



LUND UNIVERSITY
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Assessing the Recruiter Demand for Graduates With Non-Business Bachelor Degrees and a Master in Management (MiM)

by

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Abstract

The current study addresses the proposal that students with a non-business bachelor's degree and a masters in management (MiM) possess a profile that is T-shaped; as a result of, gaining general managerial knowledge in a MiM program (top of the T) and in-depth knowledge as a result of an undergraduate degree from a specific degree field (vertical part of the T). The key concepts that we focus on are, the abilities that students have and if they match T-shaped abilities found in literature and the demand for these abilities at global companies. The study design included interviews with over 10 experience recruiters from some of today's global companies, as well as, current MiM students taken from a sample of international students studying at the Lund University School of Economics and Management. The study found that, T-shaped abilities are in demand by companies; however, the demand differs according to job position. Recruiters say that the MiM graduate is an interesting profile; however, for most companies both consulting and non-consulting the undergraduate degree is a strong indicator of job placement. The majority of students from the MiM program say that they are T-shaped individuals and they give reasons for why they think they are T-shaped; however, only a few students say that they got their T-shaped abilities from the program. Most students say that they had their T-shaped abilities strengthened as a MiM student and we conclude that experiential learning develops t-shaped abilities. The outcome of our study contributes to the understanding of how t-shaped relates to the MiM program by concluding that the MiM is not the top of the T, but just one experience that might lead to becoming T-shaped.

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Keywords: *T-shaped individual, T-shaped professional*

MiM students and MiM graduate: these terms are used interchangeably throughout the paper and referred to a student with a non-business bachelors degree and a master's degree in management.

Table of Contents

1	Introduction	1
1.1	<i>Background</i>	1
1.2	<i>Problem Discussion</i>	2
1.3	<i>The MiM Program</i>	2
1.4	<i>Research Purpose and Questions</i>	3
1.5	<i>Research Limitations</i>	3
2	Literature and Theoretical Review	5
2.1	<i>Status of Current Job Market</i>	5
2.2	<i>Management Education</i>	6
2.3	<i>T-Shaped Concept</i>	8
2.4	<i>T-Shaped Individuals and Abilities</i>	9
2.5	<i>Summary</i>	11
3	Methodology	12
3.1	<i>Research Philosophy</i>	13
3.2	<i>Research Approach</i>	13
3.3	<i>Research Design</i>	13
3.3.1	<i>Research Strategy</i>	16
3.3.2	<i>Research Choice</i>	17
3.3.3	<i>Research Time Horizon</i>	17
3.4	<i>Data Collection Method</i>	17
3.4.1	<i>Interviewing Recruiter and MiM Students</i>	18
3.5	<i>Data Analysis</i>	19
3.6	<i>Data Quality</i>	20
3.7	<i>Validation and Limitations</i>	21
3.8	<i>Chapter Summary</i>	21
4	Finding and Analysis	22
4.1	<i>Qualitative Findings From Recruiter Interviews</i>	22
4.1.1	<i>Abilities in Demand When Hiring Entry-level Positions (Questions 1 Recruiters)</i>	23
4.1.2	<i>Abilities in Demand When Hiring Management Positions (Question 2 Recruiters)</i>	25
4.1.3	<i>Abilities in Demand when Hiring for Trainee and Management Programs (Question 3 Recruiters)</i>	26
4.1.4	<i>Demand for the MiM Graduate (Question 4 Recruiters)</i>	28
4.1.5	<i>Keywords describing What Recruiters Demand</i>	28
4.2	<i>Qualitative Findings from MiM student Interviews</i>	30
4.2.1	<i>Abilities Student Claim to Have</i>	30
4.2.2	<i>T-Shaped Students</i>	31
4.2.3	<i>Abilities from the MiM Program</i>	32
4.3	<i>Quantitative Findings from MiM Students</i>	33
4.4	<i>Hiring Trends</i>	34
4.5	<i>Summary</i>	34
5	Discussion	35
5.1	<i>Research Question 1: Is the MiM Program in Lund a Source for Training Abilities that Match the T-Shaped Individual Profile?</i>	35
5.2	<i>Research Question 2: Are the Abilities of the T-Shaped Individual in Demand at Global Companies in 2017?</i>	36
5.3	<i>Research Question 3: Do MiM Students Claim to be T-Shaped?</i>	39
5.4	<i>Our Discovery of The T-Shaped profile and The T-shaped Model</i>	40
5.5	<i>Summary</i>	42
6	Conclusion	43

References.....46
Appendix A.....50
Appendix B.....53

List of Models

Model 1: Augmented Hecht & Wiedmann (2016) Conceptual Model	9
Model 2: Methodology Following Onion Model (Saunders, Thornhill & Lewis, 2012).....	12
Model 3: Current Modification of T-Shaped Model.....	41

List of Objects

Object 1: Interview Recruiters	53
Object 2: Interview Students	54
Object 3: Student Survey.....	56

List of Tables

Table 1: Company participants, name abbreviation, industry, and person's title.	15
Table 2: Student participants, name abbreviation, undergraduate degree, working experience, highlighted experience.	15
Table 3: Open and Axial Coding Demand of Abilities for Job Positions, (Saunders et al., 2012).....	50
Table 4: Overall Keyword Describing Demand.....	51
Table 5: T-shaped students or Not	52
Table 6: Sought After Traits and Abilities by Industries Ranked in Order, GMAC (2016)...	55

List of Graphs

Graph 1: Global Hiring Trends MiM, source GMAC (2016).....	5
Graph 2: Abilities in Demand for Entry Level Positions.	24
Graph 3: Abilities that Consulting Companies and Non-Consulting Companies Demand When Hiring for Entry-Level Positions.	24
Graph 4: Abilities in Demand for Management Positions	25
Graph 5: Abilities that Consulting Companies and Non-Consulting Companies Demand When Hiring for Management Positions	26
Graph 6: Abilities in demand for trainee and graduate program.....	27
Graph 7: Abilities that Consulting Companies and Non-Consulting Companies Demand When Hiring for Trainee and Graduate Positions	27
Graph 8: Demand for MiM Students.....	28
Graph 9: Overall Keywords on Demand.....	29
Graph 10: Abilities Student Claim to have When Interviewed.....	30
Graph 11: T-Shaped Students	31
Graph 12: Abilities from MiM program or not	32
Graph 13: Student Abilities from Survey.....	33

1 Introduction

1.1 Background

Today individuals with a non-business bachelor's degree can get a master's degree in management (MiM). This has created a new profile for people that are qualified for a position in management, but the perception of global companies should be investigated to see if this new profile is in demand. This can be achieved by interviewing job recruiters of global companies to see if such a job profile is welcome in the 2017 job market. Prior to the current study, Hecht and Wiedmann (2016) wrote a master's thesis on the corporate perception of graduates with the non-business bachelor's degree and a master in management (MiM). The previous study interviewed expert opinions on MiM programs, but did not investigate recruiter perspective from global companies that might receive applicants matching the MiM profile. This is a key study design difference between the previous study and the current. Hecht and Wiedmann (2016) proposed that MiM students possess a profile that is T-shaped as a result of gaining general managerial knowledge in a MiM program (top of the T) and in-depth knowledge as a result of an undergraduate degree from a specific degree field (vertical part of the T). This concept requires further understanding if it is to be used as a description for the MiM graduate.

