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**A STUDY ON MATCH AND MISS-MATCH OF SKILLS TO EXPLORE THE
EXISTING GAPS BETWEEN BUSINESS SCHOOLS AND BUSINESS
COMMUNITY**

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Strategic Management
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TABLE OF CONTENTS

ABBREVIATIONS	3
LIST OF FIGURES	4
LIST OF TABLES	5
ABSTRACT	6
1 INTRODUCTION	7
1.1 <i>Research problem and gap</i>	9
1.2 <i>Objective of the study</i>	12
1.3 <i>Research questions</i>	13
1.4 <i>Delimitation of the study</i>	14
1.5 <i>Structure of the study</i>	15
2 LITERATURE REVIEW	17
2.1 <i>Understanding Knowledge, Skill and Ability</i>	17
2.2 <i>Theoretical definition of skill</i>	19
2.3 <i>Business education: A promise to supply matching skills</i>	23
2.4 <i>The business community: Expectations of matching skills</i>	27
2.5 <i>Miss-match of skills: A Conflict of Promises and Expectations</i>	29
2.6 <i>Failures of Business Schools and Areas of Improvements</i>	32
2.6.1 <i>Incompatible Knowledge /Theories</i>	33
2.6.2 <i>Lack of Balance in Research and Teaching (Learning by doing)</i>	34
2.6.3 <i>Design Thinking of Problem Solving/ Implementation of Instructional Design Model</i>	35
2.6.4 <i>Teaching of Moral and Ethical Issues</i>	36
2.6.5 <i>Failure to Address the Cross-Cultural Management and Diversity Management Issue</i>	37
2.6.6 <i>Neglecting the importance of Experience Based Learning</i>	38
2.6.7 <i>Weak Faculty Members and Ineffective Teaching</i>	39
2.6.8 <i>Failure to Implement Various Blended Learning Approaches</i>	40
2.7 <i>Summary of literature Review</i>	42
3 RESEARCH METHODOLOGY, DESIGN AND DATA ANALYSIS	45
3.1 <i>Research philosophy</i>	45
3.2 <i>Research approach</i>	46
3.3 <i>Research strategy</i>	47
3.4 <i>Research design</i>	48
3.5 <i>Data collection</i>	48
3.6 <i>Data analysis</i>	51
3.6.1 <i>Case descriptions</i>	52
3.6.1.1 <i>The job level</i>	52
3.6.1.2 <i>Job Positions</i>	54
3.6.1.3 <i>Job posting companies</i>	54
3.6.1.4 <i>Industry</i>	54
3.6.1.5 <i>Required skills</i>	54

<i>3.7 Reliability and validity</i>	55
4 EMPIRICAL FINDINGS	57
<i>4.1 Core issues related to skill match and miss-match</i>	57
<i>4.2 Skill demand and supply</i>	58
4.2.1 Skill demand	58
4.2.2 Skill Supply	60
<i>4.3 Skill match and miss-match</i>	62
5 CONCLUSION	65
LIST OF REFERENCES	69
APPENDICES	79

ABBREVIATIONS

AACSB –	Association to Advance Collegiate Schools of Business
AMBA –	Association of Masters in Business Administration
ASLA –	Amerikan Suomen Lainen Apurhat
BBA-	Bachelors of Business Administration
CBS-	Copenhagen Business School
CEO-	Chief Executive Officer
CFO-	Chief Financial Officer
EFMD-	European Foundation for Management Education
EPAS –	European Foundation for Management Development Program Accreditation System
EQUIS-	European Quality Improvement Systems
GMAC-	Graduate Management Admission Council
GVT-	Global Virtual Team
HBS-	Harvard Business School
IM-	International Management
LIFIM-	Finnish Institute of Management
MBA-	Masters of Business Administration
NSEB-	Norwegian School of Economics
PRME –	Principles of Responsible Management
RBV-	Resource Based View
ROI-	Return on Investment
SSE –	Stockholm School of Economics
UN-	United Nations

LIST OF FIGURES

Figure 1 Structure of the Study	16
Figure 2 Theoretical Framework	44
Figure 3 Research Onion (Saunders, Lewis and Thornhill 2009)	45
Figure 4 Top Skills on Demand	87
Figure 5 Distribution of Skill Demand per Jobs	87
Figure 6 Skill Demand by Industry	88
Figure 7 Top Companies on Skill Demand.....	88
Figure 8 Distribution of Knowledge Demand	89
Figure 9 Distribution of Demand on Experiences	89
Figure 10 Top Positions on Skill Demand.....	90
Figure 11 Distribution of Job Offers by Industry	90
Figure 12 Distributions of Jobs by Level.....	91
Figure 13 Job opening Model 1	91
Figure 14 Job opening Model 2	92

LIST OF TABLES

Table 1 Empirical Studies on Skill	22
Table 2 Types of Skills Miss-match	29
Table 3 Match and Miss-Match of Skills.....	64
Table 4 Design Theories in Problem Solving (Jonassen 2000).....	79
Table 5 Details of Data Collection.....	81
Table 6 List of Kew words.....	81
Table 7 Job Positions	82
Table 8 List of Companies.....	84
Table 9 List of Industries	85
Table 10 Skills and Demand.....	86

ABSTRACT

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Perpetually, business schools are considered to be the suppliers of skills demanded by business community. They, apparently, claim to be the one contributing to the progress of modern business community. Nevertheless, this is not always the case in practice. Despite the broad matching skills supplied by business schools, there are also skills that do not match with the demand of business community. Taking this into account, this study delves down into the success and failure of skill supply by business schools to the demand of business community.

As a theoretical lens, the institutional theory and the theory of resource based view is used to identify the central issues of skill supply and demand. Based on the literature review, the theoretical framework is accordingly developed to define the outcome of skill match and skill miss-match between business schools and business community.

As a methodological approach this study is qualitative in nature and uses content analysis. The findings suggest that, there are areas where business schools fail to supply matching skills to the business community. In fact, due the rapidly changing business environment and its scope, it seems that it is a slim chance for any single business school or any specific program to provide all the required skills. In this light, however, there are suggested areas of improvements for business school to supply the matching skills. By so doing, business schools are able to create adequate knowledge and relevant skills that can be developed and transferred.

Keywords

business schools, business community, business education, skill match, skill miss-match, content analysis

1 INTRODUCTION

Skills play an important role in modern dynamic and globalized world (Klosters 2014). Matching skills are critical asset of any individuals, businesses and societies. They are also high-priority to the global businesses, as the miss-match of skills are turning costly for employers, workers and societies at large. While the matching skills are directly related to the success and growth, the miss-match of skills are associated with the hindrance of economic development, progress and structural unemployment (Klosters 2014). Matching skills and jobs are becoming most common issue and has attracted significant concern from policy makers, industries, academicians, business schools and business students as well. Therefore, the issue of skill match & miss-match is one of the most critically discussed topic among the business community and academia.

The concept of business education was incepted in the beginning of the 20th century. It was influenced by the same forces and factors that drove the businesses then. The evolution of business school is supported by the industry procedures and practices rather than any scientific research or scientific methods (Nino, Cpa & College 2010) (See: Pierson 1959). During the post-world war II period, business education lacked the strong academic standards. It was because, this education system was still in its primitive era and had been unable to establish a strong connection to the business community (Khan & Martinez 2007). Gradually, the development in businesses had its effect on business education, and the prevalent business practices and procedures were adopted and compiled as business theories and textbooks into business education. During the greater business revolution, the reformed business education played an important transformative role. The rapid industrialization and advancements in the business demanded more intellectual and relevant business knowledge (Khurana 1997). Similarly, the business community expected the business schools to supply capable workforces with appropriate skills.

With the rapid industrialization, global commerce, technological support, advanced communication systems and tremendous transformation, modern business community has entered the new business era and has its various expectations from business schools. More than anything else, the appropriate and matching skills are at the top of the demand list. (Khurana & Nohria 2008)

There is no doubt that business schools are attaining huge commercial success today. This tremendous success has made it one of the most demanded course worldwide. New innovations, business ideas and entrepreneurial ventures are related with the business education and has gained more appreciations for its contributions. Even though there are plenty of success stories related with business schools, it has not been able to remain untouched from criticism and doubts. The contributions of business schools in the context of real effect to business practices have been in question for a long time. There is a great deal of denial about its relation to the progress of graduates and development of appropriate skills (Pfeffer & Fong 2002). The knowledge creation by business schools are also critiqued as irrelevant to the modern business context. Similarly, the failure of modern business schools is connected and compared to the failures of primitive era, which was mainly related to development and supply of appropriate skills (Khurana & Nohria 2008). In this context, the connection between business schools and businesses community remains controversial and confusing too.

In the absence of identified match and miss-match of the skills, the existing disparity between the promises and expectations exchanged between business schools and business community seems to be getting bigger. The issue of skill match and miss-match has become more prominent as businesses around the world are reporting difficulty in finding the competent employees. Lack of required skills and miss-match of skills are reported as common problems. Taking an example of report published by Skills Panorama (2015), Finland was suffering with 10.9% of under- skilled employees in 2014. Similarly, Estonia, hired 40.3% of under-skilled employees in the same year, due to the lack of matching skilled employees. Considering the presented data alone, it deems necessary to understand the level of match

and miss-match of skills between business schools and business community. Similarly, a thorough study is demanded to address the existing gap between these two players.

1.1 Research problem and gap

Studies in this field have shown the empirical evidence that there is a widening gap in the exchange of promises and expectations between business schools and business community. The issue of match and miss-match of skills is one of the most critical and important among many of these gaps. This issue has become a global phenomenon and deserves to get enough attention and actions from the business schools and business community.

In most recent years, the academia has seen increasing focus on examining the disparity between business schools and business community (David & David 2010). Many of the prior studies (Chia et al. 2008; Connolly 2014; Pfeffer et al. 2002; Collinson & Tourish 2015; David et al. 2010) are however focused on finding the flaws and weaknesses in business education and (Cezarino, Liboni, Oliveira, & Caldana 2016; Glen, Suciu & Baughn 2014; Greiner, Bhambri & Cummings 2003; Millar & Millar 2016; Ruth 2013; Stumpf & Dunbar 1990; Ungaretti, Thompson, Miller & Peterson 2015) they provide various suggestions. The earlier works are focused more on pointing toward the weaknesses without addressing the core issue of skill miss- match. Without much supporting evidences, many scholars are blaming the business schools for their failure to offer humanities related subjects (Bennis & O'Toole 2005) in business education. Some authors (Chia & Holt 2014) have focused their study on abstract casual explanation over practical knowledge, which still fails to address the core concern of modern business community. Similarly, business related texts are also defined as instruments of propaganda (Mir 2003) rather than a tool to solve business related problems, without much of validation.

Among many of these, some studies have been succeeded to identify the real problem of business education. These studies have meaningful contribution on development of business

studies curriculum and practices, however, they have failed to suggest a collective guideline that would address the existing gap. There are other several studies focused on addressing some of the left behind prominent issues like : moral and ethical business (Chung 2016; Ghoshal 2005), responsible management (Forray, Leigh & Kenworthy 2015; Mintzberg & Sacks 2004) and sustainable management (Akrivou & Huang 2015) etc . These studies claim that business schools are responsible for all immoral and unethical business decisions made by selected exemplary companies. The devastating failure of such companies are directly burdened to the business schools and while doing so, it seems that they totally reject the other positive aspect and impacts of business schools. This way, on an attempt to prove the failure of business schools for their one specific weaknesses, many studies are found to have failed apprehending the strengths of business education. Similarly, more studies are found to be biased toward business education as they only focus on wrong examples, avoiding the example of innovations and leadership. Similarly, numbers of studies have tried to disprove the significance of business degree by comparing it to the real return of investment (ROI), (Connolly 2014) whilst the real ROI on business education can be of abstract value and can't be calculated straightforward.

While defining the existing gaps between business schools and business community, numbers of studies are found to be concentrated on proving the failure of business education (Connolly 2014; Mir 2003; Pfeffer et al. 2002) and establish it as worthless degree (Mintzberg et al. 2004). While doing so, they provide few examples of unemployment rate against the numbers of business graduates and business failures despite of recruiting business graduates. On the shade of such remarks, some scholars have tried their best to suggest the business education to identify the best practices (Greiner et al. 2003; Ruth 2013; (O'Donoghue, 2003), but without success to address the core issues. Similarly, some studies have proposed inclusion of different necessary contents in business curriculum (Hotchkiss 2015), and shift on instructional change (Jorgenson 2006) rather than entire curriculum. These ideas have something important to contribute, but without identifying area of changes in knowledge or skills, any changes in the business education would still be incomplete. Some apprehensive studies have made recommendations to establish the connectivity of

global business education to the global enterprises (Cooke & Alcadipani 2015), whereas some other studies have suggested different techniques like: behavioral simulation (Stumpf et al. 1990), usage of soft systems (Cezarino et al. 2016) and integration between multiple disciplines (Millar et al. 2016); Cezarino et al. 2016), online blended learning (Arbaugh et al. 2009), focus on leadership related courses (Collinson & Tourish 2015), usage of technology to integrate the management education (Billsberry, Charlesworth & Leonard 2012) and global virtual collaboration (Taras et al. 2013) etc. Similarly, Mintzberg & Gosling (2002) emphasized on necessity of management education to widen its approach to address management beyond borders. The failure of modern business schools is also related to the weak communication, (Klosters 2014) (see: Dickinson, Herbst and O'shaughnessy 1983) between business schools and business community, and failure to understand the need of real business world (Chia et al. 2008), which is believed due to the lack of interest by business schools in practitioners and their ideas. Some studies (Klosters 2014) (see: Dickinson, Herbst and O'shaughnessy 1983) have identified the weak communication and link between business schools and business community. Business schools are blamed for their lack of interest in practitioners and real business ideas. Similarly, Studies have found that some business schools are too academic (Chia et al. 2008) and they ignore the real need of business world, which are the leading factors for the business schools failure to connect with business community. However, considering some business schools, this claim may be true, but it can't be generalized to entire business schools, as there are many business schools, contributing real to the business world.

Though, there are numbers of literatures available related to business education, only few researches have contributed on finding the match and miss-match of skills between business education and business community. These aforementioned gaps in research demand a thorough scientific study that evaluates the real match and miss-match of skills. Without understanding the real miss-match, any improvement or addition in business education may prove to be irrelevant or insignificant. However, several studies have identified the existing gaps between business schools and business education and suggested some great tips for the improvement, they are still incomplete, thus results obtained in regard of this subject is

insufficient and inconclusive. This study fills the existing gap in the literature and manage to establish a connecting relation between business schools and business community.

In conclusion, though there are numbers of literatures available related to business education, only few researches are concentrated on finding the match and miss-match between business education and business community. However, some of the studies have been able to announce the existence of miss-match between business schools and business community they still fail to address those specific skillsets properly, thus results obtained in regard of this subject are insufficient and inconclusive.

1.2 Objective of the study

The aim of the study is to explore the existing literatures in business education and to identify the match and miss-match of skills and then to evaluate the findings if that is the case in practice.

This study attempts to achieve the following objectives:

- to identify the most emphasized issues related to skill development and utilization in the business education literature
- to identify if business school have succeeded on delivering the demanded skills
- to suggest business schools for further improvements in skill supply

Before moving forward, it is important to examine the reasons and logics behind the claim made on the match and miss-match between these mentioned phenomena. To reach the objective, firstly it is important to examine the status of business schools, their products as well as the demand made by the business community. Second, it is also important to go through various literatures on understanding the prevalent claims, logics and arguments made on this subject of study.

As an expected outcome, this study aims to find out the match and miss-match of skills between businesses and business schools. Consequently, significant impact to multiple benefactors can be assumed. For instance, the key findings can be implemented by the business schools to address the gap and subsequently enhance the quality of their education programs so that they can meet the demand of the businesses. Similarly, businesses in other hand can request the business schools to focus specially on the miss-matches, so that the efficient leadership and management is ensured in their businesses in long run.

Given the fact that this thesis being conducted by a graduate student of management program in University of Vaasa, the outcome can benefit this university on first hand for the short and long term. The findings may become assistive to the department of curriculum while designing its program and learning outcome. Likewise, the findings may become helpful on broadening the horizon of the business education provided by many similar other universities. Similarly, as the quality of education is related to the success of its students in the real world, the findings may prove to be helpful to further develop the careers of thousands of students. The result may be applicable to the business schools operating in similar or different geographical context.

1.3 Research questions

- What are the most emphasized skill related issues in the business education literature?
- What are the matching skills produced by business schools?
- What are the areas of improvements to address the miss-match of skills?

1.4 Delimitation of the study

The concept of business education, management education, degree in strategic management along with other degrees related to business or management are used in parallel in this study. For the uniformity, 'business school/s' are used to connote any institutions or universities involved in teaching business or management related courses.

Similarly, the term 'business community' here represents businesses, enterprises, firms or any entities involved in provision of good or service to customer that are of any size or shape and are functioning in any part of the world. For the ease of understanding and to avoid any confusions and dilemmas, one single terminology of 'business' will be used throughout the study to represent any of the component of the business community. The 'business/ess' mentioned in the study consists of any kind of businesses including private, local, regional, national or multinational businesses operating in any mode like private, public, co-operative, or joint venture etc. Furthermore, the business may be of any size in terms of number of employees, shareholders, number of customers, the hierarchical management, mode of investment, market distribution etc. Similarly, the business aims to include any kind of business operating in service, technological, commercial and another industrial sector which are not mentioned here individually.

Before proceeding, it is important to establish some delimitation for the research so that the study parameters can be defined properly. In the context of numerous institutions offering different type of degrees in business, management or related courses/ programs, this study considers only university based programs offering bachelor, masters and doctoral degree in management, strategic management, global leadership, global management and business administration as business education. Thus, study excludes the undergraduate level of studies on purpose with the understanding that they are not sufficient enough to instill required skillset to meet the market demand (The Conference Board 2012). Moreover, the business schools are limited to the academic institutions operated as universities, thus may exclude any vocational colleges or private colleges providing technical knowledge or trainings,

however the universities can be private, government/ state controlled/operated as well. Likewise, the study excludes the institutions running under the affiliation however the curriculum matches exactly with the parent university. Since academic history, development of industrialization and commercialization etc., (Nkomo 2015), are related to the evolution and development of business education, this study presents relative information to make it more reflective on defining the development and progress of business education. Since the modern day business has become global (Cooke et al. 2015) and bigger businesses behave similarly in terms of their management, the Finnish companies are taken as representative on identifying the match and miss-match in skills, however it has its own constraints. This research aims to contribute the existing academic literature by offering evidences concerned to the match and miss-match of business education, by collected evidences from limited universities manually selected, with a belief that it enables the thesis to examine the subject of study in more detail. The findings of this study, still can be used later for the wider discussion in the subject area. In addition, the selected study method can be expanded or modified to examine similar results in different business or different country of origin.

1.5 Structure of the study

This thesis is structured as presented in Figure 1. The first chapter introduces the main topic, defines the existing research gap and delimitations of the study. In the second chapter, I present the review of existing literature on main topic, with relevant information related on defining skill, knowledge and abilities. In addition, I present a theoretical framework to define the outcome of skill match and miss-match in businesses. Similarly, in this chapter I present some theoretical perspective of the business schools on development and supply of skills.

In chapter three, I present the research logic and methodologies used for this study. Chapter four describes the empirical findings.

The final chapter concludes the study by summarizing the study. It discusses the issues of trustworthiness and specifies the theoretical and practical contribution. This chapter also discusses the limitations and ideas for future research.

The appendices include the charts, tables and graphs used to define the concepts.

