source: Own computation

Depending on their gender, cultural difference, religious affiliation, racial background, age difference, and/or academic qualification people might have different perspective and experience of working in multicultural working environment. Accordingly, the response of the participants of this research shows that they do have different experiences in working in multicultural organizations. Hence, about 47.19% of the respondents have had good experience and 33.42% of them replied as they all work towards common goal. About 14.8% of the respondents were closer to employees who have similar culture as they do while a few of them (4.59%) believe there is gender-based discrimination among the employees. This indicates that there are positive experiences, yet, although it seems small the issue of preferring similar culture and gender-based approach is something which might have a negative impact on innovation and creativity.

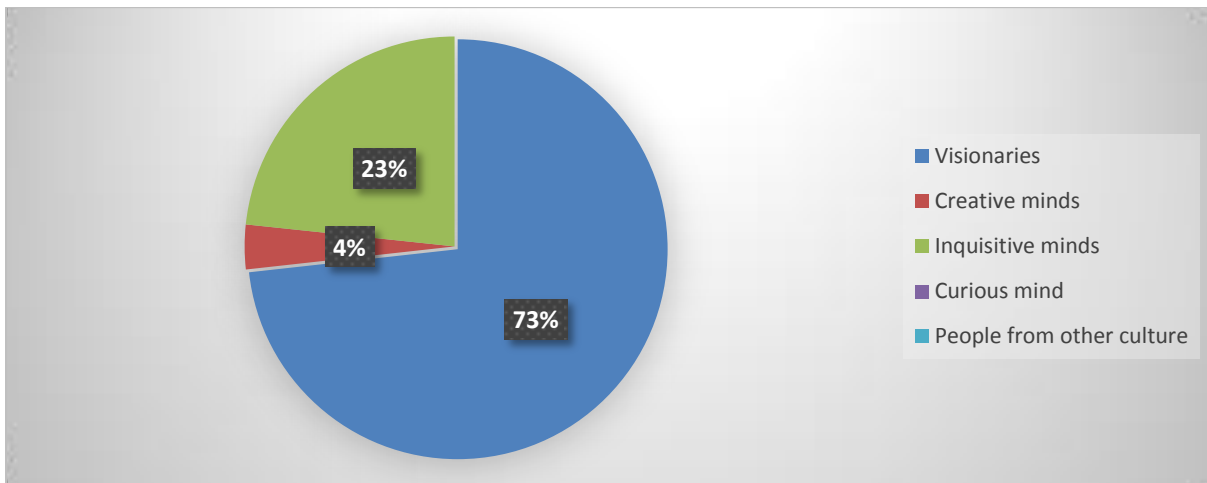
Table 18: Understanding cultural diversity Vs understanding self-strength and weakness

Do you think understanding cultural diversity can help you in understanding your strength and weaknesses?	Frequency	Percentage
Yes	392	100
No	0	0
I have no Idea	0	0

Source: Own computation

Understanding cultural diversity enables people to look back into their own culture, compare and identify the most important culture and the weaknesses that exist among different cultures. This is a good approach to personal development as well as vital for institutional creativity and innovativeness. In this research, all the respondents from the study areas agreed that understanding cultural diversity helps them identify their weaknesses and strengths which is a key to organizational growth.

Figure 15: Preferred types of people in a company in percentage



Source: Own computation

Several researchers found that organizational culture is an enabling factor that could lead to an innovation and creativity. An organization needs different kinds of skilled manpower both in the low-level working department and the leadership. The participants were asked what kind of partners they want to see in a company. As it can be seen from the chart above, visionary workers were preferred by most of them (73%) while 23% of the respondents chose employees with inquisitive minds. Creative minded employees were preferred by about 4% of the respondents. All these skills are fundamental for a company to succeed. They are attributes of innovation and creativity.

Organizational culture has several impacts on the effect of employees and companies. According to several studies (Hassan, 2009; Vincent et al., 2009; and Ahmed, 1998), it affects creativity and innovation. Moreover, Tseng, (2010) indicated that organizational culture affects the knowledge management of employees. Several research findings indicate that the presence of strong positive

relationship between organizational culture and organizational performance. Culture is one of the tools that can be used enhance performance (McLean, 2012; Becheikh, et al; 2006).

Table 19: Organizational culture and innovation

Do you think organisational culture could lead to innovativeness?	Frequency	Percentage
Yes	392	100
No	0	0

Source: Own computation

The result of this research is similar to most of the research findings that has been done before. Accordingly, all the respondents believe that organizational culture is an important attribute that could lead to innovation and creativity. Organizational culture promotes knowledge and experience sharing by creating an enabling environment for open discussion of all diverse work groups which in turn impacts their creativity.

Table 20: Organizational culture Vs innovation

How do you think organisational cultural could lead to innovativeness?	Frequency	Percentage
It impacts innovation through culture	217	55.36
It impacts innovation through clear objective	116	29.59
It impacts innovation through management	59	15.05

Source: Own computation

As they work to achieve common goal, most respondents have got a good experience from the diversity and it let them identify their weaknesses and strengths. The response from the data to

how the organizational culture can lead to innovation shows that it impacts innovation through culture, clear objective and through management.