The Master in Management program at Lund University School of Economics and Management (LUSEM), is according to the School's homepage a programme that prepares non-business graduates for a wide career within management. For example the program description says that it is shaping students to fit recruiter's profiles for hiring; that might ask for, dynamic people that have both specialist knowledge and are a generalist in management (LU, 2017). We have decided to investigate whether or not job recruiters at international companies are looking for applicants like the graduates from a MiM program.

As a part of this study we have reviewed the literature available on T-shaped individuals and have created a distinct list of abilities from what has been proposed as being a part of the T-shaped profile. These abilities are supported in articles about T-shaped professionals. A complete list of abilities has not been presented in an article prior to this study because the topic is quite new and no previous articles have combined literature with the goal of constructing a profile. However, we are aware that the abilities chosen to be highlighted in this paper do not cover all abilities within the MiM program. Due to limited time and resources, this study will focus on five abilities found to describe the horizontal part of the T in the T-shaped profile. We will use this ability set to further develop Hecht and Wiedmann's (2016) proposal that MiM students are T-shaped. Furthermore, we will use our list of abilities for interviewing students and job recruiters, rather than relying on a description of the profile

as our explanation to interviewees. This is another key difference between our research and the previous study by Hecht and Wiedmann (2016) and we hope that this will be helpful for addressing our purpose. The key concepts that we focus on are the T-shaped abilities from literature on the topic and if the MiM students think they have these abilities; as well as, the demand for these abilities at companies. By collecting this data from students and companies the research might be valuable for, graduates, companies and Lund University because we are using it as a case example of a MiM program.

1.2 Problem Discussion

MiM graduates have previously been described as T-shaped individuals because they gain broad managerial knowledge as a result of a master's in management and have combined this with in-depth knowledge, on a topic that was study during several years of an undergraduate degree. Literature describing the T-shaped professional describes a profile possessing several specific abilities, claimed to be beneficial for jobs in management (Duckro, 2016). The issue is that it is currently unclear whether or not these abilities are actually in demand in today's job market and additionally it is unclear whether or not MiM graduates believe they have these abilities. Furthermore, it is unknown whether the abilities of this profile are the result of a MiM program, or the results of experiences that students bring with them to a MiM program. By assessing the demand that global companies have for T-shaped abilities and by selecting a specific MiM program as a case of MiM programs, we plan to shine light on this issue.

1.3 The MiM Program

MiM Program Applicants and Current Students

The MiM program at Lund University experiences a high level of applicants. According to Lund University (2017) the 2017 graduating class admitted 61 students out of 951 applicants. Applicants that express a desire to develop general managerial skills and a plan for how they would like to apply managerial ability in their future are most likely to be admitted to the MiM program in Lund says S. Kleppestø (personal communication, 15 Nov 2016). These applicants have a diverse set of experiences when applying to the program. They may have prior work experience, more than one bachelor's degree, or more than one master's degree. The current program is made up of 20 nationalities with an age range of 21-36 years.

1.4 Research Purpose and Questions

The purpose of this study is to discover whether or not T-shaped abilities are in demand in today's job market, to understand the extent to which students in the MiM program at Lund University think they have T-shaped abilities and to find out if the students think they are T-shaped individuals. Additionally, the purpose is to determine whether or not the MiM program at Lund University is a source for developing T-shaped abilities, focusing on five abilities chosen from literature.

Hecht and Wiedmann's (2016) thesis began the discussion of whether or not MiMs are T-shaped individuals, but the concept took light late in their project and was not fully explained or investigated. Furthermore, their study focused on a widespread of experts on the MiM education concept also addressing the whole MiM program. We aim to understand the T-shaped profile by breaking it down into the abilities that literature claims it includes.

To assess our purpose, our research questions are as follows:

1. Are the abilities of the T-shaped individual in demand at global companies in 2017?
2. Do MiM students claim to be T-shaped?
3. Is the MiM program at Lund University a source for training abilities that match the T-shaped individual profile?

1.5 Research Limitations

The focus of this study is to assess the supply and demand of a particular set of abilities. The abilities have been selected because they are abilities stressed in literature on the T-shaped profile; however, there are undoubtedly abilities within and outside this profile that are important for describing the MiM graduate. Therefore, we are allowing interviewees to voice their own opinion about additional abilities at the end of interviews.

Hecht and Wiedmann (2016) claimed that interviewees might not have fully understood the concept of MiM during interviews. To prevent confusion regarding terms like MiM and T-shaped individual, the terms were excluded from interview questions and only the list of T-shaped profile abilities are used in the current study for investigating the opinions provided by students and Recruiters. We hope that this will give clarity to our interview session dialog; however, it is a possibility that interviewees will become confused about why we picked these abilities. We hope that we have provided a remedy to this confusion by saying that we are investigating the demand for a specific university graduate profile.

The MiM program in Lund is only one case example of a MiM program and this might be a limitation for our study. It might limit our ability to draw conclusions, regarding all MiM programs; however, we believe that the selected study design will contribute to the purpose of our study because we will have a comparable sample of MiM students' that can be use to better understand abilities of the T-shaped profile.

2 Literature and Theoretical Review

2.1 Status of Current Job Market

Since the current study is situated in the transition between a graduate program and job recruiting, it is appropriate to discuss the status of the current job market and hiring trends. The global Graduate Management Admissions Council has published a Corporate Recruiters (GMAC) Survey for the past 15 years. It gives an overview showing the hiring trends for MBAs and non-MBAs across industries and world regions. In the 2016 report: 842 employers representing 530 companies located in 40 countries participated (GMAC, 2016). General global hiring projections that were made for 2016 vs. the actual hiring trends for 2015, showed that almost 50% of companies said that they would hire or did hire a MiM graduate. Narrowing the geographical area to Europe the number increase slightly to 62%, (GMAC, 2016), which can possibly be explained by the stronger culture for MiM programs in Europe and the well-known reputation for MBA programs worldwide (Symonds, 2014). Looking at the hiring trend for MiM in graph 1 here below, there is a long-term increase by recruiters looking to hire MiM graduates.



Graph 1: Global Hiring Trends MiM, source GMAC (2016).