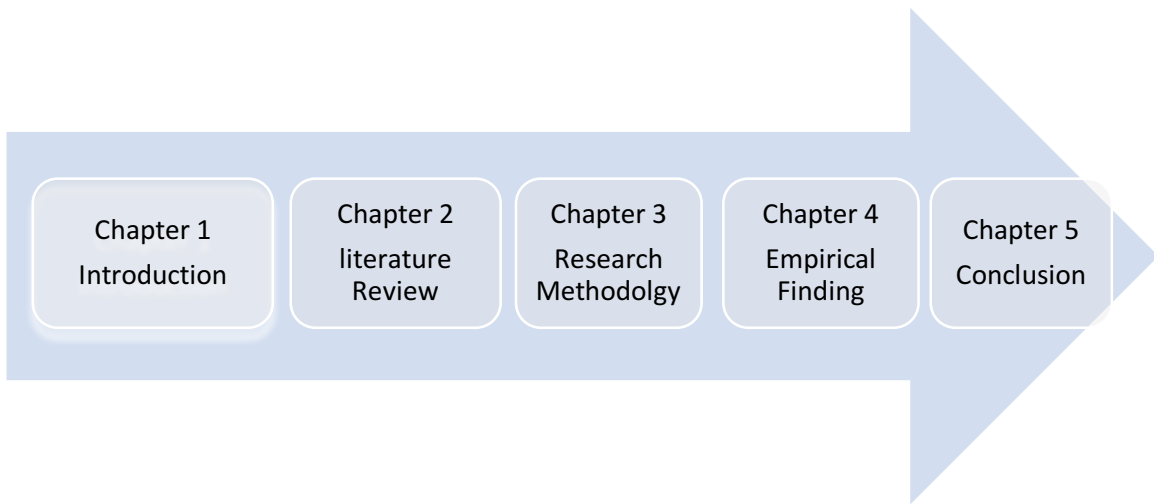


Figure 1 Structure of the Study

2 LITERATURE REVIEW

To gain the complete understanding of gaps between business schools and business community, it is vital to understand the contextual development of business education and its impact as well as contributions to the contemporary businesses. It is also important to understand the role of skills in any business. Similarly, without understanding the changes in the demand of skills throughout different phases of global business, it is difficult to study the match or miss- match of skills. The demand of skills, evolution and development of businesses can be understood from several perspectives, for which, a walk back to the history of business education and various theories is relevant and compulsory.

In a nutshell, this study considers understanding the demand of skills and existing gaps, thus, significant literatures and theories related to business education and business community are reviewed and presented. Subsequently, skills and related terminology are elaborated with relevant literature and theories.

2.1 Understanding Knowledge, Skill and Ability

The contemporary academic world has been ruled over the debate of importance of skills versus knowledge versus abilities for some time now. Contrary to the notion of establishing value of any single element, Lennart (2001) emphasize on competencies as a combined terminology of knowledge, skill and ability (KSA). Since this study intends to identify the match and miss- match of skills, it seems relevant to understand knowledge and abilities because of their reciprocal relation with skill. With the belief that skill alone does not make meaningful contribution in businesses, this study relates knowledge and abilities simultaneously to identify any match and miss-match in skills. Therefore, understanding the various aspects and distinction between skill, knowledge, and abilities is crucial, and they are

used throughout the study. However, relating it as one of the most demanded tool to achieve competency, the central focus of this study remains in skill match and miss-match.

Knowledge in general is information acquired through the sensory input like reading, watching, listening, touching, feeling etc., and it is based more on facts and theoretical concepts (Winterton, Delamare & Stringfellow 2006). Knowledge can be self-achieved through observation or study, or can be transferred from one source to another, like in business education, which is valued as great source of knowledge (Chia et al. 2008). As graduates, when one is decorated with a degree, it reflects the possession of knowledge required in the field of performance. Though there is a general assumption that knowledge in a specific field alone reflects the capability to perform the specific job, this notion is not entirely true. Since the real business world is more complicated, mere knowledge is not enough (Pfeffer & Sutton 1999). Besides knowledge, range of skills and abilities are necessary to perform better in any task (Chia et al. 2008). Students with their degree alone could obtain significant business knowledge but without necessary supplementary skills, there is a great chance they can't prove their abilities. Similarly, different people are skilled in different ways, but without having adequate knowledge, their skills can't produce better results. To compete and to prosper in the competitive job market, graduates, thus must be equipped with skills and knowledge and abilities (Davis et al. 2002). Employees become able to perform adequately and/or without any failures, when they combine the acquired knowledge with their set of matching skills. This capability to perform the designated tasks is known as abilities/ competencies (Ketchen 1996). International Board of Standards for Training and Performance Instruction (2005) defines competency as combined terminology including knowledge, skill and ability. Competency is thus understood as the ability that enables the employees to function effectively in given occupation or any specified jobs. And these competencies are also used for employee selection, compensation allocation, performance measurement, training needs assessment, training outcomes assessment, and strategic planning etc. (Guravan & McGuire 2001).

2.2 Theoretical definition of skill

Skill generally connotes the level of accuracy in performances that is measured by speed (Abraham 2006). It is also understood as reflective application of knowledge to specific situation which can be mastered through numbers of trials and errors (Proctor et al. 1995). Similarly, skill is defined as a combination of factors resulting in ‘competent, expert, rapid and accurate performance’ (Welford 1976). Skills are goal directed and well- organized behavior, acquired through repeated practice and they are performed with economy of effort. Similarly, the importance and applicability of skills are emphasized to manual operation and mental activities too (Abraham 2006).

For simple and clear understanding of skills in the business context, based on their nature, Whitley (1989), divided skill into two categories: generic and specific. Generic skills are transferable and can be applied in the wide ranges of jobs. Depending on literatures and scholars, there are 8 to 10 different generic skills commonly referred in terms of business and related context. Collaboration skills, communication skills, creative thinking skills, critical thinking skills, information technology skills, numeric skills, problem solving skills, self-management skills, people skills etc., are some of the most anticipated and common generic skills. In contrary to generic skills, specific skills are demanded on special jobs or business positions. Usually specific skills are collaborated with knowledge, as variety of knowledge develops variety of skills. In the context of modern business world, specific skill consists of skills like strategic thinking skills, leadership skills, accounting skills, negotiation skills, project management skills, management skills etc.

Proctor et. al (1995) present four characteristics to ease on complete understanding of the concept of skill. Firstly, skill develops over time with numbers of practices. Secondly, skill is always goal- directed response applied to meet the demand made in external environment. Thirdly, skill can be acquired when components of behavior are structured into coherent patterns, and finally, as skill develops, the cognitive demands are reduced.

In an attempt to articulate the conception of skill, Proctor et. al (1995) distinguished it into four categories: a) perceptual skills, b) response selection skills, c) motor skills and d) problem- solving skills. The perceptual skills demonstrate the abilities like making judgements and establishing distinction between various objects. Response selection skills are the ability to react in specific situation, which are usually developed with practice. In response selection skills, the reaction time is affected by the availability of number of alternatives. Motor skills are related to the manual aspects of performance where physical movements like speed and accuracy are involved. Problem-solving skills depend on intellect and mental models that is developed or acquired through continuous practice.

Similarly, number of studies in the later dates (Jerdee & Carroll 1965; Mahoney; Mintzberg 1973; Katz et al. 1978; Lau, Newman & Broedling 1980; Kanungo & Misra 1992; Connelly et al. 2000; Mumford, Marks, Connelly, Zaccaro & Palmon 2000; Zaccaro 2001) have elaborated skills by dividing them into basic four categories: a) cognitive skills, b) interpersonal skills, c) business skills, and d) strategic skills. These mentioned four skills are considered to be essential for the successful leadership in any businesses (Mumford, Campion, & Morgeson (2007). Cognitive skills comprise of basic cognitive capacities, such as collecting, processing, and dissemination of information and learning. The cognitive skills are required by the business leaders for a large portion of activities which include communication related tasks such as effective speaking (to convey information), active listening (to comprehend and understand), effective writing (to communicate audience-specific messages) and reading comprehension etc. The cognitive skills are facilitated by active learning process and support the leaders on adapting behaviors and strategies that are required to deal with emergent, non-routine and dynamic job situations (Mumford et al. 2007). Interpersonal skills and social skills are required to interact and influence others. Known as social capabilities, the interpersonal skills and social skills are also related with judgmental skills. These skills are required to coordinate the actions taken by various players in businesses by implying persuasion, reconciliation, negotiation etc., so that mutually satisfying relations can be established between businesses partners (Mumford et al. 2007; Marks et al. 2000). Business skill involves skills like management of material resources,

operation analysis, procurement, equipment allocation, technology management etc., that are related to specific functional areas (Hambrick & Mason 1984; Zaccaro 2001). Business skill also involves procedural skills, management skills, leadership skills, management of personal resources and financial resources etc., that are used to identify, motivate, develop and promote individuals in their jobs (Mumford, Campion, and Morgeson 2007). Strategic skill includes planning-related skills of visioning, and systems perception (Mumford, Dansereau & Yammarino 2000) that are usually required to vision a futuristic model of the business. Strategic skill assists business leaders on successful scanning of business environment and to identify the key causes and consequences. In addition, strategic skill supports business leaders to understand the casual relationship with the internal and external environment, and long term outcomes of business. Strategic skill also contains analytical skills, conceptual skills and problem solving skills (Marks et al. 2000; Mumford et al., 2007), which are required to understand the complexity and ambiguity of businesses.

Skill and skilled performance has obtained higher importance (Carlson & Yaure 1990) in the academic circle and global business world for some time now. Various studies (Carlson & Yaure 1990; Carlson, Sullivan & Schneider 1989; Logie et al., 1989; McKeithen et al. 1981; Winterton et al. 2006) have concluded that the acquisition and performance of cognitive skill, motor skill, procedural skill, problem- solving skill etc., are influenced by knowledge and working memories (See: Sullivan & Schneider 1989; Carlson et al. 1990). However due to the variations in human capacity, one can be more or less skilled from another, even though a common source of knowledge is used (Whitley 1989). Because of these variations in human capacity, acquisition of skill is basically divided into three levels: a) cognitive, b) associative and c) autonomous. The first level of skill acquisition is called the cognitive level, where the skills are learned through numbers of trials and errors. After successful completion of cognitive level with enough practices, when the performer starts to yield some positive results, one enters the associative level. Generally, this level is one of the longest phase in skill acquisition. The final phase of skill acquisition is autonomous, where one becomes expert and starts to produce results.

Table 1 Empirical Studies on Skill

Whitley, 1989	<u>Generic Skills</u> Collaboration Skill Communication Skill Creative thinking skill Critical thinking skill Information technology skill Numeric skill Problem solving skill Self-management skill People skill	<u>Specific Skills</u> Strategic thinking skill Leadership skill Accounting skill Negotiation skill Project management skill Management skill		
Procter et al, 1995	<u>Perceptual skill</u>	<u>Response selection skill</u>	<u>Motor skill</u>	<u>Problem-solving skill</u>
Jerdee & Carroll 1965; Mintzberg 1973; Katz et al. 1978; Lau, Newman & Broedling 1980; Kanungo & Misra 1992; Connelley et al, 2000; Mumford, Marks, Connelly, Zaccaro & Palmon 2000; Zaccarao 2001	<u>Cognitive Skills</u> Learning Skill Memorization Skill Thinking Skill Evaluating Skill Remembering Skill Comparative skill Analyzing Skill Perceptive skill Attentive Motor skills Language skill Visual and spatial Skill processing skill Flexibility skill Anticipation skill Problem solving skill Decision making skill	<u>Interpersonal Skills</u> Verbal communication Non-verbal communication Listening skills Negotiation skills Problem Solving Skills Decision Making skills Assertiveness Skills Personal Manners Ethical Behavior Social Awareness Self-Management Responsible Behavior skills Accountable Behavior	<u>Business Skills</u> Team management skill Relationship building skill Networking skill Sales skill Marketing skill Compliance skill Leadership skill Presentation skill Persuasive skill Motivational skill Multitasking skill Negotiation skill	<u>Strategic Skills</u> Strategic planning skill Analytical skill Accession skill Attention to detail skill Brainstorming skill Implementation skill Charismatic skills Collaborative skills Critical thinking skill Decision making skill Presentation skill Team building skill Logical thinking skill

In the recent days, scholars and several authorities are developing even more integrated approach to understand skill related concept and theories. Interpretive approach (Winterton, Delamare-Le Deist & Stringfellow 2006) has become one of the most significant one by combining three dimensions of competencies: cognitive, functional and social. Because it has successfully offered a unique unifying framework, it is considered as a fairly-consistent and universal approach like Bloom's taxonomy of learning and the French approach (savoir, savoir faire, savoir être). It is also considered one of the most influential, competitive, multifaceted, holistic and integrated approach that incorporates the meta-competencies with the social competencies (Winterton et. al 2006). Similarly, a typology of base competencies developed by Evers, Rush and Bedrow in 1998 (Jaskari 2013) consist of four to five generic skills like managing self, communicating, managing people & tasks and mobilizing innovation & changes.

2.3 Business education: A promise to supply matching skills

From the perspective of institutional theory, the development of business education is found to be locally influenced (Donaldson 2002; Engwall 2000; Whitley 1992, Whitley & Kristense 1996; Stewart et al. 1994), and adapted to international models (Scott 1995 ; Powell & DiMaggio 1991) Though, different countries have different influencing factors (Engwall 2000) behind the development of business education, states, industries, education systems and professional associations (Alajoutsijarvi, Kettunen & Tikkanen 2012) are four of the most relevant institutional actors that shape business schools. Since the foundation of business schools were made possible by the support of corporate houses and businessmen (Slaughter et al. 2004), industries have played a dominant role in the development of business education (Engwall 2000 ; Slaughter & Rhoades 2004). These mentioned actors set standards of business school operations and define responsibilities toward different stakeholders (Holtom et al. 2015), which are basically related to act as the primary source of business related knowledge creations (Freedman, Cooper & Stumpf 1982), such as new

management theories and practices (Bennis & O'Toole, 2005). In addition, they are also responsible to train people with high level of skills and abilities (Nkomo 2015; Hall 2006) by teaching facts and various training. Likewise, they are responsible to teach various operational procedures through learning processes, (Butler 2002) so that students acquire knowledge and skills needed for the real business world.

In the evolutionary process of business and its development, business schools have been credited for the introduction and development of various sophisticated methods (Engwall 2000) like accounting, control and distribution systems etc. These development of sophisticated business techniques came as a result of direct response toward addressing the market demand (Engwall 2000). Due to the change in institutional structure, the objectives of business schools have shifted quite often, however, the foundation was established with an aim to create professional entities, to produce business managers and to socialize them into a culture of professionalism (Abbott 1998). Today's business schools follow the same trend of addressing the market demand, thus, new version of knowledge and skills are introduced. To address wide range of demand, business education currently offers different kind of business degrees with core focus on its specific knowledge and skills. Among them, some of the most popular and demanded program are 'management', 'finance', 'marketing', 'entrepreneurship', 'human resource management', 'international business', 'operations management', and 'project management' (HBS 2016). Following their passion and interest, students can select any of these special subjects at any point of their higher education. These mentioned subjects are specially addressed to those who enjoy professionalism in business (Collier 2015). Likewise, these programs are dignified as a ladder to earn high- status in society. They are also linked to the source of higher income as well (Tucker 2014). In support of such remarks, Sterling Shea (HBS 2016) quotes, *"I now know myself better as a leader"* after completing Executive Program in Leadership Development from Harvard Business School.

American International University (2016) defines business education as one of the most applicable qualification that helps to boost the career opportunities in business. The success of business schools around the world also seems to support the notion that business schools are backbone of modern business world. They are associated with the dissemination of necessary skills and knowledge creation, and probably for the same reason, business schools are becoming synonyms for better business, great leadership skills, innovations, success, business expansion, business growth etc. (Ed 2016). The increasing demand of business schools are appealing prospective students who seek to start new business or have a promising career. Similarly, even the existing business personals and top level executives consider the business education as a source to enhance their business-related skills. The prospective students are even lured by the amazing stories shared in university webpages and informative brochures etc., where people share their success stories and describe the worth of having a business degree. Such promotional activities are not only limited to the core business students but also to people involved in different functional areas. Business education is also found to be promoted as a tool to build a versatile resume (Ed 2016). Similarly, business schools elaborate the wide prospects of business education by mentioning that students do not necessarily have to settle only in business, but also can utilize the learned skills anywhere they want. Likewise, business degrees are recommended as a handy tool to be used at any time of need. Articulating such explanations, The Huston Chronicle (2016) defines business education as a mean to equip entrepreneurs with business skills and knowledge. Adding more on it, Chronicle claims that in the absence of business education, entrepreneurs lack formal business skills like creating business plan, accounting and negotiation etc.

The century that has passed been a marvelous journey for business education in the backdrop of business getting more global and complex (Hamel 2016). The growth of business education has been exponential and has been appreciated as gateways to a range of career opportunities. Similarly they are also accepted as significant contributor on development of business culture (Holtom et al. 2015) through various case studies, books, scholarly publication etc. Similarly, business schools have been defined as an ideal setting for

managerial reflection, that consists of cognitive functions involving consideration, contemplation, speculation, musing and pondering (Ruth 2013). Likewise, business education has been defined as a tool to translate the management experiences into learning process as well (Baden & Higgs 2015). Among all these highly anticipation, strategic management emerges as one of the promising tool to offer knowledge and skills in the business.

In 1912, Harvard Business school initiated a pedagogical approach of teaching strategic management with the foundation of first business policy course (Greiner et al. 2003). This course included various executives coming to class to discuss different practical problems prevalent in their businesses. Such discussions consisted of personnel problems to strategic issues related like plant layout, which later was transformed into the case study method. The same method was prescribed for all HBS courses and widely adopted by majority of business schools, specially, for policy or strategy related courses (Greiner et al. 2003). Though, most of the business schools are following the most popular Harvard method, many of them have their own set of practices. Similar to the strategy related courses designed by HBS, numbers of universities offer higher education in strategic management. This subject has emerged as one of the promising subject in the field of business that offers various benefits and assures golden future for its graduates. This subject has been promoted as a necessary and handy tool to recognize a company's competitive advantage and its leverages (HBS 2016). Likewise, it consists of knowledge related to strategy formulation and implementation, resources assessment and analysis of internal and external environments (Vaasa 2016). Similarly, this specific program is emphasized as the strongest knowledge source for the companies expecting to decide on product diversification or global expansion. Likewise, the programs are found to be promising that the program graduates will be able to decide on organizational incentive system that support global strategic choices (Harvard 2016).

2.4 The business community: Expectations of matching skills

In the modern world of corporate business, business school graduates are expected to demonstrate their skills and competencies, as soon they enter the workforce. They are required to coordinate the process of perception, cognition and action (Proctor & Dutta 1995) into various business activities. Similarly, they are expected to demonstrate necessary behavioral skills of transforming strategic decisions into tangible results and make analytical judgment even in ambiguous business settings (Greiner et al. 2003). Likewise, they are expected to take strategic decisions and execute them effectively (Berman & Ritchie 2006). In addition, they are expected to be expert on spontaneous action taking and decisions making processes (Greiner et al. 2003) in relation to the corresponding business environment. Specially in today's fast-paced technologically changing world, the graduates need to adapt to change and apply their knowledge to solve various workplace related problems. The rapid acquisition of skills and transference into the workplaces becomes important, more than ever before (Berman et.al 2006). Due to the increasing integration of information technology in the businesses, the graduates are challenged to learn and apply the technological related skills in addition to the business skills.

In the evolutionary process of global business, the managerial or business work has gone through lot of significant changes. These changes also brought variations in the requirement of the skills, so that they can be effectively contextualized in the area of business operations (Worrall, Cooper & Campbell 2000; Worrel & Cooper 2001). According to Klosters (2014), the modern business world demands around 140 different skills including generic and specific skills. This data may vary in between studies but a general figure can be drawn about the situation of the current business demand. The match of skill during the recruitment process is so important that many of the businesses scan the applicants on the basis of their specific skills rather than any degree or qualification (David et al. 2010). In addition, they demand the candidates to be proactive, and with the abilities to see problems autonomously and respond them with creativity. Similarly, modern day businesses require the workforce with the ability to understand social, organizational and technological system and changes.