Table 21: How employees fit in organisation with diverse culture

How do you fit into the organisational cultures of diverse cultural workforce?	Frequency	Percentage
Be myself - do not fit into organisational culture with different cultural team outside my main culture	0	0
Be myself - fit into organisational culture with different cultural team out of my main culture	392	100
Follow my culture - do not fit into different cultural team	0	0
Do not follow my culture - fit into different cultural team	0	0

Source: Own computation

Even though the leaders of an organization try to promote diversity and improve the organizational culture, it cannot be achieved unless the employees adjust themselves to the environment. According to the respondents of this research, all of them do fit into the organizational culture with the diverse culture in the company without losing theirs. Respecting and applying your own culture while respecting the diversity and cultural differences is an indication of self-confidence.

Table 22: Experience of working with multicultural team

How do you describe your experience working with a multicultural team?	Frequency	Percentage
Good and learned a lot – benefit to the company	252	64.29
Very good – encourage your company to continue	140	35.71
Not good, a lot of conflicts – not beneficial to your company		

Do not know		
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Source: Own computation

Workings in a multicultural team have both personal and institutional advantages. As it is shown above, all the respondents have learnt a lot from the team spirit and they also believe that companies are benefited from. They also recommend companies to promote multicultural working environment.

Table 23: Conflict in multicultural team

How do you describe a situation which you encountered a conflict in different cultural team?	Frequency	Percentage
Calm – learned from the conflict	257	65.56
Aggressive – do not want to work with people outside my cultural group		
Strange – I am not ready to work with people outside my cultural group		
Strange – I am ready to work with people outside my cultural group	135	34.44

Source: Own computation

Multicultural environment, sometime, might be a source of conflict among employees. The level of understanding different culture and level communicating abilities might be determinant factors in resolving them. People do have different kinds of responses to solve problems. In this research, 65.56% of the respondents were calm and learnt from the conflicts they encountered due to the diversity they have while 34.44% found it strange, but they still preferred to work with people from another culture despite the differences they might have.

Table 24: Outcome of working in multicultural team

Giving your experience of working in a multicultural team, do	Frequency	Percentage
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you think the outcome of conflict brought innovativeness into your company?		
Yes – problems were solved differently	392	100
No – problems were not solved at all		
Maybe – it worth doing again but in a different way		
Maybe – it does not worth it		

Source: Own computation

There are several advantages of working in multicultural groups. There are different ways of solving problems across the globe and cultural differences enable people to share indigenous knowledges. Participants of this research were asked if the cultural knowledges help them solve the problems and led them to innovation and they, all, replied that the problems were solved in different way than they used to solve in their community.

Table 25: Preferred people in an organisation in terms of culture

Which of the cultural group would you recommend for your company?	Frequency	Percentage
Mix of people of same culture and people of different cultural group		
People of same cultural group		
Mix of people of same culture and people of different cultural group	392	100

Source: Own computation

As it is shown in the table above, all respondents preferred to have both people from similar culture and from different culture as well. This indicates that preference of employees in both countries under study is to have a diverse group promoting diversity in an organisation.

Table 26: Definition for creative personality

How do you define creative personality?	Frequency	Percentage
Visionary view on challenges and solutions	149	38.01
Openness to change	128	32.65
Curiosity and persuasive power	71	18.11
Personality trait	44	11.22
Cultural element trait		
Cultural dimension trait		

Source: Own computation

People define creative personality in different ways. About 38.01% of the respondents in this research defined in terms of having a vision and ability to solve them while 32.65% of the respondents defined as openness to change. Curiosity and persuasive power, and personality trait were also defined by 18.11% and 11.22% of the respondents, respectively.

Table 27: Leadership Vs promoting diversity

Do the leaders in your company promote diversity of workforce?	Frequency	Percentage
Yes	312	79.59
No	80	20.41

Source: Own computation

Promoting and well managing diversity at workplace is an essential part of good leadership and successful companies. Most of the respondents (79.59%) replied yes to the question if their leaders promote diversity indicating their leaders are promoters of diversity while the remaining 20.41% said their leaders are not promoters of diversity.

The role of leadership in managing diversity and creating conducive working environment could enable to improved creativity and innovativeness of the employees. These identities and other

major variables have impacts on the working environment of a company and hence the innovativeness and creativity.

Table 28: Leadership Vs Innovation

Does good leadership style contribute towards innovativeness?	Frequency	Percentage
Yes	392	100
No	0	0

Source: Own computation

According to Bel (2010), leadership styles have different impacts on employee participation and devotion, which in turn influence the climate for innovation management. Deschamps (2005) goes even further, saying that the malfunction of innovation projects is likely because of ineffective leadership skills. Good leadership plays a prominent role in improving creativity (Mumford et al., 2002; Amabile et al., 2004), and in leading and succeeding in innovation projects (Stoker et al., 2001; Bossink, 2007); and challenging resistance (Gilley et al., 2008).