In the same report, recruiters were given a list of 12 abilities and traits that were ranked according to importance when evaluating graduate candidates. The highest ranked ability was, “a candidates ability to fit within an organizational culture” (GMAC, pp. 28, 2016). Followed by “ability to work in teams, and the ability to make an impact” (GMAC, pp. 28, 2016). With this in mind, a company today seems to be looking for a candidate that fits the company

culture and any team were a candidate might be assigned. Making candidates module, in the sense of working in different set-up teams and also fixed, in the sense that the candidate believes and fits a company culture, are current demands for today's companies (GAMC, pp. 28, 2016). Additionally, when asking employers what is in demand when hiring graduates McMurray, Dutton, McQuaid, & Richard (2016) claim that trustworthiness, reliability, motivation, communication skills and a willingness to learn are in demand.

A strong student match for recruiter's demands has been claimed to be the combination of science, technology, engineering and mathematics (STEM) fields with management (Business-Higher Education Forum, 2011). The Business-Higher Education Forum (BHEF) is the oldest organization in the United States for business and higher education executives focused on solving problems related to education and workforce issues. The forum presents the argument that professional science master's (PSM) programs have been labelled as the MBA of the 21st century. These programs combine masters level management training with STEM fields. The argument made by BHEF (2011) is that PSM are considered to be the best match for recruiter's demands and is considered to be more beneficial than PhD programs that are largely focused on educational type research. MiM programs may have something in common with PSM programs, because students with an undergraduate degree in the STEM fields can combine their knowledge with managerial training at the master's level. This might be an attractive advantage for the MiM program in this regard because other management programs, requiring a bachelor's in business will have much fewer graduates with the combination of abilities including management and the fields of STEM.

2.2 Management Education

After considering recent job hiring trends of MiM graduates it can be seen that the hiring rate after postgraduate training in management is growing slightly (GMAC, 2016). The demand for such a degree might be explained by looking at MiM education and why it is valuable. Postgraduate education programs training managers often incorporate elements of interpersonal activities that strengthen a person's ability to think critically, systematically and strategically rather than focusing on theoretical models of management (Davis & Muir, 2004). The MiM degree has often been compared to an MBA degree and the programs are not the same. An MBA teaches business skills, but does not train managers (de Holan & Mintzberg, 2004). Gosling and Mintzberg (2003) argued that MBA programs divide the teaching of management into individual subjects of business, but a person must learn how to learn from himself or herself as a part of developing as a manager. It is argued that this is not a focus in MBA programs and that a reflexive mind-set for learning from experiences that are had is part of developing as a manager (Gosling and Mintzberg, 2003). This strengthens managerial skills and it is difficult to teach individuals to manage by only teaching about the functions of management (Gosling and Mintzberg, 2003). It appears that there is support for management education based on experience learning and self-reflection.

A lack of trust is the most common problem for international working teams (Govindarajan and Gupta, 2001). The Lund MiM program base teams are given scenarios similar to real management consulting case assignments and have the ability to apply new lessons learned to their own aspects of group dynamics. As a form of reflection, feedback sessions in the base teams, are a way for students to learn about their team's issues of efficiency and team's performance. The case assignments allow for group development in real time while learning about business concepts and self-learning. Creativity and flexibility are paramount for management and this is developed by hands-on course material in management training that strengthens soft skill development (Davis & Muir, 2004). The base teams then interact with the rest of the class, as if it were a company network. Multiple informal networks of students taking on role changes can take place in the MiM program because the class takes part in business simulations and a project during the program with an actual company. Being able to understand informal networks that develop over top of formal networks is a soft skill that is highlighted by Davis and Muir (2004) and important for management. The base team acts as a growing place for working in teams; where as, the class becomes a playground to apply lessons learned while in the base team.

According to de Holan and Mintzberg (2004) the job of management does not change, but the perception of management changes. Even though companies are becoming more globalized and this makes the perception of management seem more complicated, management itself is still the same as it has been (de Holan and Mintzberg, 2004). It is possible that the concepts of management in education programs are staying the same, while the student profiles and the walls of the classroom are beginning to open to allow students to have new kinds of interaction with concepts of management and business. Additionally, recruiter's perspectives about management might be changing and this contributes to the need for the current study.

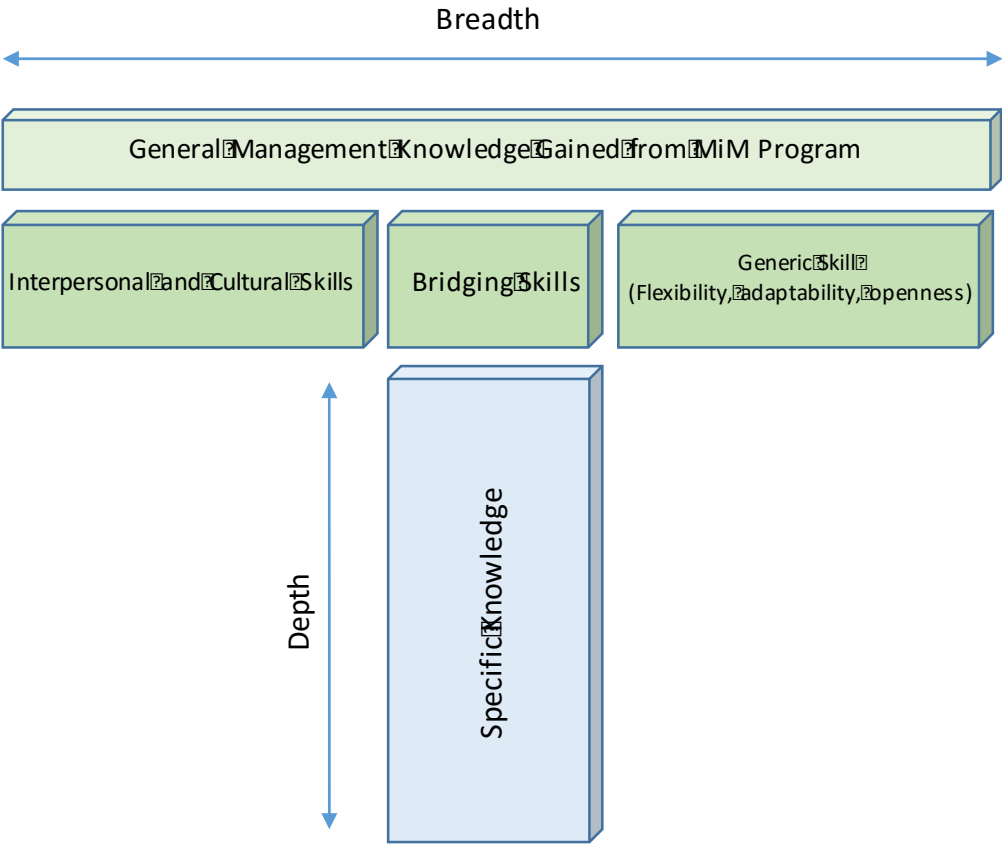
Currently there is a strong economic trend toward satisfying needs involving IT combined with business, technology, people and culture (Harris, 2009); furthermore, Service Science (management, engineering & design) is a background that only a few graduates have, when entering today's global service economy (Spohrer & Kwan, 2009). Given the current admission requirements for the MiM program, individuals with engineering or design degrees can get masters level training in management at Lund University's school that specializes in economics and management. These Individuals might be able to further develop a Service Science profile in the MiM program. The take home message from the presented literature is that multi-disciplinary programs in the above mentioned fields are relevant for today's global service economy. A T-shaped individual is claimed to be the best type of profile for today's demands in management because they have multi-disciplinary understanding (Karjalainen, Koria and Salimäki, 2009). The T-shaped concept originates from engineering and is the ability to have in-depth knowledge in one field and the ability to connect with other individuals that have different in-depth knowledge (Spohrer & Kwan, 2009).