Likewise, they demand various skills like acquisition and evaluation of data, communication skills, monitoring skills and correcting performances etc., for which technological knowledge is unavoidable. Compared to previous decades, businesses demand more and better skills even from an average employee (Klosters 2014).

A report produced by Graduate Management Admission Council (GMAC) reports that the corporate world continues to express high level of hiring demand for their partnering university business graduates (GMAC 2016). This demand has increased by five percent in 2016, from 80% of demand in previous year. With an average coverage of 24%, these demands have increased in various functional areas like marketing, supply chain management, data analysis etc. Similarly, the report mentions that manufacturing, technology, product and services are the top demanding industries for knowledge and various specific skills.

Conference Board (2012) reported that only one quarter of college graduates possess the matching skills that would meet the demand of businesses and mentions that the contemporary business world suffers from three forms of skill miss-match. First is known as skill shortage where substantially the supply of skilled workforce is lower than the actual demand. Second is known as skill gap where the skill of available workers does not match with the requirement of the market, and third is known as over/under skilling where, the available workforce is either highly skilled or do not have relevant matching skill. However, all these mentioned skill miss-match are common in every corner of the world, specially, the nature of industrialization, economic activities, political stability, industrial security etc., have a greater influence on such. The second and third kind of skill miss-match are common in the countries where academic output outnumbers the industrial growth, innovation and economic activities etc. India is one of the representative market where only 7% of business graduates are employable upon completion of their business degrees (The Economist 2016). In the other hand, the developed countries with newer innovation and development face the scarcity of skillset to support new inventions and progress. With every new business, they seek newer skill set, which are not commonly found to be supported by the academic

institutions in most of the cases. A career survey report published by Graduate Management Admission Council (2016) reports that there is significant increase and high demand of business graduates like MBA in some of the specific fields like healthcare (100%), energy and utilities (88%), manufacturing (92%) and technology (84%) in the American Market alone. Similarly, the report indicates significant demand increase in non- MBA business degrees like Masters in International Business, Masters in Risk Management etc.

In a nutshell, business community seems to be facing the problem of skill-match and they expect the graduates to be decorated with all the knowledge, skills and abilities to turn their business into a success at a competitive pace.

Table 2 Types of Skills Miss-match

<i>Skill Shortage</i>	<i>Demand of a particular type of skill exceeds the supply of people with that skill at equilibrium rates of pay.</i>
<i>Skill Gap</i>	<i>The type or level of skills is different from that required to perform the job adequately</i>
<i>Over/Under Skilling</i>	<i>The level of skill is higher/lower than required to adequately perform the job</i>

2.5 Miss-match of skills: A Conflict of Promises and Expectations

In the context of business schools claiming to be leader on creation of business related knowledge and supply of required skills for the contemporary business world, several specific business courses are regarded as the most promising tool. The skyrocketing popularity and financial success of business schools seem to support positive relation between these two. In addition, various data support that business education still has demand from the business community as a source of supplying various specific skills. Despite of these mentioned facts, business schools are floating on the boat of criticism for the immense

damage it has made in the corporate world and in the field of knowledge as well. In the background of discussed success stories and criticisms for its failure it is appropriate to study the areas where business schools are blamed for the poor delivery of promises.

Foremost, modern business education is called as inadequate (Holtom et al. 2015) and irrelevant (Hotchkiss 1920) to the modern business context. Business schools are also blamed for impeaching necessary skills (Ghoshal 2005) to the students, and not acting enough to develop most important skills (Mintzberg et al. 2004). Similarly, the role of business schools to prepare students for various management positions is disregarded (Datar, Garvin & Cullen 2010), and even their impact in student's careers (Rubin & Dierdorff 2009) are denied. Business schools are also accused of sending the graduates into a complex and turbulent business environment without adequately developing their skills (Bennis et al. 2005; Dyer, Gregersen & Christensen 2011; Waddock et al. 2013). There are critics that business graduates are given the degrees without having the abilities to adapt such turbulent environment (Bennis et al 2005; Dyer, Gregersen, & Christensen 2011; Waddock et al. 2013; Glen et al. 2014). Moreover, they are considered to be ill-equipped (Morrell & Learmonth 2015) to deal with uncertain business situations where the pursued aims become unclear. Morrell & Learmonth (2015) believe that such forceful behaviors ultimately produce poor results as they are found to be weak in business dealing and negotiations etc. Clarifying on this issue, numerous scholars (Mintzberg et al. 2002; Donaldson 2002 ; Ghoshal 2005) find business research practice and pedagogy to be poor and fails to prepare graduates for the effective business performance. In the series of vitriolic criticism (AACSB 2002; Ghoshal 2005; Mintzberg 2004; Pearce & Huang 2012; Rubin & Dierdorff 2013; Waddock & Lozano 2013) the relevance of business education in the contemporary world is repeatedly questioned with doubts. Similarly, the role of business schools on new knowledge creation and skills development are rejected (Akrivou et al. 2015). Cezarino et al.(2016) criticize business schools for failing to observe the changes in the business world. Moreover, the school administrations or authorities are accused for not updating the curriculum to address the changes in demand of newer skill sets. Though, there is some space to falsify all these claims

toward business schools, to some extent these criticisms are real in case of some selected business schools (The Economist 2016).

Holtom et al. (2015) conclude that the prevailing problems of business education are due to its lack of focus. Moreover, it is because of internalized interest, self-orientation, rigid and traditional mentality. Likewise, they are found to be more focused on the executive education and life-long learning process rather than concentrating their focus on applied fields. Due to these various reasons, business schools are taken as very ill-defined institution. Similarly, the education process, pedagogies and the academic integrity of business schools (Mintzberg 1990) are associated with the failure of business schools to create new knowledge and supply of matching skills. Pointing toward other weaknesses of business school, Dobni & Dobni (1996) conclude that they are not serious enough about applied research and innovative projects, which results on their failure to identify new skills and transfer the skills. The creation of knowledge and the contribution to the real business world, in comparison to the increasing number of business schools, supports the fact that majority of the business schools are just making money than leaving any positive footprint toward the academic progress.

In contradiction to the claims made by business schools on their successful supply of demanded skills, an employer survey by the National Association of College and Employers (2016) indicates that most of the workplaces value communication skills, analytical skills and teamwork skills rather than any other specified business skills, produced by business schools. In the same regard, the report mentions that 89% of the surveyed employers suggest the college students to pursue liberal arts education rather than core business education (O'shaughnessy 2014). This recommendation made by employers, critically questions the business schools for their claim of supplying matching skills. Similarly numbers of studies are questioning the significant of having business degrees (Chia et al. 2008; Giacalone 2004; Pfeffer et al. 2002; Bennis et al. 2005), by presenting the facts that, businesses around the world are complaining the graduates for their lack of efficiency toward leadership, innovation, productivity, profit making etc. Likewise, they are cutting the connection of business degrees to the business success. In the similar context, one of the recently published

explorative report in “The Economist” (2016), mentions that only 7% of business school graduates in India are employable upon graduation, and the data is similarly alarming in many other countries. Adding more on this, the report mentions that, though there may be some relation to the method of teaching in universities, it is also because of the easier access of students to those programs as well as the changing meaning of such business degrees to employers. Moreover, the report also claims that the business students do not necessarily obtain the required skills from these business schools.

On the shade of discussions made above, a widening gap between business schools and business community becomes more visible and clearer. The following section attempts to address the reason behind those gaps and intends to offer viable options, that business school can utilize to work on development of matching skills.

2.6 Failures of Business Schools and Areas of Improvements

Having found the clear picture of business schools failing to create new knowledge and disseminate adequate skills to the businesses, it deems necessary for business school to act accordingly so that the widening gaps can be fixed. There are many challenges business schools face on enabling students to recognize, learn and apply skills (Pether 2003). The available literatures suggest that business schools have weak relations to the business community and they fail to have a significant impact toward producing matching skill. The match of skills is also subject of competency, since literatures suggest that the produced skills are not implied adequately and fruitfully. In the context of business education failing to address the modern market demand on supply of matching skills, various opinions are offered to fix these problems. Based on literatures, the most important reasons behind the failure of business schools are presented below with suggestions and solutions.

2.6.1 Incompatible Knowledge /Theories

Business schools are found to be following the leading schools (Donaldson 2002), that results to uniformity of organizational characteristics. Because business schools are dealt from the perspective of conformity to certain ideology than any rationality (Markwell 2003), they are found to stress their focus on ritual activities (Fox 2003). As a core mission, business schools seek to improve education quality by providing updated knowledge, and they focus more on theories (Audebrand 2010). Specially, as the contemporary business schools are centered to their reliance on social science theories alone (Donaldson 2002), they lose the focus of its original connection between learning and doing. They are also decentralizing their focus from behavioral skills and actions taking to concept and tools (Larry, Bhambri and Thomas 2003). Similarly, they are found to measure success only based on monetary value (Ghoshal 2005). Likewise, the failure to lead the graduates toward corporate jobs are also believed to be result of business schools' adaption of inappropriate and self-defeating model of academic excellence (Bennis and O'Toole, *How Business Lost Their Way* 2005). Furthermore, they are also considered to be the result of their measuring tendency based on rigor of scientific research than the actual competence (Bennis and O'Toole, *How Business Lost Their Way* 2005). In conclusion, the miss-match of knowledge and skills are largely connected to the incompatible theories adopted by business schools.

Since the real business world is different and more complicated than portrayed in text books, business schools are suggested to develop measures of strategy formulation and implementation (Greiner et al. 2003), that suites the outer world. Instead of measuring success only based on monetary gain, they can start measuring success based on different metrics such as jobs created, employee satisfaction, carbon footprint, product quality etc. Similarly, if business schools start to focus on theories of value creation such as stakeholder theory (see: Freeman 1984) and stewardship theory (see: Davis, Schoorman & Donaldson 1997), the most criticized norm of self-interest (Ghoshal 2005; Khalifa 2010) of business graduates can be fixed. Business schools are suggested to start measuring their success based

on the competence of the graduates rather than the rigor of scientific research (Bennis & O'Toole, 2005).

In conclusion, the miss- match of skills are largely connected to the incompatible theories adopted by business schools and they are suggested to act on implying the relevant theories and knowledge.

2.6.2 Lack of Balance in Research and Teaching (Learning by doing)

Though the research and teaching complement each other academically, in most of the cases they are found to be conflicted. In many of the cases business school professors are found to care more about researches than teaching about new ideas (Chia et al. 2008), which seems to have a negative impact in dissemination of skills.

Learning by doing (Greiner et al. 2003) can be one of the relevant and practical setting for business students, by which they can sharpen their analytic abilities, intuition, judgement and behavioral skills (Christensen, Andrews & Bower 1973). Knowledge achieved through the cognitive effort of representation are helpful to students on becoming innovative, responsive and competitive (Chia et al. 2008). To turn the students more competent, the overemphasis on knowledge- by- representation in teaching and research is suggested to be replaced by knowledge-by- exemplification (Chia et al. 2008), which can be acquired by transmitting examples collected from different social practices, styles, demeanor, manners and culturally mediated predispositions through various practices. By implementing the knowledge-by-exemplification model, business schools can develop a better practice- base ethos as well. The successful balancing between teaching and practicing may solve the existing problem of skill acquisition and implementation.

2.6.3 Design Thinking of Problem Solving/ Implementation of Instructional Design Model

Modern business schools are found to increase their dependency on didactic teaching (Glen et al. 2014). Their focus has shifted from the role of becoming problem solvers (Jonassen 2000; Fox 2003), to embrace the tough scientific aspects of the curriculum that, comes at the expense of synthesis and design (Jonassen 2000). Similarly, business schools are forcing the students to solve well- structured problems (Bennis et al. 2005; Dyer et al. 2011; Waddock et al. 2013), which are inconsistent with the real problems of real business world. Because of this failure to prepare students to function in ill-structured problems, there is a big discrepancy between the learning and doing of students. Due to the differences in form, process and content, problem solving is not a uniform activity, thus creates greater challenges. Likewise, due to the differences in perception, variability of functions involved in problems, connectivity and relationship with the properties of problems, problem solving is becoming unique and challenging for business graduates (Jonassen 2000).

To prepare students for problem solving, business schools should integrate discipline based science to practice orientation approach (Jonassen 2000). Because different skills are required in different business contexts, instructional design model can be implied (Jonassen, Previs, Christy & Stavroulaki 1999), so that problems can be solved by divided into two groups. First, is well- structured problems which are taught inside the class room (Jonassen 2000) where students apply finite number of conceptual or casual models, rules and principles etc., to solve these problems. Second is ill-structured problems which are non-predictable or convergent, thus become complex in its nature and require the students to have the integration of several content domains and learning activities such as: problem context articulation, representation and space manipulations, case development, support to knowledge base construction and support to argument construction (Jonassen et al.1999). The second kind of problems are taught by letting the students face the real problems of business world. In addition, business schools should focus on preparing students to understand different dimensions of problems such as: problem type, problem representation and individual differences, so that they can handle any problems professionally. Moreover, problem solving requires students get familiar with social, cultural and intellectual value

(Jonassen 2000). The design thinking of problem solving model provides a unique approach for dealing with complex problems (Morrell et al. 2015) by incorporating the cognitive processes, which has been apprehended for its method, technique and sensibilities for problem solving (See: Boland & Collopy 2004; Brown 2008; Dunne & Martin 2006; Martin 2009). The implications of problem solving design may become a new mean to help students to be more innovative and creative while utilizing their knowledge and skills (See: Beckman & Barry 2007; Boni, Weingart, & Evenson 2009; Kimbell 2011; Liedtka & Ogilvie 2011; Morrell et al. 2015). Different problem types and recommended skills to solve those problems are represented in Table 4.

2.6.4 Teaching of Moral and Ethical Issues

Moral and ethical issues have been central in many academic researches for a very long time, and they are considered as one of the major problem in the business world. Business education has been objected for its omission/exclusion of ethics related courses (Giacalone 2004; Ghoshal 2005; Mintzberg et al. 2002), and they are also criticized for short term orientation. Besides, their prioritization of bottom line performance over the important societal outcomes etc., have been a subject of concern for a very long time. Similarly, business schools are blamed to let the students free from any sense of moral responsibility (Ghoshal 2005). Studies have concluded that business schools are propagating ideologically inspired amoral theories to its students, and they are failing to instill norms of ethical behavior (Ghoshal 2005); Mintzberg et al. 2002; Alajoutsijarvi et al. 2012).

Inclusion of ethics and moral related case studies and examples in the course books are some of the solutions to defend this problem (Giacalone 2004), however many universities have already started having specific ethics related course in their curriculum (Vaasa, 2016). Since, the role of business leaders (Furnham 2010) are directly associated in many of the ethical scandals and corporate collapses, business schools are suggested to teach the social cost of business and also to instill moral, ethical and professional standards in students (Alajoutsijarvi et al. 2012). Business schools (Higgs 2012; Mintzberg 2004; Baden et al. 2015) and professors (Chung 2016; Chung 2006; Giacalone 2004) have to accept the

responsibility of any bad leadership of its graduates on promulgating the questionable decisions and also to change the game of creating brilliant tacticians (Bennis et al, 2005) who make money without any transcendent responsibilities. Similarly, business schools are recommended to give up the teaching of path- without- heart, where business practitioners cheat everyone. Though various monitoring bodies like U.N. Principles of Responsible Management Education (PRME), and accreditation bodies like AMBA, EQUIS, and AACSB require the business schools to demonstrate the inclusion of ethics and sustainability related course in the curriculum (Baden & Higgs 2015), there are still spaces left behind. Moreover, the ongoing moral muteness (Chung 2016) of business schools on current unethical industry practices, diversity and social justice and equality etc., must come to an end (Morrison and Milliken 2000), as there is a risk that these bad practices are copied in most of the colleges as influence of leading colleges.

2.6.5 Failure to Address the Cross-Cultural Management and Diversity Management Issue

In the context of cultural diversity becoming integral part of the general community, workplaces and academic institutions, it has a profound impact on businesses. Likewise, cultural diversity poses a major challenge to academic institutions and professional organizations (Lewit 2003) as well. Students coming from different backgrounds (international students) do have different academic expectations (Lewit 2003), and due to the variation, they face various challenges like personal, linguistic, intellectual and transition issues. Moreover, students from diverse cultural background are found with low confidence in their ability to deal with real global business issues (Blasco 2009; Taras et al. 2013; Minor et al. 2013). In this situation, universities face two major challenges: first is to generate a meaningful exchange of ideas and interrelationships between culturally diverse students and second is to meet the educational need of all diverse students effectively so that the unified goals can be achieved (Lewit 2003).

To address the challenge of diverse group, business school professors must be inter-cultural in outlook (Hammer 2011; Johnson, Lenartowicz & Apud 2006), and suggested to have basic knowledge and understanding of different cultures. They must have the willingness to engage

with students of diverse backgrounds and by developing self-awareness and openness to different assumptions and values, teachers must instill the required knowledge and skills (Lewit 2003). Cross-cultural management (Minor et al., 2013; (Lewit 2003) also can serve as one of the prominent tool to address the problem of diversity, for which business schools are suggested to reform the business curriculum (Winkler & Bouncken 2011; Zander, Mockaitis & Butler 2012). Introduction of live cross-cultural experiences (Magnusson, Baack, Zdravkovic, Staub & Amine 2008) and cross-cultural training (Mintzberg et al. 2002) are recommended to be included in the course curriculum so that students can develop cultural intelligence (Earley & Peterson 2004), that support graduates to enhance the ability to grasp, reason and behave effectively in diverse workforce.

2.6.6 Neglecting the importance of Experience Based Learning

Another important failure of business schools is that they centralize their focus to concept and tools rather than behavioral skills and action taking skills (Larry, Bhambri & Thomas 2003). Students are not learning knowledge-in-action; thus, they do not have capabilities to turn their skills into a meaningful outcome. Similarly, there is a big gap among business schools and students on understanding the nature of knowledge (Chia et al. 2008) and knowing (Ghoshal 2005).

Since knowledge-in-action can't be achieved simply by text book reading and lectures, it requires a healthy dose of learning-by- doing, that involves plenty of trial-and-errors (Greiner et al. 2003). In this process of learning- by-doing, students are given ample opportunities to transform their cognitive knowledge in everyday behavior and long lasting skills. Similarly, the learning cycle of students (Kolb 1984:418), must include various processes of experiencing, reflecting, thinking and acting. Education practices that relies on direct experiences through case studies, videos and other means of illustrative activities like, Harvard's case study approach, industrial organization theory (Conner 1991), and contingency management strategy (Hofer 1975) are few of the examples, that supports students on understanding the real problems and design solutions. Likewise, international student exchange programs, internships and GVT are praised for the opportunities they

provide to gain such firsthand knowledge and experiences (Taras et al. 2013) (See: Chappell & Schermerhorn 1999; Clark & Gibb 2006; Gavidia, Mogollón & Baena 2005).

2.6.7 Weak Faculty Members and Ineffective Teaching

Shortage of qualified academicians (AACSB, 2002) has been a major problem ever since the foundation of business schools. This has been a continuous problem and due to the impacts of technological changes into businesses (Gelder 2003), business schools professors are failing to execute and implement the proper strategic decisions (Hor 2003). Studies have found that there is an increasing disconnectedness between business schools and businesses due to the lack of meaningful researches (Nino et al. 2010). On top of these problems, business schools are also facing the criticism for recruiting faculty members only based on their expertise in research and content knowledge (Larry et al. 2003) rather than their practice in teaching business and management issues. Because of this weak selection, students are compelled to be poor on analytical judgement (Audebrand 2010) and demonstration of necessary behavioral skills and ability to take strategic decisions (Arbaugh et al. 2009). Some of the faculty members are also found to be resistance to curricular changes (Morrell and Learmonth 2015), that eventually influence on skill acquisition by students. Likewise, the increasing workload (Ramsden 2003), time constrains (Mcphee 2003) and limited authorities (Hunt 2003) granted to professors are also related to the poor performance of students in real business world.