Accordingly, respondents of this research believe that the presence of good leadership style contributes towards innovation. This result is consistent with previous research findings such as Elenkov et al. (2005) who concluded that leadership can be helpful to achieve organizational innovations; Derakhshandeh and Gholami (2012) concluded the existence of a positive relationship between leadership style and perceived organizational success; moreover, Abdolmaleki et al., (2013) found that leadership style affects innovativeness and creativity of employees. In addition to the above research findings, several studies have shown that the role of leadership for innovation and its management is significant (Nadler and Tushman, 1990; Denti and Hemlin, 2012). Similarly, Somech (2006) concludes that corporate leaders are the key drivers of innovation management.

4.2 Hypothesis and Test Results

The following are the results for the hypothesis set for this research and are stated as follows.

Hypothesis 1:

HO: There is no outstanding difference in the study's perception between the male and female with regards to cultural diversity.

H1: There is an outstanding difference in the study's perception between the male and female with regards to cultural diversity.

Table 29: T- test result for the variable Gender

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
Luxembourg	196	1.403061	.0351264	.491769	1.333785	1.472338
Belgium	196	1.408163	.0351966	.4927523	1.338748	1.477578
Combined	392	1.405612	.0248314	.4916376	1.356792	1.454432

T = -0.1026 degrees of freedom = 390 reject H0 if Pr (|T| > |t|) = 0.9183.

Source: Own work based on R Studio Results

The t test conducted to test the difference in the attitude of male and female towards working in multicultural work environment shows that there is no significant difference in the attitude of male and female towards working in multicultural work environment as the t statistics is less than the critical value.

Gender issue is one of the global problems because sometimes cultural diversity is determined by gender differences. The result from the research reveals that in these organizations, the idea on cultural diversity between men and women of all cultures are similar. This affirms that the female share the same views on cultural interaction, networking and communication with their male colleagues. The literature found addresses some issues like gender differences and stereotypes as an outcome of different cultures, where some would prefer to do transaction with same gender. When there are such challenges, there would be a setback on innovations and creativity within the organization.

The possible reason to this might be because these companies have gone through a change over the years in terms of recognizing and admitting gender differences and equality. An organization that is not influenced by gender differences will eventually bring in creative persons with visionary view on challenges and solutions and open to change. Hence females may get similar opportunities and treatment just like the males do and this will lead to great innovation and creativity within the organisation.

Hypothesis 2

HO: There is no outstanding difference in the study's objective among the age group with regards to communication.

H1: There is an outstanding difference in the study's objective among the age group with regards to communication.

Table 30: ANOVA test result for Age groups for Luxembourg

	Age	Mean	Std. Dev
Luxembourg	18 – 30	2.9296875	.91517043
	31 – 40	3	.36410954
	41 – 55	2.1515152	0
	55 and above	3.4615385	2.0254787
	Total	2.8418367	.96634903

Source	SS	Df	MS	F	Prob > F
Between Groups	22.2565578	3	7.4188526	8.91	0.0000
Within Groups	159.840381	192	.832501984		

Source: Own work based on R Studio Results

The ANOVA test results for the Luxembourg show that there is a significant difference across age groups in their attitude towards communication in a multicultural environment. The mean value of those in the age group 55 years and above seem to be much higher than the other groups implying that they tend to have problems with communication as compared to the other groups.

The trend observed here is that the mean value increases as the age increases indicating that the employees belonging to higher age groups are having difficulties in communication in a multicultural environment. This might be due to the previous history of the world and Europe in particular where diversity was a hot topic.

Table 31: ANOVA test result for Age groups for Belgium

	Age	Mean	Std. Dev
Belgium	18 – 30	2	0
	31 – 40	2.6744186	1.084509
	41 – 55	3.0916031	1.0327956
	55 and above	3.6666667	1.5541179
	Total	2.9285714	1.2046917

Source	SS	Df	MS	F	Prob > F
Between Groups	23.3240428	3	7.77468095	5.75	0.0009
Within Groups	259.675957	192	1.35247894		

Source: Own work based on R Studio Results

The ANOVA test results for the Belgium show that there is a significant difference across age groups in their attitude towards communication in a multicultural environment. The mean value of the age group 4 (55 years and above) is higher than the other age groups indicating that they find it difficult to communicate in a multicultural environment as compared to the other age groups. Like in Luxembourg, the mean value for age group (1) is the lowest age group showing that young people in Belgium also comfortable in communication in a multicultural environment.

The ANOVA test results for the combined data for two countries also shows similar result as in the two countries that there is significant difference across age groups in their attitude towards communication in a multicultural environment.