2.3 T-Shaped Concept

To understand the T-shape concept and why it is an interesting description for the MiM graduate, the concept should be reviewed in short. The understanding of the T-shaped individual is still very new. The concept has been used to describe a knowledge management style (Hansen and Von Oetinger, 2001); however, the majority of literature on the topic describes a T-shaped individual and a particular set of abilities. Iansiti (1993) is said to be the origin of the “T-shaped individual” as a profile (Peters, 2012; Karjalainen et al., 2009). Iansiti (1993) used the term to describe a new system focus approach to R&D using teams of individuals with T-shaped skills. Individuals were said to have T-shaped skills because they had individual experience with different materials like ceramics or metals (vertical knowledge) combined with a common knowledge of an engineering discipline (horizontal knowledge). This is interesting when considering the MiM program because students have in-depth perspectives from different educational courses combined with the development of common knowledge in management. Karjalainen and colleagues (2009) took the T-shaped concept further and discussed the ways that it is applied in an education program for developing management skills. They claim that there is a T-shaped learning structure. If individuals have in-depth knowledge in a certain field, education programs that involve group development facilitate the horizontal aspect of the T-shaped profile because individuals working with multidisciplinary knowledge benefit from creative abrasion (Karjalainen et al., 2009). The definition of the T-shaped profile then became: Expertise in one specific area, with the ability to connect with other individuals and other disciplines as result of broad knowledge of a new perspective (Harris, 2009; Karjalainen et al., 2009).

Training T-shaped abilities is a process that involves an interdisciplinary education program that is open and designed more like a job atmosphere than a school (Peters, 2012). This is conducive to opportunities for networking, group interaction and collective problem solving; which is said to develop the horizontal portion of the T to be communication skills and the language of business (Peters, 2012). The vertical part of the T is deep knowledge in one discipline and part of the horizontal area of the T represents the ability to have broad knowledge for teamwork abilities (Spohrer & Kwan, 2009). In order to connect the T-shaped concept to the Lund University MiM program and provide support to the question of whether or not the MiM students are “T-shaped” as proposed by Hecht and Wiedmann (2016). We must make a distinction of how the present study views T-shaped as it relates to MiM students. Our definition is that the MiM student develops the precondition for t-shaped abilities as a result of having in-depth knowledge in a field such as design or engineering, combined with a postgraduate education in management. This view spurs from Hecht and Wiedmann’s (2016) proposal, but the current study focuses on an investigation of T-shaped abilities to further investigate this view. It is the anticipation here that focusing on abilities of the T-shaped profile, will shine light on whether or not the profile is inadequate description of MiM students and a needed profile in some of today’s global companies.

The following model is a conceptualized diagram of what was originally proposed by Hecht and Wiedmann’s (2016) study. This is an illustration of their idea that we plan to address in the current study. The previous proposal was that the MiM program provides the top part of the T as a result of interpersonal and cultural skill along with generic skills like flexibility, adaptability and openness. The T-shape model in model 1 here below, is augmented from Hecht and Wiedmann’s (2016) model. The depth is representing a special knowledge in a certain field, and the breadth visualizes the bridging ability of a T-Shaped individual gained from the MiM. We will be contributing to this model in this study by looking closer at five abilities highlighted in literature that relates to T-shaped individuals. By doing this we hope to clarify the building block in the T-Shaped model that has been used to describe MiM students.



Model 1: Augmented Hecht & Wiedmann (2016) Conceptual Model

2.4 T-Shaped Individuals and Abilities

Previous literature has described the T-shaped individual as a person possessing a variety of abilities. These abilities create the current idea of the T-shaped profile and are often highlighted in the literature as valuable for professionals working in management. Today

consumers are expecting more than functional solutions when selecting products and services; they expect to be enabled in new ways and this creates a demand for service innovation, as well as, the abilities of T-shaped individuals (Demirkan & Spohrer, 2015). Demirkan and Spohrer (2015) claim that T-shaped innovators demonstrate fast allocation to role changes because they branch out from their area of expertise and serve as boundary spanning professionals. This is the result of in-depth knowledge in a specific domain, such as, mechanical engineering or industrial design while being versatile with broad business knowledge and people skills (Demirkan & Spohrer, 2015).

The T-shaped profile has been described in many ways. It has been discussed as an asset on projects involving teams (Iansiti, 1993; Peters, 2012; Karjalainen et al, 2009). T-shaped individuals have the ability to start collaborative problem solving in multidisciplinary teams (Peters, 2012). The T-shaped profile has been described as a multidisciplinary knowledge base that is developed through project-based education programs that develop a person's ability to collaborate on multidisciplinary projects and work in teams of cultural diversity (Karjalainen et al, 2009). T-shaped individuals collaborate in multiple areas of an industry, which according to Drucker (2016) can be desirable for management positions. Duckro (2016) makes this claim based on a recent investigation of job hiring by the Michigan State University's Collegiate Employment Research Institute (2015-16), that has reported that depth and breadth of knowledge was investigated and placed on a rating scale with, rating of 1 being very broad knowledge and a rating of 10 being highly in-depth knowledge. The results from their study indicated that a 5.6 was the desire level of ability in the 2015-2016 investigations. The Michigan State survey defined the T-shaped individual as a person with a 5 on their scale (Michigan State University's Collegiate Employment Research Institute, 2015-16).