Though there are variety of ways prevalent in defining the effective practices on teaching business knowledge, scholars are yet to agree on a single accepted version of teaching (Stumpf et al. 1990). Overall, the past decades have seen upwelling of research based developments to identify best practices in teaching business related courses (Jorgenson 2011). One simple formula for effective teaching is that it must be driven by effective learning (Hunt 2003). To make it more meaning full, it must be accepted that the one who understands the weakness in learning can teach better (Stanley et al. 2003). The learning process of students remains ineffective, if teacher fails to enter the thought process of students (Hor 2003). The best professors are those who can extend the boundary of their classroom

beyond the physical measurement of walls and windows, and have abilities to engage students into their thought process of intellectual development (Markwell 2003). Moreover, in the learning process, the best professors consider bringing the outer world inside the classroom. Likewise, they inspire students to seek new knowledge and eventually produce great scholars who are learned than just educated (Hor 2003).

2.6.8 Failure to Implement Various Blended Learning Approaches

To absorb new knowledge, skills, attitudes and behaviors, students must have ample opportunities to practice different responses and evaluate their effects (Hu 2009; Kolb1984). Business schools are found to be focused on their traditional method of content delivery and thus fail to address the modern need, where students must be able to integrate various approach on solving business related problems.

As a new idea for pedagogies, curricula and institutional cultures, integrative vision is important and can be emphasized (Nesteruk 2015) to the business education where various technologies like images, audio-visual contents, graphics and interviews etc., can be used. This integrative vision focuses on blending business education with the liberal learning by usage of digital storytelling that connects humanistic thinking process and curiosities (Ross & Rosenbloom 2011). This approach also focuses on development and enrichment of narrative competence required by the business graduates for their future professional life. Similarly this approach is helpful to the faculties (Ross & Rosenbloom 2011) to: a) explore the full opportunities for thinking, learning, communicating, and using technology in related areas, b) teach more effectively to achieve more productivity, and c) accommodate the learning needs of students. Though, it has been a challenge to properly define the concept of blended learning environment, (Bonk and Graham 2006; Garrison and Vaughn 2007; Picciano and Dziuban 2007), the consensus is that, this concept integrates online learning with traditional face-to-face activities, with an approximate 20 to 79 percentage of course contents delivered online (Garrison & Kanuka 2004; Allen et al. 2007; Picciano 2007:39; Arbaugh et al. 2009). Over the last decade, it has received an increasing attention among

scholars and practitioners for the theoretical and methodological rigor of studies related to online learning in business. This interest establishes the possibility of online learning as an effective medium for the delivery of business education, particularly relative to other business disciplines (Arbaugh et al. 2009:46). Similarly, GVT and GVT based- projects can assist in effective teaching of management practices by providing an excellent opportunity in the learning cycle. In two separate collaborated project between U.S and Chinese International marketing students, the group involved in GVT found it more assistive to understand the relative concepts and theories, whilst the other group without GVT complained for the complexity on understanding (Hu 2009:417). In the context of students having slightly different background in terms of courses taken, work experience, and so on, this method is believed to further facilitate a broader range of new information to be shared, transferred, and assimilated.

Besides these abovementioned ideas, business schools have other many areas to improve so that they can act effectively on their role of knowledge creation, identification of skill and its dissemination to the students.

The integration of sustainability in business education is one among the most prominent issues, and has been emphasized more than ever before (Akrivou et al. 2015; Audebrand 2010; Walck 2009). Though, the integration of this subject in business education is challenging, because of its abstract nature, the business schools need to act fast and efficiently. Since this issue of sustainability consists of technically complex topics such as climate change, energy conversation, biodiversity etc., the immediate benefits are not realized yet, though can't be rejected. To ease the complexity of integrating sustainability related issues, new frameworks such as simulations and analogically situated experiences, embodied metaphor workshops, case method teaching, class or group discussions etc., are possible interventions.

Similarly, responsible management also demands attention from business schools and scholars. The irresponsible behavior demonstrated in the businesses are creating devastating

results, which are usually result of negative leadership or destructive leadership (Schilling 2005). The irresponsible management can be a result of individual behavior or collective behavior, but the influence of business schools can't be denied on demonstration of such behaviors. Since, good management contains the ability to recognize the dark side of management, business schools must be able to identify them in advance and they must develop certain measures to deal with it (Gary 2005).

2.7 Summary of literature Review

The literature review presented above included the main themes related to knowledge skills, and abilities by keeping the matching skills in the central focus of the study. To understand the significance of matching knowledge and skills, demand and supply of matching skills are evaluated from the perspective of business community and business schools respectively. While, knowledge and skills are presented as the product of business schools, matching skills are considered as the significant contributor to the contemporary business community. Literature review also identified the existence of miss-match of skills and provided guidelines to fix those problems.

Supporting the first theoretical objective, it pointed out the most emphasized issues related to supply and acquisition of skill in the business literature. Literature review not only presented the list of skills emphasized for the successful business operations but also presented the most common mistakes followed by business schools. In the context of business schools focusing more on specific business skills and strategic skills, literature review revealed the fact that cognitive and interpersonal skills are equally important. Not only that they are the most demanded in the businesses but also, they play supplementary role to business skills and strategic skills. Communication skills, negotiations skills, problem solving skills, decision making skills, analytic skills, people skills etc., are highly emphasized along with other specific skills like networking skills, leadership skills, presentation skills, multitasking skills, critical thinking skill etc. The weaknesses of business schools on

development and dissemination of skills related to the weak curriculum and improper communication between the business community. To the greater extent, the miss-match in skills are found to be the result of business schools' failure to implement the best practices on skills transference. The miss-match of skills are found to be the result of business school's negligence toward various important issues like ethical and responsible management, and sustainable management etc. Similarly, business schools' failure to employ the best faculty members, and lack of integrated approaches are responsible for the result of miss-match of skills. Even though, demanded skills are included in the curriculum, in most of the context, the weak delivery approaches are major obstacles for the skill transference. Because of the failure to imply different modules and practices in the instructions process, graduates do not acquire the necessary skills and fail to execute them in the real professional world.

To support the empirical analysis of the study and answer the research question, it is crucial to outline the purpose of this study and present the framework as well. In this study, the relationship between business schools and businesses are established on the basis of exchange of promises and expectations. Here, business schools are presented as offeror, who supply business skills and relevant knowledge to business community to support on their growth and success. The matching skills have been presented as one of the connecting tool between these two players.

The framework presented in Figure 2 is developed by keeping skill in the center of the study. Though, various resources divide skill into various categories, for the simple understanding and clarity, in the first layer, skill has been divided into specific and generic skills. Then the specific and generic skills are divided into subgroups, which include most of the demanded skills in businesses. Repeated practices, working memories and knowledge are presented as the source of skills, where knowledge specially reflects to the business education in relation to this study. However, repeated practices and working memory are significant source of skills, due to the scope of this study, they are not elaborated purposefully. The skill utilizations are performed in the businesses. If the knowledge and skills acquired matches in

the businesses, one becomes competent, otherwise the utilization of skills and knowledge just turns into incompetency. The match of skills is related to the success and growth of business, whereas the miss-match of skills are related to the failure of the businesses.

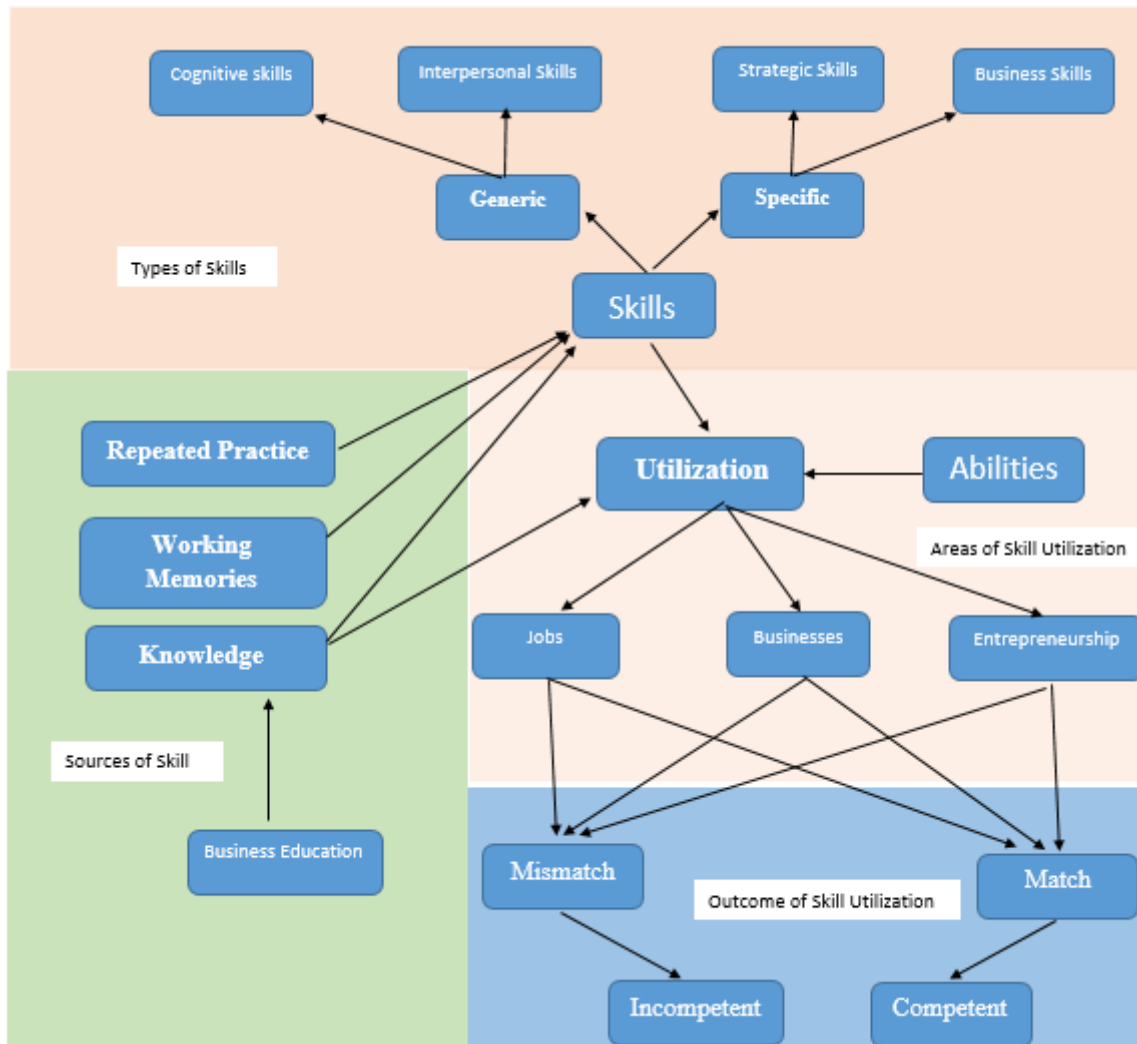
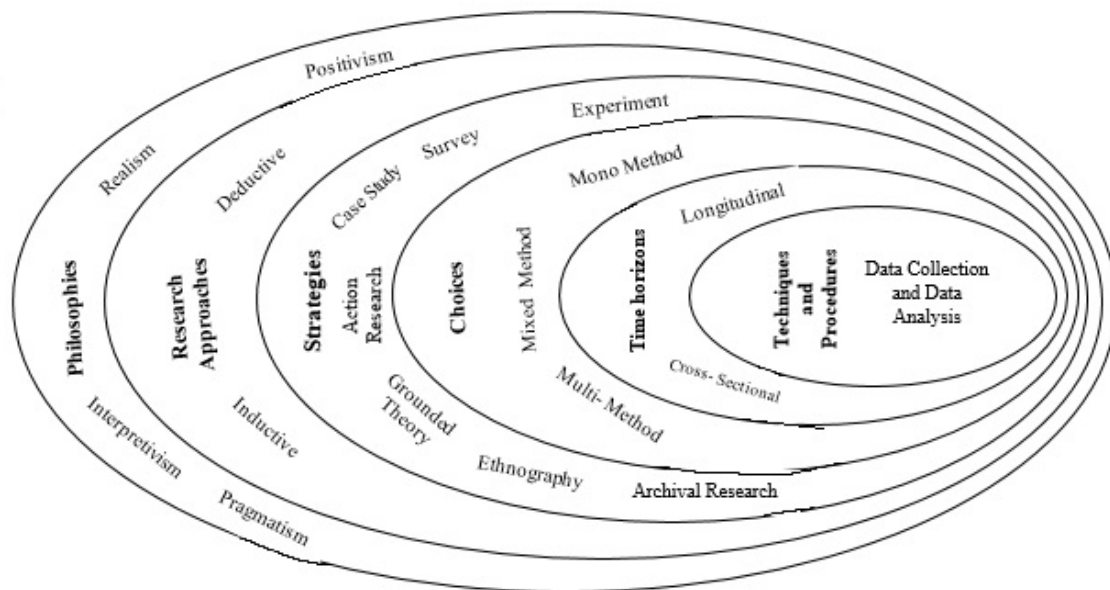


Figure 2 Theoretical Framework

3 RESEARCH METHODOLOGY, DESIGN AND DATA ANALYSIS

The usage of best research practice and the logical research methodology are essential tools to answer the research question. These tools also support on systematization of the research process and validate it as well. Researcher can decide on appropriate research methodology that focuses on answering the questions that one has defined (Creswell 2013:3), and “research onion”, that is presented in Figure 3, as presented by Saunders, Lewis & Thornhill (2009), helps to understand as well as on making decision on the selection of research methodology.

Figure 3 Research Onion (Saunders, Lewis and Thornhill 2009)



3.1 Research philosophy

Since the choice of the research philosophy contains the assumptions that assist on underpinning the research strategy and the methods, it is important for business researchers

to be aware of philosophical commitments. The philosophical commitments made throughout the choice of research strategy has significant impact on understanding and investigation of the research topic (Saunders et al. 2009:108). The right selection of philosophical position along with other possible choices offers researcher a possibility to collect and analyze empirical data and validate the findings as well. Saunders et. al (2009:109) offers four philosophical positions which can be used to develop knowledge: a) positivism, b) realism, c) interpretivism, and d) pragmatism.

Positivism seeks to develop hypotheses using existing theory which are later tested and confirmed by further researches, whereas realism seeks scientific enquiry through continuous research for the development of knowledge by implying several new methods. Another research philosophy: interpretivism, seeks to understand human action from the eyes of actors by emphasizing toward understanding of subjective meaning. Likewise, pragmatism seeks to understand research from varieties of methods by using multi-sided views and analysis techniques. (Saunders et al. 2009:106-115)

Given that, four types of research philosophy can be adapted to conduct the study, this study is conducted from the pragmatic stand point.

3.2 Research approach

Inductive and deductive approaches are two main identified approaches used in any scientific research. Inductive approach is also known as “building theory” approach which formulates a theory whereas, deductive approach is known as “testing theory” which formulates a set of hypotheses to be tested (Saunders et al. 2009:124-127).

The selection of right research approach is based on different criteria such as research topic. The selection of inductive approach is used when plenty of literatures are available. Similarly, in the inductive approach, hypotheses can be defined as well as, a theoretical framework can

be designed, whereas in contrast, the deductive approach is used when not much literatures are available. Moreover, the deductive approach is used in newer research topic.

In an alternative, a combination of inductive and deductive approach, commonly known as abductive approach that, can be used in research which starts from observation and aims to offer the simple and appropriate explanation to develop the theory. (Saunders et al. 2009: 127).

With an aim to answer the research questions and objectives, this study follows the inductive approach to build a theory based on the research questions and objectives.

3.3 Research strategy

According to Saunders et al. (2009), research strategy is a general plan used to answer the research question and to meet the research objectives. The selection of right strategy in research enables the researchers to balance the coherence and helps them to answer their research question by linking with research philosophy and methods used.

Authors mention seven basic research strategies which are: i) experiment, ii) survey, iii) case study, iv) action research, v) grounded theory, vi) ethnography and vii) archival research. These research strategies can be used in any of kind of research, be it exploratory, descriptive or explanatory. Moreover, either inductive or deductive approach can be implied in these research strategies.

Among all these aforementioned research strategies, this study is a grounded theory that attempts to construct the theory through the analysis of data. This study begins with a question and collection of qualitative data. The collected data are reviews and then tagged with extracted codes into various categories, which are ultimately based for the development of new theory.

3.4 Research design

The overall aim of this research is to understand the match and miss-match of skillsets in the contemporary business world. To understand these match and miss-match of skills, content analysis method was selected.

Content analysis is a commonly used technique to systematically describe the quantitative data derived from written, spoken or visual communication sources (Forman & Damschroder 2007). Most of the content analyses involve media like print, television, videos, movies and the internet (Mayring 2000), which can be recorded and reviewed. In most of the cases this technique is also used to analyze new material recorded by researchers (Hsieh & Shannon 2005).

Content analysis has become umbrella to boundless set of diverse research and approaches and techniques, which is used to study or to retrieve meaningful information from the sources of information in a very focused way. This kind of research also refers to a family of technique to study the “mute evidence” of texts and artifacts (Forman et al. 2007).

3.5 Data collection

Data can be obtained from two sources: primary and secondary. Any data obtained from first hand investigation is called primary data, which is also known as original research. Information collected from interviews, experiments, analysis, observations, surveys, questionnaires, focus groups and measurements etc., are primary data, whereas information obtained from secondary sources in forms of publications, journals, newspapers and previous researches etc., is known as secondary data. Secondary data is mostly obtained from another party (Forman et al. 2007).

Data collection plays a vital role in the research process. Collection of inaccurate data results to invalid findings. Since collection of whole available data and analyzing them is not possible in every study, a sample is selected to represent the total population. Sampling is a valid alternative of a census and can produce equally useful results. Due to impracticability of surveying the entire population, time constraints, budgetary constraints and the need of faster results, various sampling techniques are used on data collection. (Saunders et al. 2009:210-253)

According to Saunders et al. (2009:213) there are two main types of sampling: i) probability sampling and ii) non-probability sampling. Probability sampling is also known as representative sampling, where the chance of chosen sample to represent the entire population is known already and remains similar for all cases, whereas in the non- probability sampling, which is also known as judgmental sampling, the chance of each case being chosen remains unknown. Similarly, probability sampling is most often associated with survey and experimental research strategies, whereas non -probability sampling is associated with research projects and pilot surveys etc. Probability sampling seeks to avoid the sampling bias whereas, because of the subjective decision used by researchers, the non- probability sampling techniques may be biased. Both sampling techniques have their own advantages and disadvantages, which can be justified by the nature of the study to be conducted (Cooper & Schindler 2006: 407).

The non-probability sampling technique fit best for this study due to some of the practical considerations (Cooper et al. 2006: 423) such as the generalization is made to theory rather than the population and the dependency of sample size is on the research question and objective (Saunders et al. 2009:233). Moreover, since the data of this study is qualitative and the judgements made on sample selection are subjective (Saunders et al. 2009:233), this study uses purposive sampling. The study contains relatively small samples which are informative in nature.

Analyzing each subject and their predicted outcomes is time consuming and complicated, thus university handbook for specific programs are valid source of information on identifying the skills that any program intends to transfer to its students. Similarly, the university webpage also outlines its programs and learning outcomes through its different programs to its prospective students. As a source to understand supply of skills from business schools, few universities are manually selected. To make it more relevant to the study area and subject of the researcher, strategic management related courses are selected from universities in Europe: University of Vaasa (Finland); Aalto University (Finland), Rotterdam School of Management (The Netherlands), Norwegian School of Economics (Norway), Halmstad University (Sweden). Similarly, for the wider representation, Harvard School of Business is included in the data collection process. Because of the limited numbers of skills mentioned in the university programs, course details are looked through and analyzed to identify the skills as promised by business education.