Table 32: ANOVA test result for all the respondents taken at a time

Age	Mean	Std. Dev
18 – 30	2.0151515	.85185538
31 – 40	1.8818898	.90513678
41 – 55	2.0149254	1.007435
55 and above	2.5653811	1.1826453
Total	2.119337	.89712717

Source	SS	Df	MS	F	Prob > F
Between Groups	1.52335999	2	.761679996	0.95	0.003
Within Groups	313.167967	389	.80505904		

Source: Own work based on R Studio Results

The ANOVA test result indicates that there is significant difference in understanding the importance of diversity and in level of communication ability across different age groups. The result indicates that in these companies the communication and networking patterns of the employees in the workplace is influenced by the age differences. This implies that with different age categories and groups, there are differences of communication among the employees within the organization or company. This also implies that a generation that belongs to one age group will find it easier to communicate and interact with the same age group, notwithstanding the culture. Darshana, (2014) also affirmed this hypothesis through his discussion on Generation

Diversity. He posited that ever there is a considerable age difference among or between employees in a workplace; managers must deal with authority and communication order than work/ life balance and royalty issues.

This is because communication is one of the critical issues towards cultural diversity. If there is a smooth means of communication among the employees in the workplace, there will be a smooth road to innovation and creativity in the workplace. If the reverse is the case, then there will be a hindrance to innovation and creativity. Furthermore, Zemke et al., (2013) defined generation group and categorized them according to their core values. For them, the old generation always wishes to be superior and more cultural but sometimes they are not flexible. These are some of the communication issues that deeply influence and affect the younger group. These also require effective management skills because it affects how employees communicate in a company or organization Zamke et al, (2013).

Hypothesis 3

HO: There is no significant difference in the perception of the study’s objectives among the various race groups.

H1: There is a significant difference in the perception of the study’s objectives among various race groups.

Table 33: ANOVA test result race diversity and innovation for respondents from Luxembourg

	Race	Mean	Std. Dev
Luxembourg	White European	1.8988235	.95808516
	Black African	1.85	.86013401
	Asian	1.9314286	1.3950693
	Black American	1.790625	.99791449
	Others	1.8102	.87253897
	Total	1.85621072	1.0558452

Source	SS	Df	MS	F	Prob > F
Between Groups	15.5229442	3	5.17431473	4.92	0.0612

Within Groups	201.864811	192	1.05137922		
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Source: Own work based on R Studio Results

The ANOVA test results assessing the difference among different race groups in their attitude towards innovativeness in a multicultural work environment show no significant difference as the p value is more than 0.05. The mean value for All respondents is almost similar implying that the employees think that innovation is mainly brought through by setting a clear objective and better management and culture has the most important role to play in fostering innovation.

In the case of Belgium, no significant difference was found across the employees belonging to different race in their attitude towards innovativeness in a multicultural environment. The mean values show more or less similar results ranging from 1.67 to 1.97.

Table 34: ANOVA test result race diversity and innovation for respondents from Belgium

	Race	Mean	Std. Dev
Belgium	White European	1.6760563	.78875395
	Black African	1.8358209	.56667598
	Asian	1.975	1.4760915
	Black American	1.8888889	1.1318329
	Others	1.770945	.97658312
	Total	1.829342	.94466194

Source	SS	Df	MS	F	Prob > F
Between Groups	2.51920272	3	.83973424	0.94	0.4223
Within Groups	171.496103	192	.893208872		

Source: Own work based on R Studio Results

The ANOVA test results shown below for combined data assessing the difference among race in the attitude towards innovativeness in a multicultural work environment also indicates that there

is no significant difference among the different races on their opinion whether work place cultural diversity have an impact on innovativeness as the p value is higher than 0.05.

Table 35: ANOVA test result race diversity and innovation for respondents from both countries

Race	Mean	Std. Dev
White European	1.474359	.68578862
Black African	1.4148031	.62386004
Asian	1.3933333	.90901392
Black American	1.3682353	.78306496
Others	1.387102	.79201729
Total	1.40756654	1.0558452

Source	SS	Df	MS	F	Prob > F
Between Groups	8.99755977	3	2.99918659	5.72	0.06
Within Groups	203.318767	388	.52401744		

Source: Own work based on R Studio Results

This implies that in a company or organization where there is a mixture of race and culture, there is a high and sure road to innovation and creativity which will push the company or organization higher more than others. As noted in the literature review of this research, the innovation and creativity coming from different race groups are vitally important to the success and growth orientation of an organization. Also, innovative, creative individuals are essential and are put into action by organisational action pack (PPS), meaning people, process and strategy. PPS is

organisational making or referred to organizational strategy (Mullins, 2010). It entails the appliance of inventive thoughts that can give room to new ideas which can serve as a remedy to some problems facing the organization.

Adler, (2002) proves this when he noted that diversity in multicultural teams is associated with positive group outcomes such as increased levels of innovation, creativity and problem solving. Cultural diversities of people of different race, when initiated into business settings bring in new ideas, skills and pattern of work. Also it helps in stimulating innovation and creativity. The result shows that in this organization, the interactions of various cultures, the management of cultural diversity and its effect on employee performance, networking and communication between the workers are not influenced by race. This may be because the organization has a higher percentage of workers who can speak various languages, individuals who are able to communicate to each other without any cultural boundaries or because of the change that this organization has through in terms of cultural awareness. This implies that workers are able to work in multiracial group and help one another to put in their best abilities in their jobs. In this case the negative hypothesis turns out to be true.