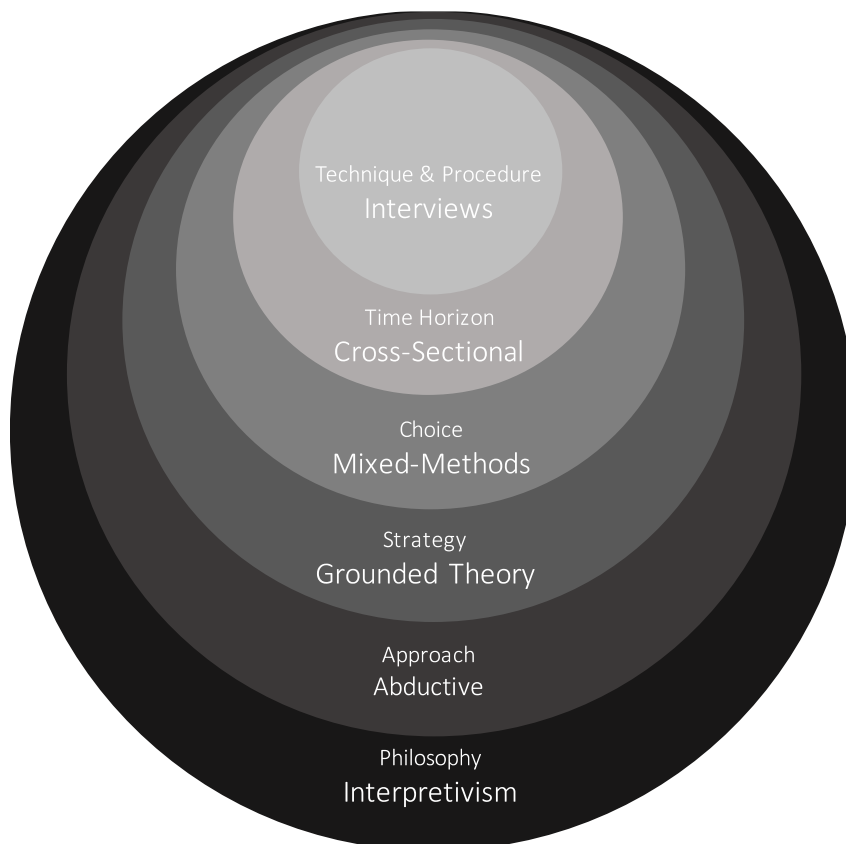
For the current study we have taken the abilities of the T-shaped profile from the literature that we have been able to find on this topic. After reviewing the literature we have highlighted five main abilities that are used throughout our interviews with recruiters and MiM students. A list of these abilities as we have used them in this study can be found in the methods section. These abilities are the ability to adjust to role changes (Demirkan & Spohrer, 2015), the ability to collaborate in multiple areas of an industry (Duckro, 2016), the ability to understand one field of knowledge in depth and how to integrate this knowledge with people that have a different in depth knowledge (Iansiti, 1993; Spohrer & Kwan, 2009), the ability to work in teams of cultural diversity (Karjalainen, 2009) and the ability to start collaborative problem solving in multidisciplinary teams (Peters, 2012). The abilities we have selected have been used to describe T-shaped, but have never been combined until now. This should demonstrate that the topic is rather new in its development. The five abilities will be used to address our research purpose.

2.5 Summary

The hiring trend for MiM students is steadily rising, which could support the demand for these individuals and their T-shaped profile, as suggested by Hecht and Wiedmann's (2016). Hecht and Wiedmann's (2016) study presented T-Shaped student as being the result of a special knowledge in one specific field and the broad knowledge from the MiM program, that has an open learning atmosphere (more than lectures in a classroom) allowing individuals to have group development and problem-solving experience. Management has not changed (de Holan and Mintzberg, 2004), but the structure of management education is evolving and the types of student profiles that are entering management education are taking a new form, which is suggested to match the T-shaped individual. This study has chosen five abilities highlighted in literature relating to the T-Shaped profile, these abilities are taken from the current literature on T-shaped and will help further our understanding of how the T-shaped profile relates to MiM students.

3 Methodology

The methodology of the current study has been selected to explore the research questions in the most efficient way, given the time frame available for this research. This paper realise the difficulties in assessing the supply and demand for T-shaped individuals, along with highlighted abilities. With the chosen methodology presented here below, this paper fulfils the purpose and answers the research questions given the time and resources present. In the following chapter, the method part of the paper will be presented, outlining the different research stages according to the onion model, presented by Saunders, Thornhill and Lewis (2012) First, the research philosophy must be defined, creating a starting point for the research approach, which is adopted in the second stage for the model. The third layer is choosing the strategy, followed by the fourth step of identifying the time-horizon. The fifth step presents what type of data collection method that is adopted. By following the onion model, the methodology of the study can be described in a series of stages and illustrated step by step (Saunders et al., 2012).



Model 2: Methodology Following Onion Model (Saunders et al., 2012)

3.1 Research Philosophy

The current research philosophy is based on interpretivism, which advocates the necessity of understanding the difference between humans in social roles; as well as, the difference in conducting research among people and objects (Saunders et al., 2012). Realizing that reality can be interpreted in many ways, this paper maintains that these interpretations are in themselves a way to pursue current knowledge on the research topic. The interpretivist perspective can be listed as the most appropriate, particularly the field of organizational behaviour and human resource management (Saunders et al., 2012). Symbolic interactionism tells us that we are in constant process of interpreting the world around us through interactions with others, which leads to adjustments of our own meaning and actions, and it is crucial to adapt an empathetic stance (Saunders et al., 2012). Studying phenomena in its natural environment is essential to the interpretivist philosophy, however, “The only thing we can know for certain is how people interpret the world around them” (May, 2011, pp. 13).

3.2 Research Approach

The T-shaped theoretical framework is quite new and at this point the grounded theory has not been combined in one study before now. With this being the case, we have not stated a hypothesis, but we are asking questions and looking for patterns in the responses we get from participants information. In this light, our study is not only inductive or deductive, but is a combination, abductive (Saunders et al., 2012). “The abductive approach involves the collection of data to explore a phenomenon, identify themes and explain patterns, to generate a new – or modify an existing – theory which is subsequently tested” (Saunders et al, pp. 665, 2012). Moreover, grounded theory gives room for exploratory hypotheses, analysed through deduction and validated through induction (Littlejohn & Foss, 2009).

3.3 Research Design

This study is designed to explore the extent to which, recruiters look for abilities that, according to existing literature, T-shaped individuals have and if MiM graduates possess these T-shaped abilities.

Recruiter – Interviewees

Recruiters were purposefully sampled because they are all actively recruiting were from global companies based in the Nordic countries, and in total 11 people were interviewed. These interviewees were selected based on experience with recruitment, current position and

type of industry, in order to explore the research questions (see object 1 in appendix B for interview questions).

Through personal contacts and snowball sampling, job recruiters were selected in a strategic and purposeful information-oriented manner (Saunders et al., 2012; May, 2011). After gathering the participants, 20-35 minute qualitative telephone or in person interviews were carried out. A semi-structured interview is a qualitative interview that is defined by a pre-set question guide and as explained here above, it aims to provide in-depth findings through informal discussions with participants (Littlejohn & Foss, 2009). Prior to the interviews, we confirmed with each potential interviewee that they could speak on behalf of the whole company's recruiting and hiring perspective. A list of recruiter interviewees can be found below in table 1 and a list of MiM student participants can be found in table 2.