The primary source of data for this research is internet based web pages of different companies that are involved in recruiting the business students for different positions. Web platforms like LinkedIn, Monster, Experteer, Indeed, Ejobs and Addeco are the major sources of business community related data. The data related to this research are collected via using keyword hunting method in job portals and individual companies' web pages. Since the data collection is related to Finnish Market, while searching the business related jobs, google translate has been widely used to understand and translate the key skills posted in the job requirements. Since numbers of the job posting were in Finnish language, some basic key words were used in Finnish as well, though, English is widely used during the search process. The list of key words are presented in Table 6. While majority of the search are based on key-word search, few of them are based on manual selection and automated recommendations. Some of the jobs were even selected on the basis of personal influence, where name and fame of the companies were used on the base of personal intuition and impressions. The data collection process lasted from October 1, 2016 to October 31, 2016.

As, this study focuses on identifying the match and miss-match of skills between business schools and business community, majority of the data is related to the skills demanded by the job postings. Though some of the job postings elaborated demanded skills with exact terminal words, majority of the job postings used those skills in intended format blended in the sentences, which means during the data collection process, the data collector had to refine and identify the intended meaning of the words instead of directly quoted skills. The sample of job opening is listed in appendix.

3.6 Data analysis

According to Shamo & Resnik (2003), data analysis is the systematic process of applying statistical and/or logical techniques to describe, illustrate, and evaluate data. Data analysis process is one of the many steps completed during the conduction of research experiment, where data from all relevant sources is gathered, reviewed and then finally analyzed to form a finding or conclusion. Improper data analysis falsifies the scientific findings and contains the possibility of misleading casual readers (Shepard 2002), thus this plays a crucial role in any research. In additions, the wrong selection of data analysis method may negatively influence the public perception of research as well, as the result validity is directly related with the data analysis method.

The specific method of data analysis to be used in specific research is determined by the approaches taken during the research process and the form of data collected, various specific data analysis methods like data mining, text analysis, business intelligence, data visualizations etc., can be applied for different kind of studies.

Multiple Excel sheets and multiple workbooks have been used to tabulate and analyze data. Pivot chart and other chart makers are used to display data in chart so that the data can be analyzed and explained easily. Formula generators were used to convert the percentage,

generate the count and repetition of the data. Overall, Microsoft excel has been the major single source for the data tabulation, analysis and result drawings.

3.6.1 Case descriptions

To identify the skill demand in businesses, this study selected total of 125 job postings announced for the functional area of business and management, but later due to the repetition of jobs in different portals, six job posting were removed to avoid the duplication. The selected jobs were collected from various job portals including LinkedIn, Monster, Addeco, Experteer, and independent companies. With the representation of 33 different industries, the data included 107 different companies and 101 different job positions. The jobs are divided into three different levels depending on the verities of experiences and knowledge demanded in each job. To understand the match or miss-match of skills, the collected skills are compared against the skills majorly addressed in business literatures and selected universities.

The data collection concentrated mainly on of skills demanded by each position, however, to establish extensive relation and for proper analysis and data reliability, other variables were also included. The inclusion of other variables also supports to establish relation of skills to other influencing factors such as job levels, companies, industries etc. The brief explanation of each variables is presented below:

The summary of data collection is presented in Table 5.

3.6.1.1The job level

Though the level of jobs is defined differently by the industries and specific businesses, three common level of jobs are used to categorize the job posting during the data analysis process of this thesis.

First is entry-level jobs that basically requires no job experiences however in some of the cases they demand up to two years of experiences in any or related field. This job-level requires the employees to have some Bachelor's degree or equivalent, however, related academic degree does not seem to be a compulsive requirement. The employees in this level are believed to have some fundamental concepts, practices and procedures of specific field or work and are supposed to work using established procedures usually working under immediate supervision. Especially routine- based work is common and usually employees are assisted by instructions. Evaluation process are little and no specific originality or ingenuity are required. Moreover, the responsibilities are very limited and reporting is done to immediate senior level.

Depending on the complexities of work, the requirement of professional experiences may vary from two to eight years in the second level of job, which is defined as mid-level in this thesis. This job-level demands the high level of knowledge in the related field, thus masters or equivalent is expected academic qualification. Employees are supposed to possess a broad knowledge of principles, practices and procedures in the specific area of duty. In addition, employees are required to have the ability to complete difficult assignments with minimum supervision, where planning, conducting and supervising assignments are routine. The progress and results are frequently evaluated. Moreover, tasks are usually broad in nature that requires originality and ingenuity. Job reporting is usually done to the top-level and contains high level of responsibility.

The high-level jobs are the highest position in career ladder and requires the higher degree of knowledge of principles, practices and procedures in related field of area. Usually the professional experiences may range from five years plus to any number of years. Expertise in the specific field is one of the most essential credential. In addition to the higher academic degrees, this level seeks more of related trainings in related field and demands proven records of accomplishments with sound experiences on organizational leading etc. The employees of this level usually hold positions like CEO, GM etc., and they are credited for the success or failure of the company.

3.6.1.2 Job Positions

The job positions in the context of this thesis refers to all the vacant job positions that are announced via the online platforms selected. Any specific job positions related to the field of businesses, that need to be filled by potential employees at any businesses are understood as job positions, which means the company is actively recruiting for the specified positions. 119 different job positions have been selected for this study, which is presented in Table 7.

Job positions vary depending on industries and nature of jobs as well. Generally, different job positions have different job functions, however, they may have similar responsibilities and line of duties. To identify the demanded skills in the businesses, job positions are used as the primary search criteria. 101 different job positions have been identified in this study, which are presented in Table 7.

3.6.1.3 Job posting companies

In the context of this thesis, companies involved in active recruiting for vacant positions in the field of business or management are known as job posting companies. There are total of 107 different companies studied during the data analysis process, which fall into different industrial categories. The list of jobs posting companies is presented in Table 8.

3.6.1.4 Industry

Industry is a classification that refers to the groups of companies functioning in the same related primary business activities. For this study purpose, the industry categories are referred according to the Harvard Business School (2016) manual for industry categorization. Out of 53 listed industries, this study has representation of 33 industries. The list of industries is presented in Table 9.

3.6.1.5 Required skills

This thesis intends to compare the supply and demand of skills to identify the match and miss-match of skills between business schools and business community. To achieve this

objective, various academic literatures and business school manuals are used extensively to identify the supply of skills.

Required skills connotes to all the skillsets specially demanded by the company involved in recruitment process. The definition of skills and related terms have been already presented in earlier part of this report, so to avoid the duplication, the definition of skills is skipped here. This study found the demand of 99 different skills in those 119 job openings. The list of required skills is presented in Table 10.

3.7 Reliability and validity

The quality of any research is measured by the reliability and the validity of data. Reliability of the research finding indicates the consistency of results on multiple testing. Similarly it is also related with the replicability of the process, where the result of one researcher is similar to the result of other researcher/s (Kothari 2004:65).

Another most important criteria for research is its validity (Kothari 2004:74), which can be defined as the accuracy of the finding as well. This accuracy of finding can be measured by implying certain procedures to find out if the research is accurate from the standpoint of the researcher, the participants and the readers as well (Creswell & Miller 2000).

The finding of this study is reliable due to the fact that data is collected from reliable sources and would yield the similar results in case the same job postings are analyzed in future. Because the data coding has been handled by a single coder and by using a single standard tool, there is a very minimum risk of data misinterpretation. Similarly, so to maintain the data uniformity and to make the finding reliable, data collection and tabulation were done within limited and designated time. Likewise, to make the study more reliable, related data has been explicitly elaborated and documented in excel sheet. In terms of validity, the result may differ, given the chance that the nature of jobs may change and there is also a great chance

that the demand of business world may change due to unprecedented change in requirement. However, the chance of data error and bias was avoided by acquiring sufficient information related to the job postings. The challenges remain due to the nature of job description, where the skills are implied rather than directly quoted and majority of data are translated and interpreted in relation to the skills. Due to these mentioned reasons, despite of the validity of the study, the chances of slight variations can't be denied. Some variations may occur; thus, the validity of this study depends on the specific time and situation.

4 EMPIRICAL FINDINGS

The empirical findings of this study address several aspects related to skill match and miss-match in the context of modern business schools and business community. The results are discussed on the basis of key findings derived from the literature review and data analysis. The research questions are answered based on theoretical framework which was constructed after the literature review.

4.1 Core issues related to skill match and miss-match

Based on academic literatures, some of the most important issues related to match and miss-match of skills are related to the process of knowledge creation itself. Incompatible theories mostly are the reason behind business schools failing to produce the matching skills as skills are directly related to the knowledge. Similarly, updated knowledge provides right information correspondent to the demand of contemporary market which supports on modification and reformation of course content to transfer adequate skills to the students. In case of schools not maintaining the balance between research and teaching, students don't get opportunities to acquire new or important skills. Since, acquisition of skills and utilization of skills are different terms, students must be prepared for the proper utilization of skills, by which they can turn themselves into competitive workforce. Business schools, besides transferring skills to students, must also prepare them to use them at the time of need, for which students must be given knowledge about the cross-cultural issues, sustainable management etc. In addition, business schools must focus on ethical and moral issues, and they also need to teach the students about responsible management. All these can be achieved if the business schools have brilliant faculty members, who can transfer the skills by involving them into the practical process of knowledge and skill acquisition. Guiding students through various activities like: problem solving process, learning- by- doing or knowledge- by- implementation, students get better on skill acquisition and utilization. New

teaching processes must be used to effectively disseminate the skills to the student, where GVT, virtual learning, blended learning, cross-cultural learning etc., can be utilized as a mean of skill and knowledge transfer.

4.2 Skill demand and supply

For the better evaluation and analysis of the match and miss-match of skills, it is relevant to understand the demand of skill at first, so that they can be compared to the supply of skills. For this purpose, the demand of skill from the perspective of businesses will be presented and then evaluated against the supply of skills from the perspective of business schools. Finally, the match and miss-match will be evaluated based on the gaps identified between demand and supply.

4.2.1 Skill demand

The review of relevant literatures suggest that businesses have a greater influence on business schools. They have played a dominant role in the development of business education in past and have meaningful influences in present. Business schools and business community have reciprocal relationship as they both depend on each other. Businesses need specific tools and skills for their operations, which are communicated to the business schools whereas, business schools by understanding the needs of businesses, develop various programs. These programs are focused on specific area of businesses so that they can develop specific skills required for the concerned functional area of businesses. The skills needed for the business community, thus are found to be directly or indirectly conveyed to the business schools. Furthermore, various literatures suggest that the universities support business community on identifying the required skills by conducting various related researches.

The study identified 99 different skills demanded by various companies and industries, which is presented in Table 10. Communication skill is one of the most demanded skills by the industrial sector, followed by analytical skill, interpersonal skill, leadership skill and language skill. Out of 33 industries, communication skill is demanded by 63.6%, whereas analytical skill is demanded by 36.3% of industries. Similarly, interpersonal skill is demanded in 30.3% of industries, leadership skill in 21.2%, and language and sales skills are demanded in 18.18% of different industries. The 15 top skills on demand by the industrial sector is presented in Figure 6 .

The minimum number of skill required for the job positions was one, whereas the maximum number of skills required for the job position were 10. The average demand of skill is 3.6. 5.9% of total jobs require only one skill whereas 23.7% of jobs require four different skills. Similarly, only 0.8% of total job require more than eight different skills. There was no single job that would deny the skill requirement. The distribution of jobs and demanded number of skills is presented in Table 10.

Information technology is leader in demanding the highest number of skills for its different positions. Consulting, manufacturing, service and food & beverage industry are other top five industries in this category. The distribution of demanded skills by the industries is presented in Figure 6.

Nokia remains at top to demand the highest number of skills. Fazer services, Wartsila, Wipro and Microsoft follow Nokia for the numbers of skills demanded. Nokia remains in top with 10 different skills demanded, while the average demand is 3.6 numbers of skills. There were total of 7 job positions demanding only one specific skill. Similarly, there are 30 different types of skills that are in demand by any single position, which means 39.47% of identified skills are not demanded by any other industries or jobs, but fits for some specific job, position or industries. The distribution of companies on their demand on skill is presented in Figure 7.

46% of the jobs does not specify what level of knowledge they want from their applicants. 18% of the jobs are announced for those who have Master's degree. 2% of the jobs demand the applicants to have masters or higher, 3% of the job wants the applicants to have MBA and Engineering, whereas 1% of jobs require the applicants to have at least a master's degree and a PMP certification. Similarly, 13% of the jobs are for those who have at least Bachelor's degree, whereas 13% of the jobs prefer the applicants with bachelors or higher. The distribution of knowledge demand is presented in Figure 8.

51.43% of the jobs require the applicants to have several years of experiences. 30.25% of the job postings did not specify if they require any experiences or not. Similarly, 10.9% of the jobs do not require the applicants to have any experiences. Only 4.3% of jobs require high level of experiences from the applicants, whereas 17.14 % of applicants are expected to have experiences between 5 to 10 years. The demand of experience is presented in Figure 9.

The study finds that Project Manager as one of the most demanding position in terms of skills with 15 different skills asked from job applicants. The top followers in this category are business analyst, practice manager, quality & reporting manager and account executive. The top 15 positions demanding the highest number of skills are presented in Figure 10.

Information technology leads the job market with the highest number of vacancies. 15.96% of total analyzed jobs are from the information technology industry alone. The other leading industries providing employment opportunity are consulting (9.24%), employment (5.88%), services (5.88%) and construction (5.04%). The distribution of employment opportunities by the industries is presented in Figure 11.

4.2.2 Skill Supply

The supply of skill depends on demands made by the businesses. In addition, various national and international agencies play a dominant role on shaping the business schools as they supply the data related to skills demand and supply as well as the business patterns. As

mentioned earlier, businesses directly or indirectly influence business schools for the development of knowledge and course content, so that they can support the businesses. However, majority of the business schools are found to follow the demand created by business community, they identify the futuristic model of businesses by various researches. Business schools study the pattern of changes in businesses, so that they can predict the required skills or techniques for businesses of future. Similarly, business schools are found to be supported by government agencies on skills identification. Various government agencies provide the data related to the emerging or mostly demanded skills to the business schools, which turn to be a major milestone for business schools to launch the specific programs with an aim to supply required skills. In this context, business schools apprehend the demand of supply by two means: first by establishing a communication to the business community and second by involved in extensive researches.

University of Vaasa promises to offer key theoretical knowledge, practical insights and key business skills to its students so they become professional in the field of business. *This business school focuses on communication skills (oral and written), analytical skill, interpersonal skill, decision making skills, business skills, strategic skills and information technology skills in its program.* Likewise, business skills and strategic skills are delivered through different course contents. Aalto university, School of business for its Masters' program in strategy has its focus on methodological skills, critical and analytical thinking skills, problem solving and decision making skills.

As a theoretical approach to resolve the hardest decisions that any multinational executives must make while building international strategy for global success, Harvard Business School, focuses on strategic decision making, analytical thinking, negotiation skills, presentation skill and communication skills in its program. Similarly, with focus on strategic analysis, strategy formulation and strategy implementation, Rotterdam School of Management intends to make its program most applicable and highly marketable qualification. The program focuses on strategic decision related skills along with presentation skills and finance related skills to its students. Likewise, Norwegian School of Economics focuses on managers' ability to develop

business on making it efficient and competitive by making them social corporate responsibility. The program focuses on value creation and competitive advantage of the company and thus, emphasizes on skills like financial analysis, public relation, strategy development, problem analysis along with communication skills. With the focus on leadership skills, Halmstad University offers its masters in strategic management and leadership program for the students who expect to get involved in strategic management and leadership area. The course aims to disseminate skills like strategic planning, analytical skills and cultural skills.

4.3 Skill match and miss-match

The finding of data analysis reveals that communication skills, collaboration skills, creative thinking skills, problem solving skills etc., are the most demanded skills which are highly emphasized in literatures and prioritized by the business schools. Diversity management, leadership skills, cooperation skills, negotiation skills, organizational skills, and people skills etc., are found to be weakly implemented by business schools in their programs, though they are highly emphasized by the literature and on high demand in business community.

The review of literatures suggest that moral, ethical, sustainable and responsible management are most important skills any business schools should focus on. However, most of the business schools include ethical business related course, the finding suggest that the business community does not demand the ethic or moral related skills in their job openings.

The comparative analysis of literature review and data collection shows that there is an existence of match and miss-match of skills between business schools and business community.

In the data collection process, it was found that a single university does not mention every skill in its manual, so evaluating the match or miss- match based on any one business school

seems to be irrelevant. Combining multiple business schools and multiple programs however, may give a concrete result. Similarly, different universities have different focus on skill supply as they define the learning outcome differently. Even though the overall nature of the programs is similar, there are differences on core functional or operational objectives. Because of these mentioned reasons, a disparity between universities is clearly visible when they identify various skills as their learning outcome. Moreover, even though the universities offer various courses, and each course has its own specific learning outcome, universities do not define each outcome in its course content. Similarly, each course is designed to deliver related knowledge and skills, however, they are not individually listed. Likewise, numbers of skills are transferred through various activities like assignments, group works, presentations etc. Based on the data evaluation, the table below presents the match and miss-match of skills between business schools and business community.

After a thorough analysis of the demand and supply of skills in terms of modern businesses, it can be concluded that there is a match between demand and supply, however, the miss-match of skills is also prevalent where business schools need to focus. In a nutshell, there is a match in some of the highly-demanded skills, whereas, there is a miss-match in plenty of skills demanded by business community. The match and miss-match of skills are presented in Table 3.

Table 3 Match and Miss-Match of Skills

<i>Matching Skills (Based on course listing, In-class activities and other assignments)</i>	<i>Miss-Match of Skills (Based on course listing, in-class activities and other assignments)</i>
Communication skill Report writing skill Strategic Planning skill Strategic Thinking skill Analytical skill Project Management Product Management Management Accounting skill Operation skill Methodological Skill Sales skill Marketing Skill Financial Modeling skill Accounting skill Creative skill Conceptualization skill Interpersonal skill Partnering skill Effective listening skill People skill Cooperation skill Interaction skill Cross-cultural management skill Diversity management skill Social skill Leadership Skill Cooperation skill Social Skill Team Management Case Development Skills Media Skill Social media skill	Public Relation skill Influencing skill Collaborative skill Consulting skill Public procurement skill Negotiation skill Motivational skill Influencing skill Assertive skill Virtual team management skill Technology translation skill Public procurement skill Pragmatic Skill Technical Skill Relationship Management Tolerance Skill Customer Service Skill Cross functional management skill Multitasking skill Decision making <i>Organizational skill</i>

5 CONCLUSION

It is imperative to note that business schools design their program according to the recommendations made from different businesses as well as other related agencies. Similarly, they conduct several researches on identifying the required skills for the businesses in present and future. If we apprehended the mentioned facts and compare the demand and supply of skills, there is a match in skills dissemination between business schools and business community. The findings also suggest that businesses expect the graduates to be decorated with numbers of related skills. Similarly, it seems essential for today's graduates to acquire competence and experiences in translating complex cognitive knowledge into everyday behavior and lasting skills. In this context, the balance between expectations made by business community and promises made by business schools seem to have a widening gap with the existence of miss-match in skills.