Zamke et al, (2013) in culture and diversity seems to disagree with this findings, it says that race classification still does exist in communities and organizations and have a great impact and influence on how people view and work with one another. The literature says that where there is different races working together, conflicts and issues of seniority and superiority and dislike will surely come in and this can go a long way to affect the proper functioning of the organization or the company.

Hypothesis 4

HO: Significant differences in academic qualification cannot affect the flow of innovation in an organization.

H1: Significant difference in years of experience can also affect the flow of innovation in an organization.

Table 36: ANOVA test results on academic qualification of respondents from Luxembourg

	Academic Qualification	Mean	Std. Dev
Luxembourg	PhD	1.5283019	.71988818
	Masters	1.75	.7406129
	Bachelors	1.3181818	.56790036
	High School and Below	1.4895410	.68312908
	Total	1.521506	1.0558452

Source	SS	Df	MS	F	Prob > F
Between Groups	3.75605594	2	1.87802797	3.70	0.0265
Within Groups	97.9378216	192	.507449853		

Source: Own work based on R Studio Results

The ANOVA test results to check for the difference in attitude towards multicultural work environment across employees with different academic qualifications seem to be significant in Luxembourg as the p value is less than 0.05. From the mean scores, it could be seen that employees with masters degree have the highest score indicating their positive experience in working in a multi-cultural environment. The lowest mean score is for employees with bachelors degree.

Table 37: ANOVA test results on academic qualification of respondents from Belgium

	Academic Qualification	Mean	Std. Dev
Belgium	PhD	1.9391304	.80662777
	Masters	1.6491228	.64062548
	Bachelors	1.7916667	.83297094
	High School and Below	1.3709127	.78456710
	Total	1.687708	.94466194

Source	SS	Df	MS	F	Prob > F
Between Groups	.451624013	2	.225812007	0.39	0.04808
Within Groups	113.114703	193	.586086542		

Source: Own work based on R Studio Results

For Belgium, the ANOVA results show that there is a significant difference across employees with different educational qualifications towards working in a multicultural environment. The mean score ranges from 1.37 to 1.93 implying that the employees have differences in their attitudes.

Table 38: ANOVA test results on academic qualification of respondents from both countries

Academic Qualification	Mean	Std. Dev
PhD	1.7420814	.96836001
Masters	1.896	.97405041
Bachelors	1.9347826	1.2000403
High School and Below	1.725016	.50120216
Total	1.82447	1.0005186

Source	SS	Df	MS	F	Prob > F
Between Groups	2.65462188	2	1.32731094	1.33	0.0362
Within Groups	388.75099	389	.999359872		

Source: Own Work based on R Studio Results

The ANOVA test results for the combined data to check for the difference in attitude towards multicultural work environment across employees with different academic qualifications seem to be significant as the p value is lower than 0.05.

This means that in these companies, the academic rank (qualification) of an employee influences the level of his or her innovative and creative mind. This can be linked up to the study by Tung, (1993), who states that people that works and share similar years of work experience will tend to

share common views and can easily interrelate and intermingle in their work places. Also, it states that experience is linked to age. This implies that workers of same experiences in an organization view and react to issues and conflicts in the same way. And thus can bring in innovations. This also seems to have countered the literature on Zamke et al., (2013), which says that newly employed or newly recruited workers are very innovative, advanced in technology, not scared of authority and willing to take risk in order to prove they are capable of the job. This in the other hand, it makes it hard for them to fit in with the most experienced workers who happens to be older in age. In this case it can be difficult to manage the older group and also for them to perform effectively because they may feel that the younger group is more enlightened. Also, the younger group might feel intimidated by the years of experience of the older ones. The positive hypothesis seems to support this.

Hypothesis 5

HO: The diversity of religious beliefs among the employees doesn't affect their innovative and creative minds.

H1: The diversity of religious beliefs among the employees affects their innovative and creative minds.

The ANOVA test results show that there is a significant difference in view in creativity and innovativeness across workers professing different religious beliefs. The mean value for workers professing Muslim and other religious beliefs seem to be higher than the workers professing other beliefs in Luxembourg indicating they believe religious difference in working environment have a positive impact on creativity. Christian Catholic also has higher mean value as compared to other the Christian Orthodox and Protestants. Higher mean value implies that the respondents do not think that multicultural work environment fosters innovativeness.