Student – Interviewees

We randomly selected current MiM students to be interviewed, in order to find out whether or not they claim to be T-shaped individuals. A total number of 11 students were interviewed. This number of students would have been more, but we had a limited time because our interviews with recruiters were time-consuming. Selection was done using the 2016 class list of students and a random number generator found on random.org (see object 2 in appendix B for interview questions). By asking students about their own opinions of themselves, we acknowledge that their answers can be self-biased. To troubleshoot in this aspect, we asked student interviewees to clarify how they developed the abilities they claim to have and elaborate on why they have these abilities. We then followed up with a survey in order to get better data on their answers. In the interviews we had a threshold for dealing with uncertainty. If students did not give a clear answer supported by a clear example to our questions regarding their abilities or their opinion of matching the T-shaped profile, their answer was perceived as a no.

Student - Follow-up survey

After each interview with MiM students we followed up with a survey in order to get a more quantitative view of the extent to which students think they have the abilities they say they have. Additionally, the survey had an answer gradient where students had the ability to say the extent to which they thought they had the ability we asked about. Students could either answer, “No, I do not have the ability”, “yes, to a small extent”, “yes, to a large extent”, or “yes, to very large extent”. To contribute to the certainty of the answers we received, we had a threshold and marked, “yes, to a small extent” as a no. This is considered to contribute to the reliability when comparing the interview and survey data.

Table 1: Company participants, name abbreviation, industry, and person's title.

Short Name	Company	Title
C1	Consulting	HR Manager
C2	Consulting	Recruiter Experienced Hires
C3	Consulting	HR Director
C4	Consulting	Director Consulting Services
C5	Consulting	Recruiter
NC6	Non-consulting	HR Manager
NC7	Non-consulting	HR Manager
NC8	Non-consulting	HR Manager
NC9	Non-consulting	HR Business Partner
NC10	Non-consulting	HR Manager
NC11	Non-consulting	Recruiter

Table 2: Student participants, name abbreviation, undergraduate degree, working experience, highlighted experience.

Student	Undergraduate Degree	Working Experiences	Highlighted Experience
S1	System Science	No	Studied Abroad
			Played Sports
S2	Psychology	Yes	
S3	English Language	Yes, several years	Studied Abroad
			Work
			Sports
			Multicultural Family
S4	Double Degree	2 Internships	Studied Abroad
	Personnel Management		
	Psychology		
S5	Media and Communication	Yes, several years	Work Experience
S6	Food Technology	Yes, several years	Work Experience
S7	Foreign Language	Yes, several years	
	German and Italian		
S8	Liberal Arts	Yes, several years	Global Understanding
S9	Designed Sustainable Material	Yes, several years	Work Experience
S10	Strategic Communication	Yes, several years	Work Experience
S11	English	Yes, several years	Work Experience
	Communication		

3.3.1 Research Strategy

In order to address our question: Is the MiM program at Lund University training abilities that match the T-shaped individual profile? We selected 11 students from the Lund University MiM program that matched our definition of t-shaped. We interviewed these individuals and asked them if they believe, or do not believe that they have the 5 different abilities that are a part of the T-shaped profile (see object 2 appendix B). We then ask them if each of these abilities came from the MiM program or something else. If the ability was claimed to come from the MiM program, we asked the students to specify what part of the program gave them this experience. We acknowledge that a person's view of him or herself might be self-biased. Our approach to this investigation is that we are judging the answer of a student as if we were interviewing them for a job. We have used our own discretion when analysing the answers students have given and believe that this is the first tool a recruiter has when initially interviewing a job candidate before using case studies or IQ tests. The student interviews were followed by the quantitative assessment (survey) within two weeks after the interview, to see the extent to which the students believe they have any of the five T-shaped abilities. The data collected was then used to assess; whether or not, T-shaped individuals gain ability as a result of a MiM program, or if they had these abilities before they apply to the program. This assessment was used to shine light on; whether or not, the program is training T-shaped abilities, strengthening T-shaped abilities, admitting students with T-shaped abilities or a combination of occurrences.

In order to address the question: Are the abilities of the T-shaped individual in demand at global companies in 2017? We provided recruiters from global companies with the 5 different abilities that are from the literature on T-shaped individuals and asked recruiters to tell us which abilities on the list are in demand for each of the following types of job position: entry-level job, management job and graduate/trainee position. After hearing each recruiter's perspective we asked them to specify why they think these abilities with match each of the three different types of job position. We also asked recruiters what they think has changed about the economy and if this changes the abilities that are needed when entering today's job market. This measure was included to understand the type of perspective the interviewee has regarding job hiring.

In order to address the question: Do MiM students claim to be T-shaped? Each student that was interviewed was provided with our definition of the T-shaped profile and was directly asked if this definition describes them and why they think they match the definition or do not match the definition.

Table 3: Research strategy

	Strategy	Aim	Sample	Type of Questions	Method of Analysis
1	Qualitative semi-structured Interviews	To understand to what extent the recruiters valued the abilities	Recruiters and HR-Managers at companies in the Nordic countries	Open questions	Open Coding and Content analyse
2	Qualitative semi-structured Interviews	To understand to what extent the student in the MiM programme have these abilities	Students from MiM Program	Open questions	Open Coding and Content analyse
3	Quantitative Survey	To follow up the interviews with quantitative data	All Students	Survey	Ordinal scale

3.3.2 Research Choice

A mixed method was chosen in order to explore the research question in the most efficient manner given the research approach and strategy. Both qualitative and quantitative data was collected during the interviews and analysed (Saunders et al., 2012).

3.3.3 Research Time Horizon

Using a cross-sectional design the current study captures data at one certain point in time, looking at phenomena by comparing the collected data (May, 2011).

3.4 Data Collection Method

A semi-structured interview method was used in order to ask specific questions and at the same time give room for the interviewee to possibly go beyond a simple answer because of follow up questions. The semi-structured set-up gives the interviewer room to seek clarification and elaboration from the answers given by the interviewee, giving the opportunity to record the qualitative information on the research question (May, 2011). These types of interviews have been explained as giving people more room to answer the questions on their own terms while still maintaining the integrity of the structured interview. Usage of this type of interviews will enable comparison as the answers will vary in quality and amount of information. There will not be one perfect interview, however, all interviews will add to the final story in the long run (May, 2011).

3.4.1 Interviewing Recruiter and MiM Students

To increase the quality and level of preparedness before interviews, a document was sent out a few days before all interviews, including the following: An introduction to the research, example of MiM student profile, the abilities that are targeted and the interview questions. This guiding document aimed to help the interviewee to prepare for the interview (Easterby-Smith, Thorpe & Jackson, 2012). The abilities and themes utilized in this study were derived from the literature review and were crucial in developing the interview questions. The semi-structured approach also provided the current study with the ability to probe answers, which was well needed when more explanation was needed in order to fully understand the answers. The interview questions in the semi-structured interviews can be found in appendix B.