In the context of businesses expecting their employees to be decorated with all required skills, business schools are in immense pressure to address the gaps. The identified miss-match of skills is mainly found to be result of business schools' weak curriculum and practices as well as the limited scope of individual business courses. Similarly, the quality and ability of the student themselves also matters in the process of skill acquisition and utilization. There is a great chance that students from same business school or program may have variations in terms of acquired skills. Similarly, the curriculum, the overall strategy of the institution, size and nature of the classes, assessment programs, feedback provided by mentors, the availability of learning resources (Mcphee 2003) etc., have greater influence and impacts on how skillful students become (Hunt 2003). However, it depends on business school what kind of skills they want to provide to their students, the learning and development of skills may depend on various factors including their learning approach, aptitude and motivation of student (Stumpf & Dunbar 1990). In this context, in addition of enlisting skills in their programs, business schools should focus on other issues like: shifting its focus on teaching process rather than learning outcomes, by the usage of intensive debate, discussion,

independent thinking and communication etc. Since, the individual business courses are designed to disseminate specific related knowledge and skills, they possibly can't address each skill on demand. Due to the demanding nature of jobs, businesses require the candidates to have multiple skills, which seems impossible for an individual to gain immediately after their graduation. The demand on experiences also suggest that individuals learn various skills during their tenure gradually. However, seems difficult, business schools must initiate to match the most demanding skills, so that they can reduce the widening gap. Regardless of the differences in the business courses, business schools must ensure that the graduates acquire the most demanded skills, for which they must play an important role to assist graduates on skill acquisition and utilization. Business schools can establish a connecting relation with business community, so that students can practice their learned skills outside classrooms to become a better leader. To achieve the goal of reducing the existing gap and increasing the match of skills, they must redefine their focus toward combinations of different dimensions including strategic focus, student composition in program, input of institutional resources, curriculum, faculty, program and institutional climate, learning outcomes of the students, etc. Remodeling the curriculum is recommended, (Giacalone 2004) so that the miss-matched skills can be included, however, it is difficult to create the pedagogy that addresses each and every concern. Faculty members also play a central role in the dissemination of skills in addition of adding value and contributing to the academic integrity, (Porter & Mckibbin 1988), that's why business schools need to focus on recruiting "a guide on the side rather than a sage on the stage", who can inspire students by the experiences and lessons (Trigwell 2003). Moreover, business schools need to focus on recruiting the faculty members who make students hungry to learn more than making them fall asleep (Hor 2003). Similarly, time allocated for consultation and feedback to each student also has a great impact on students learning skills (Pether 2003). Likewise, selection of faculty members must look for the "star quality" (Stanley & Porter 2003) in the faculty members, who can build rapport through various techniques like humor among the students so that the connection can be established with the students. They are recommended to involve myriad of teaching strategies like problem - based case studies, pair-share activities, role-play, simulations etc.

In the context of identified miss-match, if viewed from the institutional theory lens, the problem of one business school can be generalized to the other business schools as they function similarly with common business structure. But, in contrary, if we look at the business school from the lens of resource based view (RBV), one business school can perform differently than other business schools (Jay Barney 1991; Kraaijenbrink, Spender & Groen 2009), if they select different assets and capabilities. Toward addressing the match and miss-match, the resources of business schools either can function as strengths or weakness (Wernerfelt 1984), or they can be favorable or unfavorable. By selecting, rare and inimitable resources and containing high barriers to imitation, business schools can create unique knowledge and transfer skills, which can be a mean to achieve sustainable competitive advantage (Barney 1991; Barney 2001). Since the imitability or duplication converts any resources into temporary (Williams 2014), business schools find it challenging to maintain the rarity and inimitability of resources (Donaldson 2002), but the competitive parity can be one of the best options for the business schools to work on developing skills, so that they become unique (Porter 1996). To achieve the specific objective of business schools they can leverage the resources (Barney 1991; Kong & Prior 2008), by seeking and acquiring the best service delivery mode and best human resource (Srivastava, Fahey & Christensen 2001), as the source of knowledge creation and skill dissemination. Similarly, the successful utilization of organizational resources for productivity, (Schlesselman & Coleman 2013) specially in the form of competitive faculty members are (Becker, Greene & Siegfried 2011) best options to create knowledge and transfer skills.

In a conclusion, however, the miss-match in skills reflect the existing gap between business schools and business community, business schools are not yet a complete failure as described in literatures. Business schools play a vital role in the development of business and dissemination of required skills, thus they have significant role in the contemporary business world. In a nutshell, it can be concluded that with supply of matching skills, there are plenty of areas where business skills need to work on addressing the miss-match of skill supply.

For researchers, in future, it is recommended to select any specific program and specific matching jobs to identify the real match and miss-match of skills, rather than selecting the broad area. The co-work between specific business programs and related industries seems to be a valid solution to identify the required skills and skill development.

LIST OF REFERENCES

- Aalto University (2016). *Master's Programme in Strategy-M.sc. Degree in Economics and Business Administration.* [Cited 12 December 2016]. Available from World Wide Web<URL:
http://www.aalto.fi/en/studies//education/programme/strategy_biz_master/#study_experience.
- Abraham, Anne (2006). The Need for the Integration of Emotional Intelligence Skills in Business Education. *Business Renaissance Quarterly*. 1:3, 65-79.
- Akrivou, Kleio & Hilary Bradbury-Huang (2015). Educating Integrated Catalysts: Transforming Business Schools Toward Ethics and Sustainability. *Academy of Management Learning and Education* 14: 2, 222-40. doi:10.5465/amle.2012.0343.
- Alajoutsijarvi, Kimmo; Kerttu Kettunen & Henrikki. Tikkanen (2012). *Institutional Evolution of Business Schools in Finland 1909-2009. Management & Organizational History*. 7. doi:10.1177/1744935912457624.
- Arbaugh, J. B.; Michael R. Godfrey; Marianne Johnson, Birgit Leisen Pollack, Bruce Niendorf & William Wresch (2009). Research in Online and Blended Learning in the Business Disciplines: Key Findings and Possible Future Directions. *Internet and Higher Education* 12: 2. Elsevier Inc.: 71–87. doi:10.1016/j.iheduc.2009.06.006.
- Audebrand, Luc K. (2010). Sustainability in Strategic Management Education: The Quest for New Root Metaphors. *Academy of Management Learning and Education*. 9 :3, 413–28. doi:10.5465/AMLE.2010.53791824.
- Baden, Denise & Malcolm Higgs (2015). Challenging the Perceived Wisdom of Management Theories and Practice. *Academy of Management Learning & Education* 14: 4, 539–55. doi:10.5465/amle.2014.0170.
- Bain, Ken (2003). What do the Best Teachers do? *Improving Teaching and Learning in Universities*. November: 13-15.
- Barney, Jay (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17:1, 99-120. doi:10.1177/014920639101700108.
- Barney, Jay (2001). Resource-Based Theories of Competitive Advantage: A Ten-Year Retrospective on the Resource-Based View. *Journal of Management*. 27: 6, 643–50. doi:10.1016/S0149-2063(01)00115-5.

- Bennis, Warren & James O'Toole (2005). How Business Schools Lost Their Way. *Harvard Business Review* .May. [Cited 15 August 2016] Available from World Wide Web<URL: <https://hbr.org/2005/05/how-business-schools-lost-their-way>>
- Berman, Jeffrey & Ritchie Leah (2006). Competencies of Undergraduate Business Students. *Journal of Education for Business* 81: 4, 194-205.
- Billsberry, Jon, Julie Charlesworth, and Pauline Leonard. 2012. "Moving Images: Effective Teaching with Film and Television in Higher Education." *Academy of Management Learning and Education*. 680–84. <http://eprints.soton.ac.uk/80317/>.
- Butler, David (2002). OFSTED's View of Business Education. *Teaching Business & Economics*. 6 :3, 1-26.
- Carlson, Richard A. & Yaure G. Robin (1990). Practices, Schedules and the Use of Component Skills in Problem Solving. *Journal of Experimental Psychology: Learning Memory and Congnitiion*. 16, 484-496.
- Cezarino, Luciana O.; Lara B. Liboni; Marcia F. Oliveira & Adriana C. F. Caldana (2016). Soft Systems Methodology and Interdisciplinarity in Management Education. *Systems Research and Behavioral Science*. 33:12. 278–88. doi:10.1002/sres.2383.
- Chia, Robert and Robin Holt (2008). The Nature of Knowledge in Business Schools. *Academy of Management Learning and Education*. 7:4, 471–86. doi:10.5465/AMLE.2008.35882188.
- Chung, Ken (2016). Moral Muteness of Faculty in Management Education. *International Journal of Management Education*. 14:3. 228–39. doi:10.1016/j.ijme.2016.05.003.
- Collinson, David & Dennis Tourish (2015). Teaching Leadership Critically: New Directions for Leadership Pedagogy. *Academy of Management Learning & Education*. 14 :4, 576–94. doi:10.5465/amle.2014.0079.
- Conner, K. R. (1991). A Historical Comparison of Resource-Based Theory and Five Schools of Thought within Industrial Organization Economics: Do We Have a New Theory of the Firm? *Journal of Management*. doi:0803973233.
- Connolly, Michael (2014). The End of the MBA as We Know It. *Academy of Management Learning & Education*. 2 :4, 365-367
- Cooke, Bill & Rafael Alcadipani (2015). Toward a Global History of Management Education: The Case of the Ford Foundation. *Academy of Management Learning & Education*. 14:4, 482–99.

- Creswell, John W. Dana L. Miller (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*. 39 :3, 124–30.
- David, Fred R. & Forest R. David (2010). What Are Business Schools Doing for Business Today ? Are Business Students Learning What Employers Need? *Business Horizons*.1-28
- Dobni, Dawn & Brooke Dobni (1996). Canadian Business Schools: Going Out of Business. *Journal of Education for Business*. 72 :1, 1-28.
- Donaldson, Lex. (2002). Damned by Our Own Theories: Contradictions Between Theories and Management Education. *Academy of Management Learning & Education*. 1 :1, 96–106. doi:10.5465/AMLE.2002.7373701.
- Engwall, Lars. (2000). Foreign Role Models and Standardisation in Nordic Business Education. *Scandinavian Journal of Management* 16:1,1–24.
- Forman, Jane & Laura Damschroder (2007). Qualitative Content Analysis. *Advances in Bioethics*. 11, 39–62. doi:10.1016/S1479-3709(07)11003-7.
- Forray, Jeanie; Jennifer Leigh, & Amy L. Kenworthy (2015). Special Section Cluster on Responsible Management Education: Nurturing an Emerging PRME Ethos. *Academy of Management Learning and Education*. 14:2, 293–96. doi:10.5465/amle.2015.0072.
- Fox, Robin L. (2003). The Socratic Method: Teaching Students to Think. *Improving Teaching and Learning in Universities*. 11, 8-10.
- Gelder, Van T. (2003). Developing Critical Thinking Skill through Information Technology. *Improving Teaching and Learning in Universities*.11, 21-23.
- Ghoshal, Sumantra (2005). Bad Management Thories Are Destroying Good Management Practices. *Academy of Management Learning & Education*. 4:1, 75–91. doi:10.1109/EMR.2005.26768.
- Giacalone, Robert A. (2004). A Transcendent Business Education for the 21st Century. *Academy of Management Learning & Education*. 3:4, 415–20. doi:10.5465/amle.2004.15112547.
- Glen, Roy; Christy Suciú & Christopher Baughn (2014). The Need for Design Thinking in Business Schools. *Academy of Management Learning and Education*. 13:4, 653–67. doi:10.5465/amle.2012.0308.

- Greiner, Larry. E.; Arvind Bhambri & Thomas. G. Cummings. (2003). Searching for a Strategy to Teach Strategy. *Academy of Management Learning & Education*. doi:10.5465/AMLE.2003.11902092.
- Hall, Alen (2006). Teaching Professional Behaviors: Differences in the Perceptions of Faculty, Students and Employers. *Journal of Business Ethics*. 63, 407-415.
- Harvard Business School (2016). *Working Knowledge*. [Cited 15 November 2016] Available from World Wide Web <URL: <http://hbswk.hbs.edu/industries/>>
- Harvard Business School (2016). *Executive Education*. [Cited 15 August 2016] Available from World Wide Web <URL: <http://www.exed.hbs.edu/programs/gsm/Pages/default.aspx>>
- Hofer, Charles W. (1975). Toward a Contingency Theory of Business Strategy. *Academy of Management Journal*. 18 :4, 784–810. doi:10.2307/255379.
- Holtom, Brooks; Erich S. Dierdorff; Jossey C. A. Bass (2015). Disrupt or Be Disrupted : A Blueprint for Change in Management Education , Edited. *Academy of Management Learning & Education*. 14: 1, 133–40.
- Hor, Andy T.S. (2003). Education with Big E. *Improving Teaching and Learning in Universities*. B. Hert News. November: 13-15.
- Hotchkiss, Willard E. (2015). The Basic Elements and Their Proper Balance in the Curriculum of a Collegiate Business School. *The University of Chicago Press*. 89 :1, 95–110.
- Hsieh, H.F. & Sarah E. Shannon (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*. 15:9, 1277–88. doi:10.1177/1049732305276687.
- Hunt, Lynne (2003). What Makes Good University Teaching? *Improving Teaching and Learning in Universities*. B. Hert News. November: 201-21.
- Inlow, Gail M. (1965). Factors That Influence Curriculum Change, October. [Cited:12 April, 2016][Online] Available from Internet <URL: http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_196510_inlow.pdf>
- Jaskari, Minna M. (2013). *Teaching the Future Marketers Through Experiential Client-Based Projects*. Vaasa: Vaasan Yliopisto.

- Johnson, Judy A. (1998). Principles of Effective change: Curriculum Revision that Works. Texas. 40-45. [Online] Sam Houston State University.[Cited 3 February 2016] Available from Internet <URL: http://www2.education.uiowa.edu/archives/jrel/fall01/Johnson_0101.htm.>
- Jonassen, David H. (2000). Toward a Design Theory of Problem Solving. *Educational Technology Reserach & Development*. 48: 4, 63–85. doi:10.1007/BF02300500.
- Jonassen, David H.; Timari Previsi; David Christy & Euthemia Stavoulaki (1999). Learning to Solve Problems on the Web: Aggregate Planning in a Business Management Course. *Distance Education* 20: 1, 49–63. doi:10.1080/0158791990200105.
- Jorgenson, Olaf (2011). *Why Curriculum Change is Difficult and Necessary?* National Association of Independent School. June. [Online] [Cited 2 April 2016] Available from Internet <URL: <http://www.nais.org/Magazines-Newsletters/ISMagazine/Pages/Why-Curriculum-Change-Is-Difficult-and-Necessary.aspx>.>
- Juusola, Katariina; Kerttu Kettunen & Kimmo Alajoutsijärvi (2015). Accelerating the Americanization of Management Education : Five Responses From Business Schools. *Journal of Management Inquiry* 24: 4, 347–69. doi:10.1177/1056492615569352.
- Ketchen, David J. (1996). Process, Content and Context: Synergistic Effects on Organizational Performance. *Journal of Management*. doi:10.1016/S0149-2063(96)90048-3.
- Khan, Mohammad A.& Salvador T. Martinez (2007). An Integrative Business Education Model: A Theoretical Framework. *Modelos Educativos*, 1–30.
- Khurana, R. & Nohria N. (2008). It's Time To make Management a True Profession." *Harvard Business Review*. 86 :10, 70-77.
- Klosters, Davos (2014). Matching Skills and Labour Market Needs: Building Social Partnerships for Better Skills and Better Jobs. *Global Economic Forum*. [Cited 12 August 2016] Available from Internet < URL: http://www3.weforum.org/docs/GAC/2014/WEF_GAC_Employment_MatchingSkillsLabourMarket_Report_2014.pdf.>
- Kothari, Cr. (2004). *Research Methodology: Methods and Techniques*. Vasa. doi:http://196.29.172.66:8080/jspui/bitstream/123456789/2574/1/Research%20Methodology.pdf.
- Kraaijenbrink, Jeroen; J. C. Spender & Aard J. Groen (2009). The Resource-Based View:

- A Review and Assessment of Its Critiques. *Journal of Management*. 36:1, 349–72. doi:10.1177/0149206309350775.
- Larry, Greiner E.; Arvind Bhambri & Cummings G. Thomas (2003). Searching for a Strategy to Teach Strategy. *Academy of Management Learning and Education*. 2 :4, 402-420.
- Lewit, Tamar (2003). *Educating in the Global Village: the Challenge of Cultural Diversity*. Melbourne: B Hertnews. [Cited 20 August 2016] Available from Internet <URL: <http://www.bhert.com/publications/newsletter/B-HERTNEWS18.pdf>>
- Markwell, Donald (2003). The Urgent Challenge of World -Class University Teaching and Learning. *Improving Teaching and Learning in Universities*. November, 1-2.
- Mayring, Philipp (2000). Qualitative Content Analysis. *Forum Qualitative Social Research*. 1 :2, 1-15.
- Mcphee, Peter (2003). Nine Principles to Guide Teaching and Learning. *Improving Teaching and Learning in Universities*. November: 16-17.
- Millar, Victoria & Victoria Millar (2016). Interdisciplinary Curriculum Reform in the Changing University. *Teaching in Higher Education*. 25: 17 July. doi:10.1080/13562517.2016.1155549.
- Minor, Michael S, V a S Taras, D a N V Caprar, Daniel Rottig, Riikka M Sarala, Norhayati Zakaria, Fang Zhao, et al. 2013. “A Global Classroom ? Evaluating the Effectiveness of Global Virtual Collaboration as a Teaching Tool in University of North Carolina at Greensboro University of North Carolina at Greensboro.” *Academy of Management Learning & Education* 12 (3): 414–35. doi:10.5465/amle.2012.0195.
- Mintzberg, Henry (1990). The Design School: Reconsidering the Basic Premises of Strategic Management. *Strategic Management Journal*. 11:5, 171–95.
- Mintzberg, Henry & Jonathan Gosling (2002). Educating Managers Beyond Borders. *Academy of Management Learning and Education*. 1:1, 64–76. doi:10.5465/AMLE.2002.7373654.
- Mintzberg, Henry & Danielle Sacks.(2004). The MBA Menace. *Fast Company*, 83: 31–32. [Cited 15 August 2016] [Online] Available in Internet URL:<<http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=13050367&site=ehost-live>>

- Mir, Ali (2003). The Hegemonic Discourse of Management Texts. *Journal of Management Education*. 27:6, 734–38. doi:10.1177/1052562903257944.
- Morrell, Kevin & Mark Learmonth (2015). Against Evidence-Based Management, for Management Learning. *Academy of Management Learning & Education*. 14:4, 520–33. doi:10.5465/amle.2014.0346.
- Mumford, Troy V. & Michael A. Campion & Frederick P. Morgeson (2007). The Leadership Skills Strataplex: Leadership Skill Requirements Across Organizational Levels. *Leadership Quarterly*. 18:2, 154–66. doi:10.1016/j.leaqua.2007.01.005.
- Nesteruk, Jeffrey (2015). Digital Storytelling : Bringing Humanistic Inquiry to Management Studies. *Journal of Management Education*. 39:1, 141–52. doi:10.1177/1052562914545335.
- Nino, Lana S.; Lana N. Cpa & Whittier College (2010). Literature Review of Challenges in Business Education. *Research Gate*. 1, 1–9.
- Nkomo, Stella M. (2015). Challenges for Management and Business Education in a Developmental State : The Case of South Africa. *Academy of Management Learning & Education*. 14: 2, 242–58. doi:10.5465/amle.2014.0323.
- O'Donoghue, Peter (2003). Teaching Quality Matters in Higher Education: Instigating Cultural Change. *Improving Teaching and Learning in Universities*. 11, 32-34.
- O'shaughnessy, Lynn (2014). *8 Reasons Not to Get a Business Degree*. January 20. [Cited 5 September 2016] [Online] Available from World Wide Web <URL: <http://www.cbsnews.com/news/8-reasons-not-to-get-a-business-degree/>>
- Pether, Mcphee (2005). Nine Principles to Guide Teaching and Learning. *Business Higher Education Round Table*. 18:11, 16-17.
- Pfeffer, Jefery & Christina. T. Fong (2002). The End of Business Schools? Less Success Than Meets the Eye. *Academy of Management Learning & Education*. 1:1, 78–95. doi:10.5465/AMLE.2002.7373679.
- Porter, Michael E. (1996). What Is Strategy? *Harvard Business Review*. 12, 61–78. doi:10.1098/rspb.2008.0355.
- Porter, Layman W. & Lawrence E Mckibbin (1988). *Management Education & Development: Drift or Thurst into the 21st Century*. New York, McGraw Hill.