Table 39: ANOVA test result on Religious differences for Respondents from Luxembourg

Religion	Mean	Std. Dev
Christian Catholic	1.6714286	.65322896
Christian Orthodox	1.2553191	.56982397

Protestant	1.3513514	.48397751
Muslim	2	1.0235326
Others	2	.79471941
Total	1.65561982	.72215446

Source	SS	Df	MS	F	Prob > F
Between Groups	14.8824178	4	3.72060444	8.10	0.0000
Within Groups	86.8114598	191	.454510261		

Source: Own work based on R Studio Results

Table 40: ANOVA test result on Religious differences for Respondents from Belgium

Religion	Mean	Std. Dev
Christian Catholic	1.6271186	.64053601
Christian Orthodox	1.9555556	.90341663
Protestant	1.7073171	.74979672
Muslim	1.2916667	.46430562
Others	1.2916667	.82861914
Total	1.5746649	.76314574

Source	SS	Df	MS	F	Prob > F
Between Groups	8.56061519	4	2.1401538	3.89	0.0026
Within Groups	105.005711	191	.549768122		

Source: Own work based on R Studio Results

In the case of Belgium, there is a significant difference in opinions in creativity and innovativeness across workers professing different religious beliefs as the p value is less than the threshold of 0.05. This indicates that people with different religion tend to have different perspectives of what brings innovativeness and creativeness in a certain company.

The ANOVA test results for the combined data shown below strengthens the findings of the two countries under study indicating that there is significant difference across workers professing

different religious beliefs in the perception if workforce diversity enhances creativity and innovativeness.

Table 41: ANOVA test result on Religious differences for Respondents from both countries

Religion	Mean	Std. Dev
Christian Catholic	2.4325581	1.48172
Christian Orthodox	2.0434783	1.4366708
Protestant	1.8846154	1.3768095
Muslim	1.78260872	1.3318833
Others	1.1574468	1.4135593
Total	1.8601415	1.4273264

Source	SS	Df	MS	F	Prob > F
Between Groups	10.0170157	4	2.50425394	1.23	0.02966
Within Groups	786.551862	387	2.03243375		

Source: Own work based on R Studio Results

This indicates that in these companies, religion has an influence on the interaction of different communication, culture and networking pattern of workers. Also, this influences the cultural managements and the effects of cultural diversity on performance and towards innovations. This implies that religion plays a vital role in the communication and interaction of the workers and how they settle cultural diversity issues. Religion is a part of one’s social and personal identity and it is a part of one’s daily life. This is confirmed by the social organization view that people who share the same beliefs can spend more time together, understand each other better and also work effectively towards the initiation of innovation (Zamke et al, (2013).

Robbins et al., (2009) also supports these findings as they opined that most people that share a culture will seem to follow the same religion. Also, in social groups like religion, their different views about other groups can create a sought of barrier which might make it difficult for these other group to interact and work together with them. Hence, the positive hypothesis is true in this case.

4.3 New Scientific Results

1. The definition given to workplace diversity has been different in different time. Assessing the definition given by the employees influenced with globalisation was very important in order to understand on what variables to focus. Accordingly, gender and cultural difference were the main defining attributes of diversity at workplace. In the previous research findings, racial difference was the main defining attribute.
2. Age differences have different impact of level of communication at workplace. The older somehow have difficulties in communication. Previous studies mainly focused on examining if age differences have a significant impact on innovation. This research came up with factors which may affect the innovation and creativity of employees such as the how people do communicate their jobs across the diverse workforce. Hence, the younger generation seems to better in communicating their jobs in the diverse working environment. On the contrary, the older employees face difficulties in easily communicating their jobs.
3. This research came up with evidence that gender difference does not have a significant impact on the opinion if diversity at workplace could lead to innovation. The researcher could not find studies which supports this finding.
4. The major contribution of this research is the presence evidence that either supports the previous research findings and new way of thinking that has developed over time.

5 CONCLUSIONS

This study tried to examine the impact of workplace cultural diversity on creativity and innovation performance of the employees. In doing so, review of several research works has been in relation to definition of cultural diversity, organizational culture, impact of innovation on economic growth and role of leadership in managing diverse workforce and their impacts. Moreover, the main attributes of diversity such as gender, age, race, religion and educational status (academic qualification) of the employees were taken into consideration to examine if there is a significant difference in their perception towards the impact of workplace diversity on their performance in generating novel ideas and developing them into innovation. Hence, descriptive statistics was used to analyse the demographic variables incorporating the workforce diversity and some of the responses from the questionnaire.

The average age size of the respondents was around 33 years old while the majority of the workers participated in this research have master's degree followed by bachelor's degree. There was different ethnicity in the workforce of the involved companies where the respondents were from more than 20 different nations. Majority of the respondents defined diversity in terms of gender and cultural difference while race was the last choice to define workforce diversity indicating race doesn't have significant impact. This is something the researcher found unique while many literatures do consider race as an attribute of cultural diversity. The respondents do respect the culture of others; mostly they are comfortable with other cultures while they interact.

Those who have difficulties to cope up by accepting their difference and understanding/ learning from others culture. Cultural diversity brings people together and enables them to be creative and enhance their innovative performance. As they work to achieve common goal, most respondents have got a good experience from the diversity and it let them identify their weaknesses and strengths.

Organizational culture can also lead to innovation through culture, clear objective and through management. A well-integrated organizational cultural program through a well functional leadership helps create certain personality traits which disseminate creative characteristics within the diverse cultural teamwork, apparently leading to achieve innovativeness reflected on the responses gathered. Hence, the role of leadership in managing diversity and creating conducive working environment is vital to improve creativity and innovativeness of the employees.