Interviewing structure for Recruiter Interview

All interviews were conducted via Skype or telephone. Each interview began with an introduction of the interviewee and their background. Each interviewee he was asked to verify that they had the questions for the interview in hand and that the interview could be audio recorded. Recruiters were told that the purpose of this study is to understand the demand for the abilities of a specific graduate profile. Interviewees were told that the profile was that of a person graduating from the Lund University masters program in management and that this person has a bachelor's degree in any field other than business. The interviewees were then asked to look at the list of T-shaped abilities and determine whether or not abilities from this list were desirable for three different job positions (entry-level job, management job and graduate/trainee position). Each interviewee was then asked directly if they thought the graduate profile is in demand for their company. After the recruiter said yes or no, they were asked to specify what undergraduate degrees would be most eligible for a job position.

Interviewing structure for Student Interview

All interviews were conducted via Skype or telephone. Each interview began with an introduction of the interviewee and their background. Each interviewee was asked to verify that they had the questions for the interview in hand and that the interview could be audio recorded. Students were told that they were selected for this study because they match the MiM student profile. This profile was explained to them as we have defined earlier in this article. Each student was asked to select any of the five listed abilities presented on the questions for the interview. The questions were presented in the same way as in our interviews with recruiters see appendix B. Students were asked which of the abilities they thought they had, and were asked to provide an explanation for why they thought they have these abilities and say whether or not the ability came from the Lund MiM program. The

students were then given our definition of the T-shaped profile and were asked if this definition describe them and if they believed they were T-shaped individuals. After each person either said yes or no to this question they were asked to explain why this was true for them and if the MiM program made them T-shaped.

3.5 Data Analysis

The procedure of analysing the data during this research was consistent with our philosophy and research strategy, and inline with the nature of our data collection method of interviews and surveys (Saunders et al., 2012). Transcribing and coding the data into different categories allowed us to work with the data in a more comprehensive way, in order to be able to develop or test the patterns and relationships between data and previous literature. From this clean data, we could build our conclusions in a more structured and accessible way. Moreover, this analyse draws upon a generic five step approach from Saunders et al. (2012) presented here below:

1. Comprehend often large and disparate amounts of qualitative data;
2. Integrate related data drawn from different transcripts and notes;
3. Identify key themes or patterns from information for further exploration;
4. Develop and/or test theories based on these apparent patterns or relationships;
5. Draw and verify conclusions.

(Saunders et al., 2012).

Beginning with open coding (Saunders et al., 2012), which requires a brainstorming approach to open up the data; many different possibilities could be found because we asked all interviewees the same basic questions. A key point in transcribing the data is to interpret the answers to a yes and no question when no clear answer is given (Saunders et al., 2012).

After listening to all of our interview recordings, we created a master excel file with all of the statements that recruiters and students said when answering each of the questions we asked. We then extracted key phrases and words from each of these answers. For recruiters, we have two presentations of keywords that displays the words they used when interviewed, see tables 4 and 5 in appendix A.

Key phrases and words from student answers during interviewing were also taken from a master excel file, containing each student's full answer. Keywords and phrases were taken from this raw data to help us understand whether or not the students say they match the T-shaped profile, see table 6 in appendix A.

Using this structure, we took the answers given during interviews and made comparisons between subjects in our two groups of interviewees, students and companies, as well as between the two industries, consulting and non-consulting (C and NC in table 5 appendix A).

3.6 Data Quality

Qualitative Data

To ensure and assess the qualitative data quality of this paper, we have taken guidance in how this type of study should be judged and evaluated according to Lincoln and Guba (1985; 1994 cited in Bryman and Bell, 2015). They propose two main criteria, trustworthiness and authenticity. Authenticity focuses on fairness towards the social members with regards to the selection of participants in the research (Bryman and Bell, 2015). This paper has included participants from various companies among the represented members of this social sphere together with student participants.

The trustworthiness, is built upon 4 sub-criterias, which all have an equivalent criterion within quantitative research, as follows; Credibility, which parallels internal validity; Transferability, which parallels external validity; Dependability, which parallels reliability; Confirmability, which parallels objectivity. Lincoln and Guba built their criterion on the idea that there is no absolute truth about social concepts in the world for one researcher to reveal (Bryman and Bell, 2015).

- **The credibility**, as presenting and acceptance from social world that is studied, of this research was achieved by including our thesis tutor throughout the process together with input from student participants.
- **Transferability**, can according to Lincoln and Guba, be seen as limited if the sample size is small and concentrated to a specific field sharing certain characteristics (Bryman and Bell, 2015). This is averted by giving a “thick description— that is, rich accounts of the details of a culture (Bryman and Bell, 2015).
- **Dependability**, was achieved by keeping records of all separate phases in the process of the research (Bryman and Bell, 2015), in order to assess a possible peer audit review.
- **Confirmability**, should ensure that researcher have acted in good faith, not allowing personal values to interfere with the research (Bryman and Bell, 2015).

Quantitative Data

Our quantitative data was collected through a survey, which included a few straightforward questions generated from the interview questions and interview data. This was selected to try to avoid any misunderstanding that the participants of the survey might encounter, as all survey participants had completed the interview where all information in the survey was discussed.

3.7 Validation and Limitations

The current study uses purposive sampling. Saunders et al. (2012) say that purposive sampling can be seen as bias to the reader, on the idea that the sampling has been based on the researcher's own judgement; however, the sample may very well contain participants that are completely different, which can be argued to be strength, as any patterns shown can be of particular interest and represent key themes. In order to use this as an advantage, we have asked the exact same questions to each of our interviewees, supplying them with the same information. By doing this we consider that the answers we have received are comparable.

External reliability can be measured by the degree to which the study can be replicated. as with all qualitative research, this is a difficult criterion to meet when looking at a specific snapshot of a social setting at one point in time (Bryman and Bell, 2015). A strong point for our research is that all of our job recruiter interviewees are the recruiters that claim to speak for each of the global companies we spoke with. Any future researcher can contact these individuals and make an additional assessment using our study criteria. We are aware of the relative small sample sizes for both companies and students and we will keep this in mind during the analysis of our study.

Having a semi-structured interview might have led the interview towards a different direction than intended due to follow questions asked to probe answers. However, this was avoided by having two researchers present at all interviews.

3.8 Chapter Summary

It has been proposed, by Hecht and Wiedmann (2016) that future research should focus on improving MiM programs so that the degree is meeting industry demands. It is likely that recruiters at global companies are the best suited to provide information on such a topic because they have first hand knowledge of the demands of today's companies. Additionally, students that are currently in the Lund MiM program are likely a good current resource of answering questions about today's MiM student perspectives.

4 Finding and Analysis

Our findings have been presented in several different ways, in the sections that follow three graphs can be seen that compare the demand for T-shaped abilities as they are needed for three different job positions, shown in graphs 2, 4 and 6. We then present three graphs that show comparisons of consulting companies and non-consulting companies' demands for the T-shaped abilities, in graphs 3, 4 and 7. The company demand for MiM student profiles, can be found in graph 8.