- Porter, Erin M. (2003). Engaging Students in Large Classes-Challenging Some of the Learning Myths. *Improving Teaching and Learning in Universities*. 11, 18-20.
- Proctor, Robert W. & Addie Dutta (1995). *Skill Acquisition and Human Performance*. London: Sage Publication.
- Ramsden, Paul (2003). Making Good Teaching a High Priority Again. *Improving Teaching and Learning in Universities*. 11.
- Ross, Douglas. N.& Al. Rosenbloom (2011). Reflections on Building and Teaching an Undergraduate Strategic Management Course in a Blended Format. *Journal of Management Education*. 35:3. 351–76. doi:10.1177/1052562911398979.
- Rotterdam School of Management. (2016). [Cited 5 September 2016] [Online] Available from World Wide Web <URL: <http://www.rsm.nl/master/msc-programmes/msc-strategic-management/overview/>>
- Ruth, Damian (2013). Teaching Strategy: Reflections on Professional Practice. *Teaching in Higher Education*. 19: 3, 254–65. doi:10.1080/13562517.2013.860100.
- Saunders, Mark; Philip Lewis & Adrian Thornhill. (2009). Formulating the Research Design. In *Research Methods for Business Students*. by Mark Saunders, Philip Lewis and Adrian Thornhill, 136-167. Essex: Prentice Hal.
- Saunders, Mark; Philip Lewis & Adrian Thornhill. (2009). Selecting Samples. In *Research Methods for Business Students*. by Mark Saunders, Philip Lewis and Adrian Thornhill, 210-254. Essex: Pearson Education Limited.
- Saunders, Mark; Philip Lewis & Adrian Thornhill. 2009. Understanding Research Philosophies and Approaches. In *Research Methods for Business Students*, by Mark Saunders, Philip Lewis and Adrian Thornhill, 106-131. Essex: Pearson Education Limited.
- Schilling, J. (2005). From Ineffectiveness to Destruction: A qualitative study on the meaning of negative leadership. *Leadership*, 5(1), 102-128.
- Shamoo, Adil E.& David B Resnik. (2003). *Responsible Conduct of Research*. New York: Oxford University Press.

- Skills Panorama. (2015). *Matching Skills and Jobs*. European Commission. [Cited 15 July 2016] [Online] Available from World Wide Web <URL: <http://skillspanorama.cedefop.europa.eu/en/skills-theme/matching-skills-and-jobs>>
- Stanley, Christine A. & Erin M. Porter (2003). Engaging Students in Large Classes: Challenging Some of the Learning Myths. *Business Higher Education Round Table*. 18:11,18-20.
- Stumpf, Stephen A & Roger L. M. Dunbar (1990). Using Behavioral Simulations in Teaching Strategic Management Processes. *Journal of Management Education*. 14: 43, 43–62. doi:10.1177/105256298901400204.
- Taras, Vas; Dan V. Carper; Daniel Rottig; Riikka M. Sarala; Norhayati Zakaria, Fang Zhao et al. (2013). A Global Classroom ? Evaluating the Effectiveness of Global Virtual Collaboration as a Teaching Tool in Management Education. *Academy of Management Learning & Education*. 12:3, 414–35. doi:10.5465/amle.2012.0195.
- The Conference Board (2012). Are They Really Ready to Work?[Cited 2 August 2016] [Online] Available on Internet URL: <http://www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf>
- The Economist. (2016). Why MBAs are no Longer Prized by Employers?" *The Economist*. [Cited 8 September 2016] [Online] Available from World Wide Web <URL: learnmore.economist.com>
- Trigwell, Keith (2003). Student-Focused versus Teacher- Focused Teaching: the Key to Improvement. *Improving Teaching and Learning in Universities*. B-Hert News.11:18, 23-25.
- Tyler, Ralph W. (1949). Basic Principles of Curriculum and Instruction. *University of Chicago Press*. 1–33.
- Ungaretti, Toni; Kenneth R. Thompson; Alex Miller & Tim O. Peterson (2015). Problem-Based Learning: Lessons From Medical Education and Challenges for Management Education. *Academy of Management Learning & Education*. 14: 2, 173–86. doi:10.5465/amle.2013.0245.
- Walck, Christa (2009). Integrating Sustainability into Management Education. *Journal of Management Education*. 33: 3, 384–90.
- Williams, Scott D. (2014). A Strategic Resource-Based View of Higher Education Institutions' Resources. *International Journal of Business and Social Science*. 5 :12,

8–23.

- Winterton, Jonathan; Françoise Delamare-Le Deist, & Emma Stringfellow (2006). *Typology of Knowledge, Skills and Competences: Clarification of Concept and Prototype. Cedefop Reference Series. [Cited 8 July 2016] [Online] Available from World Wide Web:URL:<http://www.cedefop.europa.eu/en/Files/3048_EN.PDF>*
- Welford, Travis A. (1976). *Skilled Performance: Perceptual and Motor Skills*. Scott: Foresman Publication.
- Whitley, Richard (1989). On the Nature of Managerial Tasks and Skills: Their Distinguishing Characteristics and Organization. *Journal of Management Studies*. 26 :3, 209-229.
- Worrall, Les; Cary L. Cooper & Fiona Campbell- Jamison (2000). The Impact of Organizational Change on the Work Experiences and Perceptions of Public Sector Managers. *Personnel Review*. 29:5 613–36. doi:10.1108/00483480010296429.
- Worrel, Les & Cary L. Cooper (2001). *Quality of Working Life Survey*. London: Chartered Management Institute.

APPENDICES

Table 4 Design Theories in Problem Solving (Jonassen 2000)

		Problem outcomes					
		Learning Activity	Inputs	Success Criteria	Context	Structuredness	Abstractness
Problem categories	Logical Problems	<i>Logical control and manipulation of limited variables; Solve puzzle</i>	<i>Puzzle</i>	<i>Efficient manipulation; Number of moves or manipulations required</i>	<i>Abstract task</i>	<i>Discovered</i>	<i>Abstract, discovery</i>
	Algorithmic Problems	<i>Procedural sequence of manipulations; Algorithmic process applied to similar sets of variables; Calculating or producing correct answer</i>	<i>Formula or procedure</i>	<i>Answer or product matches in values and form</i>	<i>Abstract, formulaic</i>	<i>Procedural Predictable</i>	<i>Abstract, Procedural</i>
	Story Problems	<i>Disambiguate variables; Select and apply algorithm to product correct answer using prescribed method</i>	<i>Story with formula or procedure embedded</i>	<i>Answer or product matches in values and forms; Correct algorithm used</i>	<i>Constrained to pre-defined elements, shallow context</i>	<i>Well-defined problem classes; Procedural predictable</i>	<i>Limited simulation</i>
	Rule-Using Problems	<i>Procedural process constrained by rules; Select and apply rules to produce system-constrained answers or products</i>	<i>Situation in constrained system; Finite rules</i>	<i>Productivity (numbers of relevant or useful answers or products)</i>	<i>Purposeful academic, real world constrained</i>	<i>Unpredicted outcome</i>	<i>Need based</i>

Decision Making problems	<i>Identifying benefits and limitations;</i> <i>Weighting options;</i> <i>Selecting alternative and justifying</i>	<i>Decision situation with limited alternative outcomes</i>	<i>Answer or product matches in values and form</i>	<i>Life decisions</i>	<i>Finite outcomes</i>	<i>Personally situated</i>
Strategic Performance problems	<i>Applying tactics to meet strategy in real-time, complex performance maintaining situational awareness</i>	<i>Real-time, complex performance with competing needs</i>	<i>Achieving strategic objective</i>	<i>Real-time performance</i>	<i>Ill-structured strategies;</i> <i>Well-structured tactics</i>	<i>Contextually situated</i>
Case analysis problems	<i>Solution identification, alternative actions, argue position</i>	<i>Complex, leisure-time system with multiple ill-defined goals</i>	<i>Multiple, unclear</i>	<i>Real world, constrained</i>	<i>Ills- structured</i>	<i>Case situated</i>
Design problems	<i>Action on goals to produce artifact;</i> <i>Problem structuring and articulation</i>	<i>Vague goal statement with few constraints;</i> <i>Require structuring</i>	<i>Multiple undefined criteria;</i> <i>No right or wrong, only better or worse</i>	<i>Complex, real world;</i> <i>Degrees of freedom;</i> <i>Limited input & feedback</i>	<i>Ill-structured</i>	<i>Problem situated</i>
Dilemmas	<i>Reconciling complex, non-predictive, vexing decision with no solution;</i> <i>Perspectives irreconcilable</i>	<i>Situation with antinomies positions</i>	<i>Articulated preference with some justification</i>	<i>Topical, complex, interdisciplinary</i>	<i>Finite outcomes, multiple reasoning</i>	<i>Issue situated</i>

Table 5 Details of Data Collection

Total Numbers of							
Jobs	Positions	Companies	Industries	Entry Level Jobs	Mid-Level Jobs	Top Level Jobs	Skills Identified
119	101	107	33	22	72	25	99

Table 6 List of Kew words

In English	In Finnish
Recruitment	Toimistotyö
Vacancy	Asiakaspalvelu
Finance	Logistiikka
Human Resource Management	Taloushallinto
Operations	Rekrytointi
Customer Service	Henkilöstöhallinto
Management	Markkinointi
Sales & Marketing	Tuotanto
Consultant	Matkailuala
Logistic	konsultointi

Table 7 Job Positions

Sales	Service Manager
Account Executive	Service Personal
Account Manager	Site manager
Application Manager	Sourcing Specialists
Application Specialist - Product and Quality Management	Store Manager
Associate Consultant	Strategic Program Lead
Associate Director	Strategic Programming Lead
B2B Sales	Strategy and Insight Manager
Booking Manager	Supervisor
Business Analyst	Supply Planning Manager
Business Analyst	Team Leader
Business Consultant	Territory Sales Manager
Business Coordinator	Trainee
Business Development Senior Manager	Training Consultant
Business Process Consultant	Vendor Manager
Chief Executive Officer	Process Manager
Client Financial Management Specialist	Product Development Manager
Commercial Retail Manager	Product Manager
Consultant	Product Specialist
Content and Social Media Specialist	Production Manager
Content Manager	Program Manager
Customer Project Manager	Project Manager
Customer Service Manager	Project Manager
Digital Communication Specialist	Quality and Reporting Manager
Digital Dialogue Marketing Specialist	Recruiter
Digital Marketing Manager	Recruitment Assistant
Digital Specialist	Recruitment Superstar
Director of EIT	Recruitment Consultant
Employee Experience Manager	Regional Manager
Executive Director	Rental Manger
Export Trade and Customer Service Specialist	Sales
Field Sales Manager	Sales and Business Development Manager
Financial Process Excellence	Sales Associate
General Manager	Sales Manager
Global Development Management	Senior Account Manager
Graduate Program	Senior Advisor

Head of Customer Digital Channel	Senior Business Analyst
Head of Marketing	Senior Business Consultant
Head of Project Management	Senior Digital Strategists
Housing Action Director	Senior Manager, Talent Acquisition
Housing Business Development Manager	Senior Product Manager
Human Resource Manager	Senior Project Manager
Human Resource Specialist	Senior Risk Officer
Inbound Marketing Manager	Senior Sales Manager
Internship	Service Coordinator
Management Assistant	Service Design Lead
Managing Director	Office Assistant
Marketing & Communication Specialist	Online Marketing Manager
Marketing and Communication Specialist	Online Media Partner and Analyst
Marketing Assistant	Operation Director
Media Optimization Consultant	Performance Marketing Manager

Table 8 List of Companies

Companies		
4Finance oy	Helvar	Rihimäki Kotikaupunki
Accenture	Henkel	Rovio Entertainment
Adä	Hilti	Sales Force
Asan Security Technologies	Huawei Technologies	Sandoz
Baring	ICT Direct	Siili Solutions
Barona	Innofactor	Solita
Bedenoch & Clark	Iptor	Storytel Sweden AB
Biofore Company	Kesko	Stryker
Booking. Com	Kiilto	Suomen Palveluskoirallitto
BPS World	Klikki- Klikkicom Oy	Talent Vatica oy
Capgemini	Kone Corporation	Teknos
Catenon	Kuntec Oy	Templeton and Partners limited
CBRE	Laision Technologies	Titaani Rakennus Oy
CISCO	Leaddesk	Tuxera
Citec Group	Lenovo	Vattenfall
City of Kuopio	Lieksan Teollisuuskylä oy	Vianor
Commvault Systems	M4ID	Virta Media
Continental	Management Events Group	Wartsila
Continental Rengas Oy	Manpower Group	Wipro
Covance	Merima Oy	Wolt
Cramo Adepteo	Metsä Tissue	YIT
Danfoss	Metso	Falck Global Associate
Danoe	Michael Page Nordic	Fazer Services
Dansac and Hollister	Microsoft	FCG Kuntakrery Oy
Danske Bank	not declared	Finnair
Deal Dash	Opuscapita	Fiskars
Dedicated Network Partners Oy	Oracle Finland Oy	Frosmo
Efecte Corp	Orion Corporation	Pohjolan Energia Oy
EIT digital	Outotec	Polarn O. Pyret
Ernst and Young	Oy C.E. Lindgren Ab	Prysmian Group
Espresso House	Paulig Group	Psycon Oy
Euler Hermes	Peab Group	Quintiq
Euroclear Finland	PiBond	Qvantel Finland OY
GS1	Relex Solutions	

Table 9 List of Industries

Industrial Categories (HBS, 2016)		
Accommodations	Education	Medical Devices and Supplies
Accounting	Electronics	Motion Pictures & Video
Advertising	Employment	Music
Aerospace	Energy	Pharmaceutical
Agriculture & Agribusiness	Entertainment & Recreation	Public Relations
Air Transportation	Fashion	Publishing
Apparel & Accessories	Financial Services	Real Estate
Auto	Fine Arts	Retail
Banking	Food & Beverage	Service
Beauty & Cosmetics	Health	Sports
Biotechnology	Information	Technology
Chemical	Information Technology	Telecommunications
Communication	Insurance	Tourism
Computer	Journalism & News	Transportation
Construction	Legal Services	Travel
Consulting	Manufacturing	Utilities
Consumer Products	Media & Broadcasting	Video Game
		Web Services

Table 10 Skills and Demand

Skills	Demand	Skills	Demand	Skills	Demand
Communication Skill	80	Public Relation Skill	2	Photoshop Skill	1
Language Skill	37	Social Media Skill	2	Pragmatic Skill	1
Interpersonal Skill	27	Strategic Analysis Skill	2	Product Management Skill	1
Analytical Skill	25	Strategic Planning Skill	2	Public Procurement Skill	1
Team Management Skill	18	Strategic Thinking Skill	2	Qualitative Analysis Skill	1
Leadership Skill	14	Team Leading Skill	2	Report Writing Skill	1
Presentation Skill	12	Team Working Skill	2	Research Methodological Skill	1
Collaborative Skill	11	Technology Translation Skill	2	Right Management Skill	1
Information Technology Skill	11	Virtual Team Management Skill	2	SAP Skill	1
Negotiation Skill	11	Abstraction Skill	1	Service Skill	1
Cooperation Skill	10	Adobe Design Skill	1	Structured Analysis Skill	1
Sales Skill	10	Adware Design Skill	1	Technical Analysis Skill	1
Organizational Skill	7	Assertive Skill	1	Technical Management Skill	1
Problem Solving Skill	7	Business Communication Skill	1	Technical Modeling Skill	1
Creative Skill	6	Business Reporting Skill	1	Time Management Skill	1
People Skill	6	Case Development Skill	1	Tolerance Skill	1
Technical Skill	6	Conceptualization Skill	1	Writing Skill	1
Interaction Skill	5	Consulting Skill	1	Personal Skill	2
Motivational Skill	5	Cross Functional Management Skill	1		
Social Skill	5	Design Skill	1		
Business Skill	4	Documentation Skill	1		
Influencing Skill	4	Economic Skill	1		
Project Management Skill	4	Effective Listening Skill	1		
Customer Service Skill	3	Effective Work Management Skill	1		
Decision Making Skill	3	Entrepreneurial Skill	1		
Diversity Management Skill	3	EU Affairs Knowledge Skill	1		
Financial Skill	3	Financial Management Skill	1		
Marketing Skill	3	Financial Modeling Skill	1		
Planning Skill	3	Games Marketing Skill	1		
Relationship Management Skill	3	Graphic Design Skill	1		
Accounting Skill	2	Management Accounting Skill	1		
Coordination Skill	2	Marketing Communication Skill	1		
Curious	2	Media Skill	1		
Innovative Skill	2	Monitoring Skill	1		
Inspirational Skill	2	Multicultural Management Skill	1		
Management Skill	2	Operational Skill	1		
Microsoft Office Skill	2	Opportunity Management Skill	1		
Multitasking Skill	2	Partnering Skill	1		
Numerical Skill	2	People Management Skill	1		
Office Tool Skill	2	Personal Management Skill	1		