Student T test and Analysis of variance were used to test if there is a significance different between factor and response variable for the hypotheses. Accordingly, the results were in line with the majority of review works done. The importance of gender has been greatly noticed in the last three decades although there are still challenges across countries and organisations. There was no significant gender-based difference in the perception that gender diversity has an impact on the flow of innovation affirming that female share the same views on cultural interaction, networking and communication with their male colleagues.

There is significant difference across age groups in their attitude towards the impact of diversity and level of communication in both the countries. As the age increases, easily adapting and integrating to diverse culture becomes difficult. There is no significant difference in the opinion of racial diversity towards innovativeness. The organization incorporating more ethnic groups leads to the success of the organizations concerning production due to sharing of knowledge and issues of marketing. Innovation is mainly brought through by setting a clear objective and better management and culture has the most important role to play in fostering innovation.

The effect of academic qualification one of the important factors that determine the level of creativity, innovation and cultural integration. The higher the academic rank, the greater

creativity and innovativeness. In this situation, it can be concluded that as the number of years workforce and academic rank as the same time grow; there will likely have high skill of innovation. On the other hand, the older have difficulties in communicating to employees from other background. The importance of diverse religious group in a company is one of the key inputs to innovation. In this research, different religious group have different opinions on whether diversity is important for innovation skill of the employees. Hence, people with different religion tend to have different perspectives of what brings innovativeness and creativeness in a certain company.

The cultural diversity workforce becomes an essential factor to consider when setting up organization. Generally, diversity at workplace is seen as a key to improved creativity and innovation of employees. It is vital to ensure diversity matters with proper leadership style, awareness creation and dialogue platform.

As the world becomes a global marketplace, organizations explore innovation for growth and profitability. The working places are increasingly becoming culturally diverse and if properly managed with capable leadership will increase performances and profits. Conversely, diverse cultural employees could initiate conflicts. Many conflicts have element of cultural issues. As many authors wrote that culture is multi-layered, and this means that what you see on the surface may mask differences below the surface. Various people were tested through questionnaires the effect of the organizational culture to attain innovation and competitiveness.

Innovation is main purpose of organizational creation and signifies the ability of the organization to utilize disposable resources and new opportunities available. In essence, deployment of new technology presents complex opportunities and challenges of organizations, leading to managerial approach and emergency of new organizational forms. Organizational innovations are intertwined. However, to be creative and innovative it requires organizational attitude and principle of inclusiveness, in order words diverse cultural workforce. This is because different cultures produce different personalities, different ways of solving problems. With this approach in mind, the research paper examines what drives what, in the sense that does it mean that different interaction of cultures are provoking creativity and innovativeness or organizational

cultural tendencies. Theoretically, we could say yes because different interactions are provoking different capabilities which is the main point of innovation and creativity.

There are many limitations to the research paper mainly for the purpose of identifying contributively the effects of diverse cultural employees into the company's optimal innovation ratio and profit making on each products and services.

The people who filled the questionnaire have done so according to their understanding of diversity, therefore, they could be a probability of error in this data, therefore further research on these issues are to be conducted to reduce the error margin.

6 SUMMARY

This study tried to examine the impact of workplace cultural diversity on creativity and innovation performance of the employees. In doing so, review of several research works has been in relation to definition of cultural diversity, organizational culture, impact of innovation on economic growth and role of leadership in managing diverse workforce and their impacts. Moreover, the main attributes of diversity such as gender, age, race, religion and educational status (academic qualification) of the employees were taken into consideration to examine if there is a significant difference in their perception towards the impact of workplace diversity on their performance in generating novel ideas and developing them into innovation. Hence, descriptive statistics was used to analyse the demographic variables incorporating the workforce diversity and the responses from the questionnaire and statistical test such as t test and Analysis of Variance were used to the hypothesises to analyse the data collected from 392 respondents from six national and multi-national companies from Luxembourg and Belgium. Simple random sampling technique was used to select the final three sample companies and the 392 respondents from each country.

Accordingly, the most important characteristics to define diversity are diversity in gender and culture. Participants of this research were very good at understanding the importance of diversity at workplace by smoothening the communication among one another. Workforce diversities have a positive impact on innovation and creativity in their jobs. Understanding cultural diversity enables people to look back into their own culture, compare and identify the most important culture and the weaknesses that exist among different cultures. Organizational culture is an important attribute that could lead to innovation and creativity. The role of leadership in managing diversity and creating conducive working environment could enable to improved creativity and innovativeness of the employees.

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8 APPENDIX 2: Cover Letter of Questionnaire

PhD Research Questionnaire

Survey Questionnaire to be filled by employees of companies

Introduction:

My name is **KENNETH AGU OBINNA** A PhD student at Szent Istvan University, Faculty of Economics and Social Sciences, Doctoral School of Management and Business Administration. This questionnaire is prepared by the researcher on **CREATIVITY AND INNOVATION EXPLORATION: MEASURING THE IMPACT OF CULTURAL DIVERSITY OF AN ORGANIZATION** in Belgium and Luxembourg. The aim of this questionnaire is to collect data about *“Impact of workplace cultural diversity on innovation”*. The information you provide is pertinent for successfully accomplishing the research and finally for sound policy intervention and the resultant development. For this sake, the researcher really confirms you that all the data will be used for policy intervention and academic purpose only and will be analyzed anonymously. Hence, because of your provision, you will never be exposed to any harm. We are thanking and appreciating your kind cooperation in advance; and we would like to say thank you!

General Instruction:

1. Please encircle your answer for multiple choice questions.
2. To open-ended questions, please write your response on the space provided.

Questionnaire ID: _____ Enumerator's Name _____

9 APPENDIX 3: Questionnaire

1. Country _____ Company Name _____
2. Country Code a. Luxembourg B. Belgium
3. Age-----
4. Gender A. Male B. Female
5. Race A. White European B. Black African C. Asian D. Latin American E. Others
6. Religion A. Christian Catholic B. Christian Orthodox C. Protestant D. Muslim E. Others
7. Academic qualification A. PhD B. Masters C. Bachelor D. High school and below E. illiterate
8. **What is your definition of diverse cultural workforce?**
 - a. Race
 - b. Gender
 - c. Different Culture
 - d. Different Religion
 - e. Educational Qualification
9. **How are you able to communicate the information about your job to other cultures?**
 - a. I do so by welcoming their culture.
 - b. I do so by seeing their culture as a continuation of mine.
 - c. I do so by learning from theirs.
 - d. I do not communicate anything with other culture.
10. **How do you cope with a multicultural workforce?**
 - a. I am comfortable with other cultures.
 - b. I stoop low and learn from them
 - c. By understanding them.
 - d. By accepting the differences between us.
 - e. By avoiding them completely
11. **Does your organization have work environment free from cultural discrimination?**
 - a. Yes
 - b. No

12. **Is cultural diversity a problem to the better performance of your job?**
- a. Yes
 - b. No
13. **Can cultural diversity management stir up a better relationship among the employees?**
- a. Yes
 - b. No
14. **Do you think multiplicity in culture in the workplace can bring in innovation and creativity in the organization?**
- a. Yes
 - b. No
15. **What are your experiences in working in a multicultural organization?**
- a. It a good experience so far.
 - b. All work towards achieving one goal.
 - c. Some are closer to the people from the same culture with them.
 - d. There is gender discrimination among the employees.
 - e. There are lots of conflicts encountered
16. **Do you think understanding cultural diversity can help you in understanding your strength and weaknesses?**
- a. Yes
 - b. No
 - c. No idea
17. **Who are the best people you can recommend for this organization?**
- a. Visionaries
 - b. Creative minds
 - c. Inquisitive minds
 - d. Curious mind
 - e. People from other culture
18. **Do you think organisational culture could lead to innovativeness?**
- a. Yes
 - b. No

- 19. How do you think organisational cultural could lead to innovativeness?**
- a. It impacts innovation through culture
 - b. It impacts innovation through clear objective
 - c. It impacts innovation through management
- 20. How do you fit into the organisational cultures of diverse cultural workforce?**
- a. Be myself - do not fit into organisational culture with different cultural team outside my main culture
 - b. Be myself - fit into organisational culture with different cultural team out of my main culture
 - c. Follow my culture - do not fit into different cultural team
 - d. Do not follow my culture - fit into different cultural team
- 21. How do you describe your experience working with a multicultural team?**
- a. Good and learned a lot – benefit to the company
 - b. Very good – encourage your company to continue
 - c. Not good, a lot of conflicts – not beneficial to your company
 - d. Do not know
- 22. How do you describe a situation which you encountered a conflict in different cultural team?**
- a. Calm – learned from the conflict
 - b. Aggressive – do not want to work with people outside my cultural group
 - c. Strange – I am not ready to work with people outside my cultural group
 - d. Strange – I am ready to work with people outside my cultural group
- 23. Giving your experience of working in a multicultural team, do you think the outcome brought innovativeness into your company?**
- a. Yes – problems were solved differently
 - b. No – problems were not solved at all
 - c. Maybe – it worth doing again but in a different way
 - d. Maybe – it does not worth it
- 24. Which of the group would you recommend for your company?**
- a. Mix of people of same culture and people of different cultural group
 - b. People of same cultural group

- c. People of different cultural group
 - d. None of the above
25. **How do you define creative personality?**
- a. Visionary view on challenges and solutions
 - b. Openness to change
 - c. Curiosity and persuasive power
 - d. Personality trait
 - e. Cultural element trait
 - f. Cultural dimension trait
26. Do the leaders in your company promote diversity of workforce?
- a. Yes
 - b. No
27. Does good leadership style contribute towards innovativeness?
- a. Yes
 - b. No

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I dedicate the PhD study to my late father, Chief, Nze, and Sir Innocent N. Agu. You inspired me to achieve this height. Rest in peace my lion heart, wonderful father.