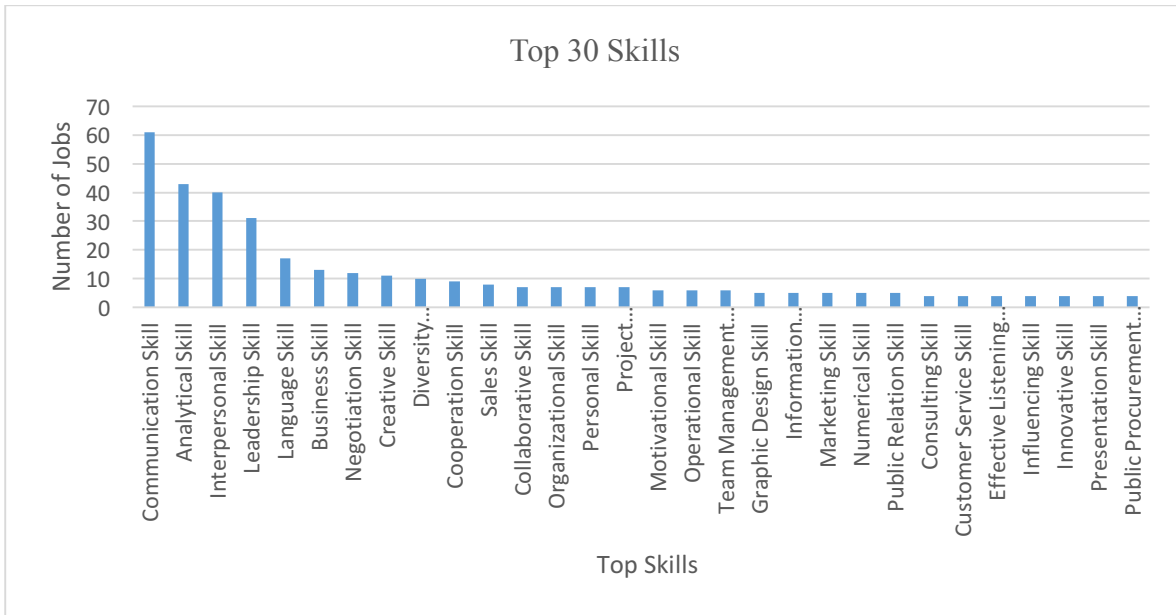


Figure 4 Top Skills on Demand

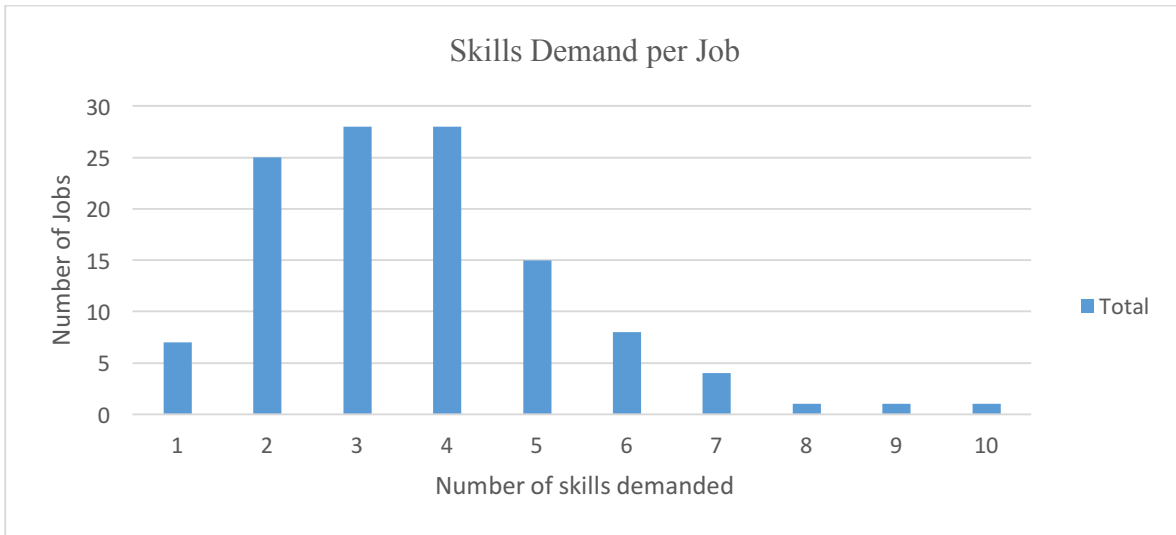


Figure 5 Distribution of Skill Demand per Jobs

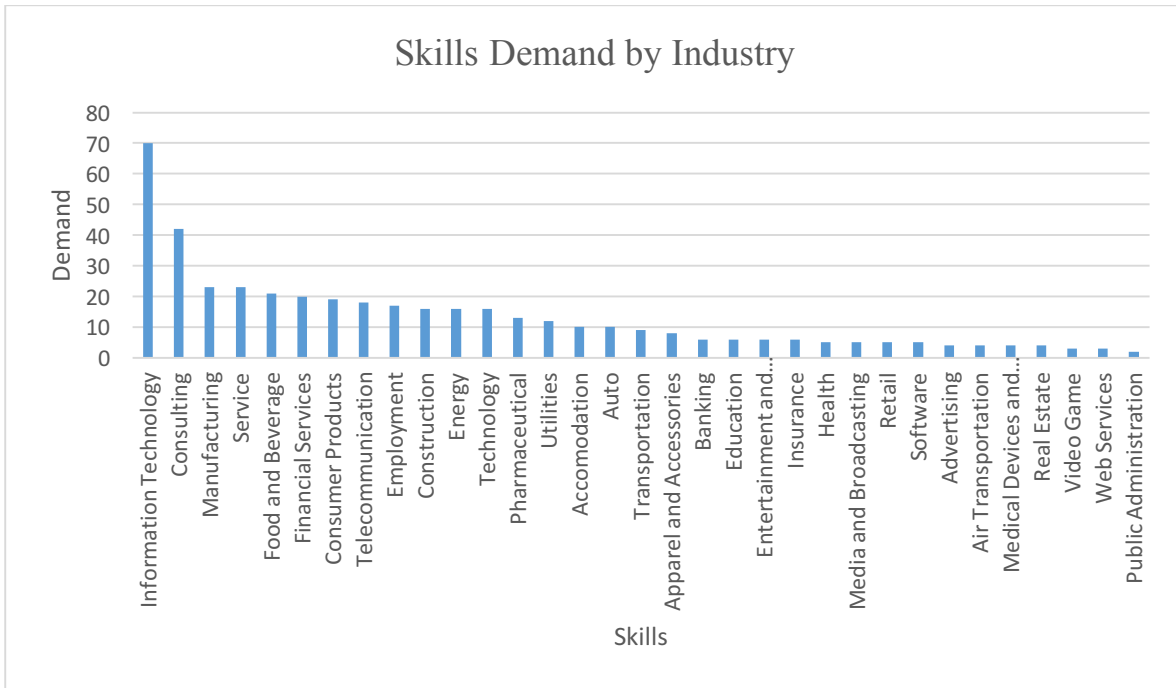


Figure 6 Skill Demand by Industry

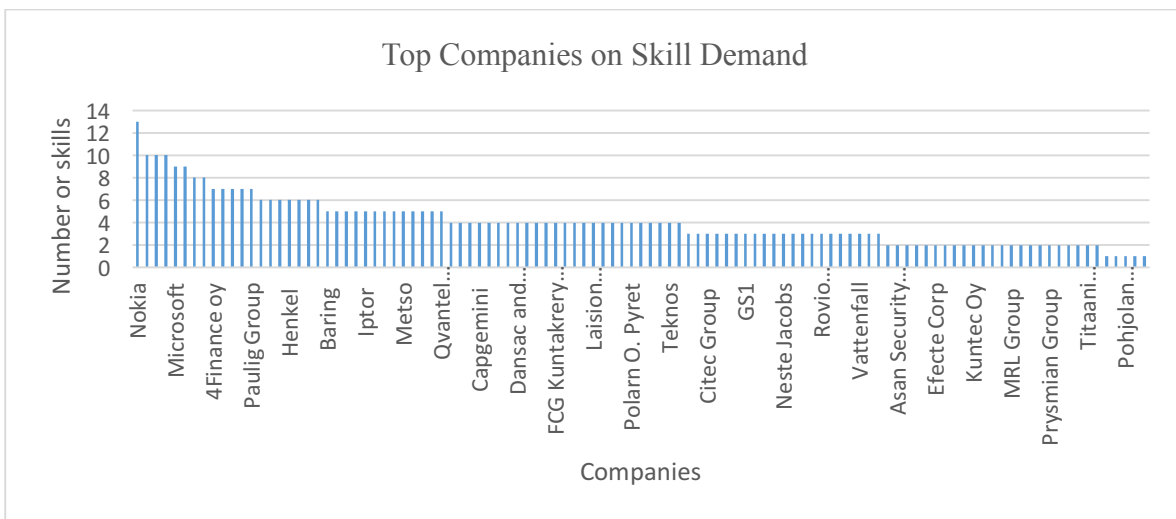


Figure 7 Top Companies on Skill Demand

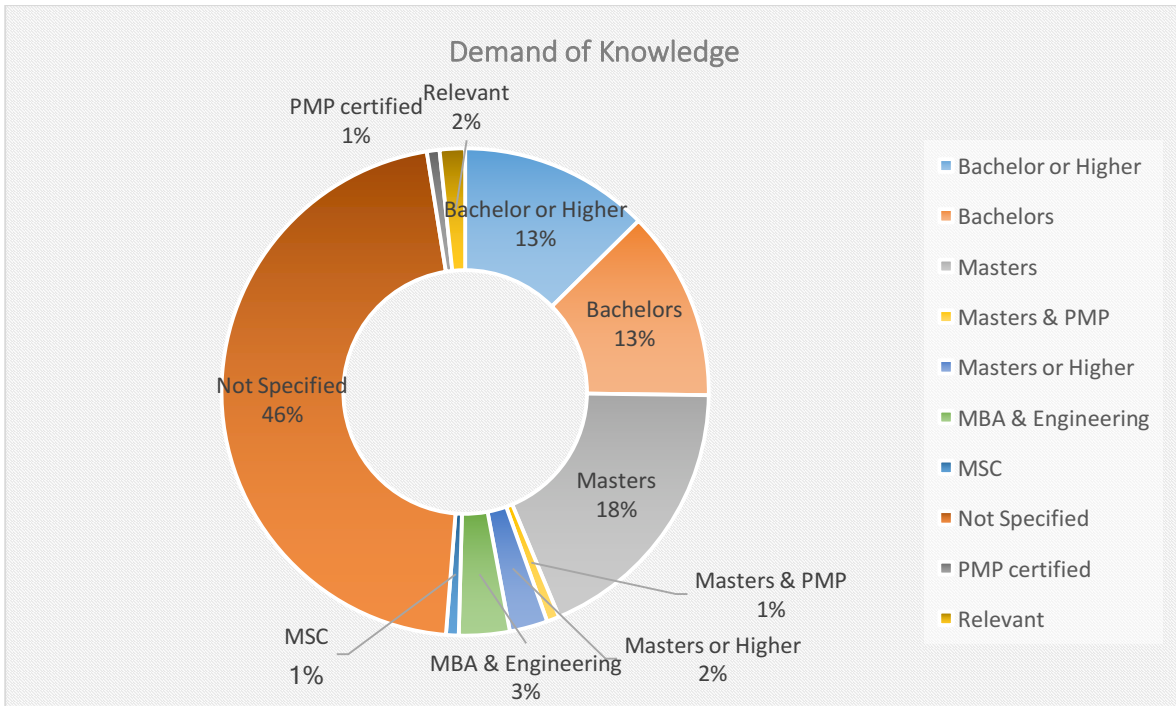


Figure 8 Distribution of Knowledge Demand

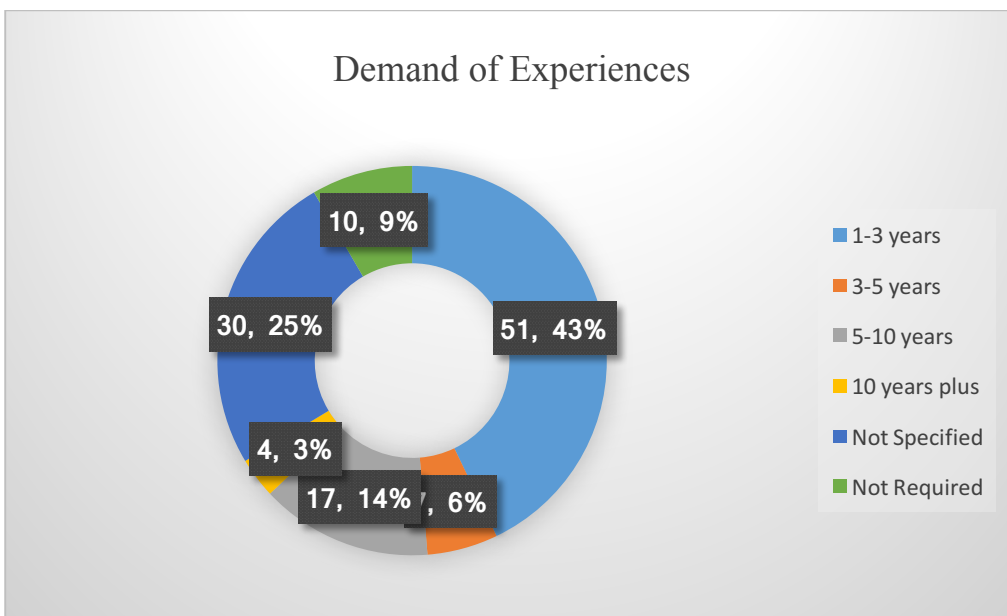


Figure 9 Distribution of Demand on Experiences

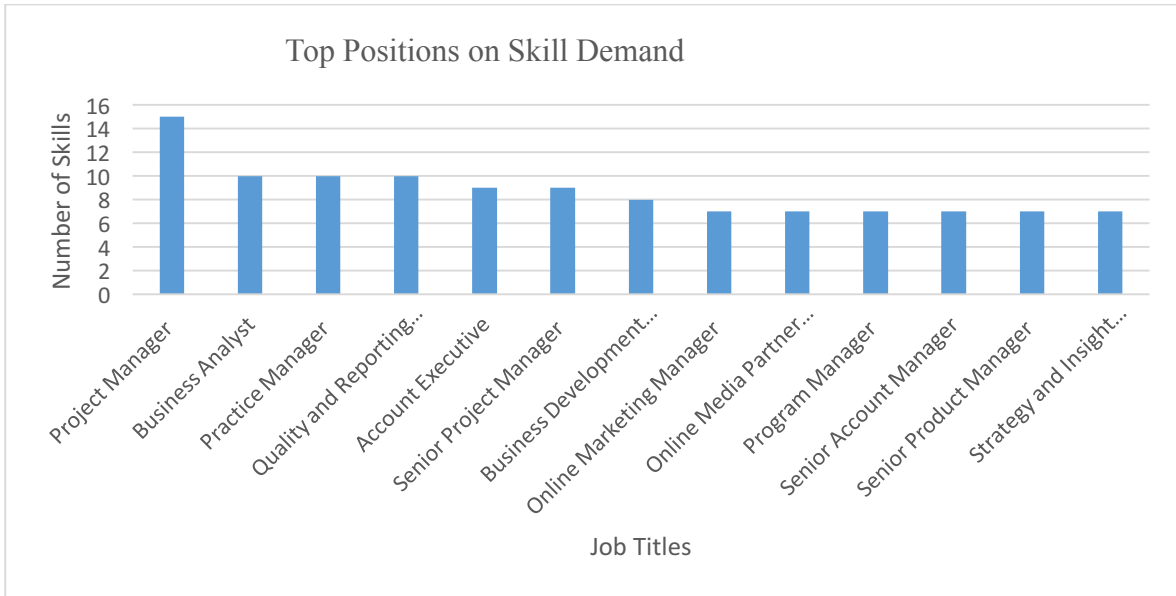


Figure 10 Top Positions on Skill Demand

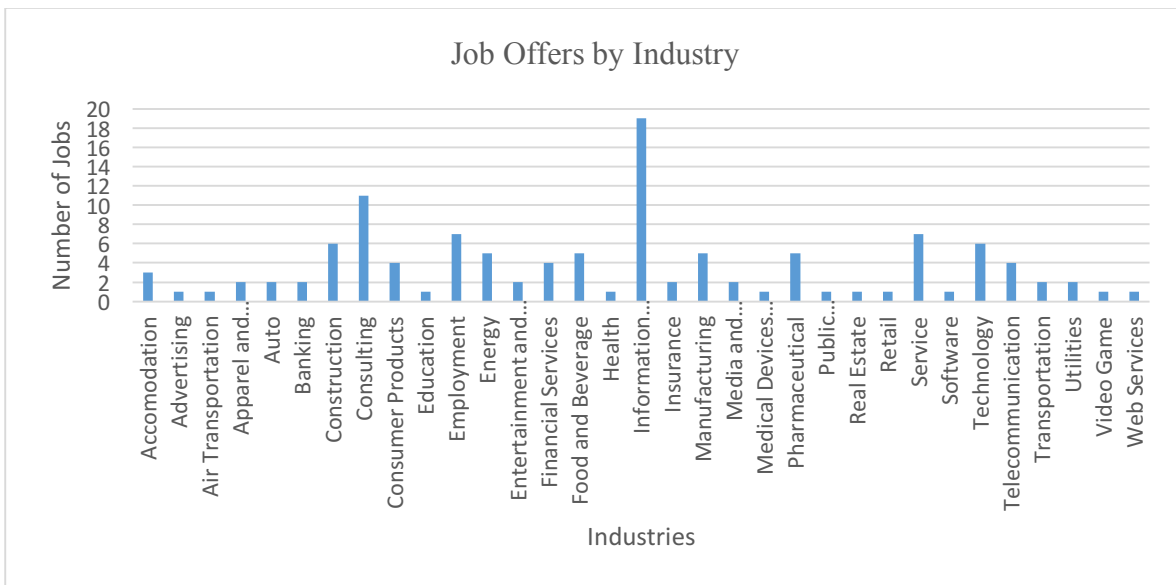


Figure 11 Distribution of Job Offers by Industry

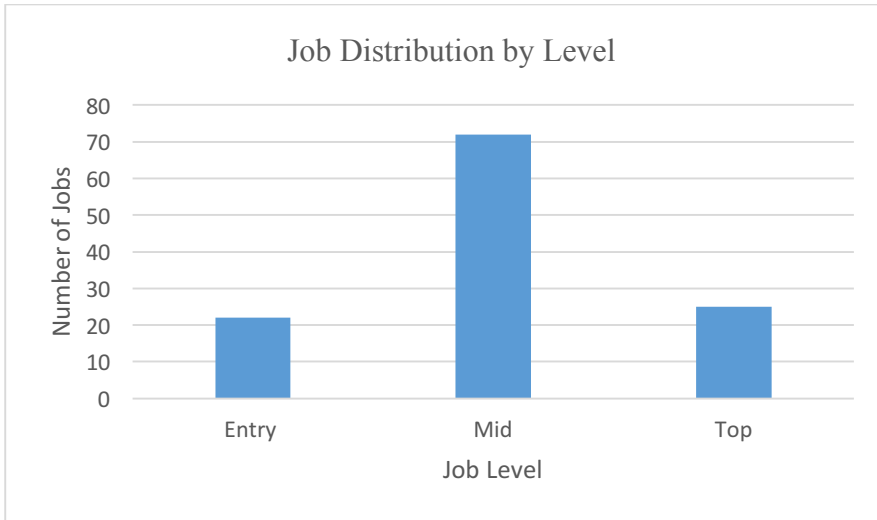



Figure 12 Distributions of Jobs by Level



President and CEO of HT Laser Oy
several areas

job description reported

HT Laser Oy is Finland's leading customer-oriented laser and water jet cutting and laser welding expert and versatile system integrator. The company operates in ten locations and employs a total of more than 300 specialists. HT Laser Oy's turnover is EUR 48 million. euros. The company's customer base consists of eg. the major export enterprises in the metal.

www.htlaser.fi We are looking now **CEO AS** You take full responsibility for the HT Laser Oy's business and its development. This task requires several years of experience and a strong track record of successful business management and development of the B2B business area. You are customer-oriented and service-oriented. You will have excellent co-operation and negotiation skills, as well as the ability to create and maintain a wide range of stakeholder networks. Rest of the world managerial work experience, and you are skilled and motivational people manager. You will have knowledge of the product and production development. In addition to good English language skills in other languages is an advantage. The company is based in Keuruu, but the seat position can also be someone else of our plants. We provide you with the organization under the expert mission, which is a constant pioneer in the industry. You are also ready to commit themselves in the long term development of the company. For more information on the role to give Blom Company Ltd, consultant Seija Blom, tel. 044 976 5512 (you can also leave a callback). Please send your application and CV with salary 01.31.2017 at the latest blomcompany.fi.

job summary

Location
several areas

Type of employment
Full-time, Employee

Released
1 day ago

Figure 13 Job opening Model 1



President and CEO, TreLab Ltd
Tampere, PIRK

job description

📄 reported

TreLab Ltd is a Tampere-based technology company that has developed a wireless, intelligent measuring system (SmartTags, Smart Data Mill) enables real-time control of industrial equipment of all usage and other conditions. Trelabin end customers include. manufacturing industry, and this clientele service business. Our system produces fast and cost-effective information production environment and seamlessly integrates with the company's planning and control systems. See more about us www.trelab.fi and <https://www.linkedin.com/company/trelab> .

The company has just been selected Tekes Young Innovative Companies funding program (YIC), which is intended for the most promising for small, internationalising and rapid business growth aiming at startup companies. To succeed, the growth needs of knowledgeable and are passionate people. We are now looking ten-mental experts to join in Tampere

CEO AS A

company's international growth, led. You are the future engine of our success, and that is why we require the Chief Executive Officer elect a strong sales-grip, happy loppuasiakaskuntamme the service of the acquired in-depth sector expertise, particularly open-minded view of the construction of new business models and a network of partners.

Even if you can described as more of the new developer and creator, as you are able to ensure the achievement of the objectives in the long term, particularly active and cooperative management expert otteellasi. Cash withdrawal from the spurs of you have purchased, for example, a focus on international sales or manufacturing industry in managerial positions.

Work requires willingness to travel mainly in Europe, have good English and preferably also in German language. Further information may be assisting in recruitment consultant Veikko Perttuli 040 745 1415. Please send your application by 05.02.2017 to veikko.perttuli@gmail.com ?

Figure 14 Job opening Model 2