In the text each of the 5 abilities are presented in the abbreviated form as follows: ability to adjust to role changes (A1), ability to collaborate in multiple areas (A2), ability to understand one field in-depth and how to integrate this with other in-depth fields (A3), ability to work in teams of cultural diversity (A4), ability to problem solve in multidisciplinary teams (A5).

Note: It should be noted that some companies only hire management positions internally and some companies do not have graduate programs. The companies that fall into these categories have abilities that are not applicable (N/A) in graphs

4.1 Qualitative Findings From Recruiter Interviews

The qualitative data that we have collected from interviewing recruiters at global companies has given us insight on whether or not T-shaped abilities, which have been selected from previous literature on the topic, are in demand in 2017. Our interviews have been rich in content and we believe that each of our selected individuals has demonstrated a response that spurs from experience with hiring demands. Recruiters gave strong input on the abilities that are in demand for entry-level jobs, positions in management and graduate programs. Additionally, they gave strong feedback to whether or not a graduate with a non business bachelors and a master's degree in management would be considered for a job, as well as, input on what undergraduate degrees would lead to a position at their company.

The five T-shaped abilities from our interviews are discussed below in sections on each of the three job position categories that were asked about in the interviews with recruiters. After each job position is discussed it is followed by a graph of the demand for the individual abilities. The second graph that follows in each section compares the demand for each ability separated by consulting company or non-consulting company (manufacturing, technology etc.)

Main Findings From Recruiter Interviews

Taken together, the five abilities that we have highlighted in our interviews are in demand for entry-level jobs at the majority of companies interviewed. The demand for abilities that are needed for entry-level positions appear to be lower than what is in demand for management positions, but higher than what is in demand for graduate programs. One finding regarding the ability to adjust to role changes (A1) stands out because it is in demand for all job positions we have focused on. Additionally, another finding of interest is that graduate programs appear to have low demand for the ability to understand one field in-depth and how to integrate this with other in-depth fields (A3). This ability has been referred to as the “go between” and it is claimed to be an important skill for T-shaped people working as managers (Demirkan and Spohrer, 2015). Our study results indicate that this is an ability that is in demand for management and it is interesting that this is not something that is desirable for a graduate program candidate.

Taking a look at our comparison of consulting and non-consulting companies, we see that consulting companies have a stronger demand for T-shaped abilities when hiring for entry-level positions; whereas, non-consulting companies have a high demand for T-shaped abilities when hiring for graduate programs. Both industry categories have a similar demand for T-shaped abilities when hiring managers.

4.1.1 Abilities in Demand When Hiring Entry-level Positions (Questions 1 Recruiters)

Our impression from interviewing recruiters about the abilities needed for entry-level positions is that this type of position can vary and applicants should be ready for ad-hoc roles if needed. When asked if the ability to adjust to role changes (A1) is in demand for entry-level jobs, 10 out of 11 interviewees highlighted this ability as one of the most important skills for entry-level candidates, see graph 2. After assessing key words that were used by interviewees for validation it was reported that 7 out of 11 companies claim that it was “important” to be able to adjust to role changes for entry-level jobs (see table 4 appendix A). For example, one consulting company used the phrase, “applicants should have a mind-set for change”; additionally, other companies used the phrases “adaptability”, “multi-skilled people” and “the ability to make daily role changes is important”. Conversely, the manufacturing company that did not think A1 was something important said, “the need for the ability for role changes is unnecessary, because we are in a niche market and our industry does not really change that much.”

When comparing consulting companies and non-consulting companies (see graph 3), it can be seen that role changes are in demand by both industries. We can also see that the ability to understand one field in-depth and how to integrate this with other in-depth fields (A3), the ability to work in teams of cultural diversity (A4), the ability to problem solve in multidisciplinary teams (A5) are in higher demand from consulting companies. After assessing phrases and key words that were used by interviewees for validation, it was reported

that the ability to work in teams of cultural diversity is “important” and or “crucial”; however, it should be noted that some companies saw this ability as something that all candidates should be able to do. One consulting company said that cultural diversity was a “hygiene factor”.

When comparing consulting companies and non-consulting companies (see graph 3), consulting companies look for more T-shaped abilities when recruiting Entry-level positions. Additionally, both companies have similar demands for the ability to adjust to role changes (A1) and the ability to collaborate in multiple areas (A2).



Graph 2: Abilities in Demand for Entry Level Positions.

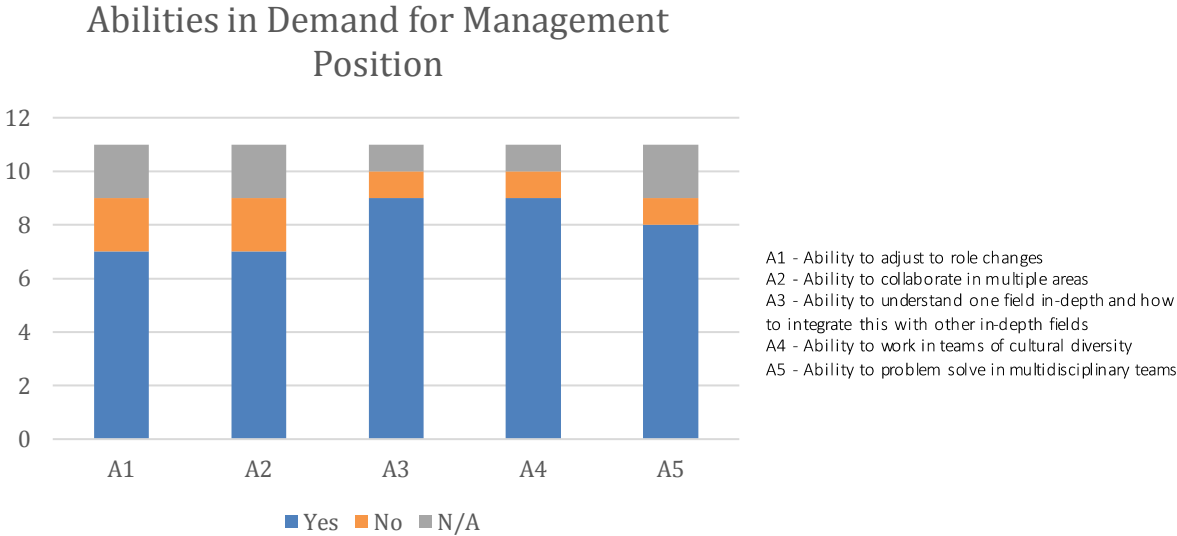


Graph 3: Abilities that Consulting Companies and Non-Consulting Companies Demand When Hiring for Entry-Level Positions.

4.1.2 Abilities in Demand When Hiring Management Positions (Question 2 Recruiters)

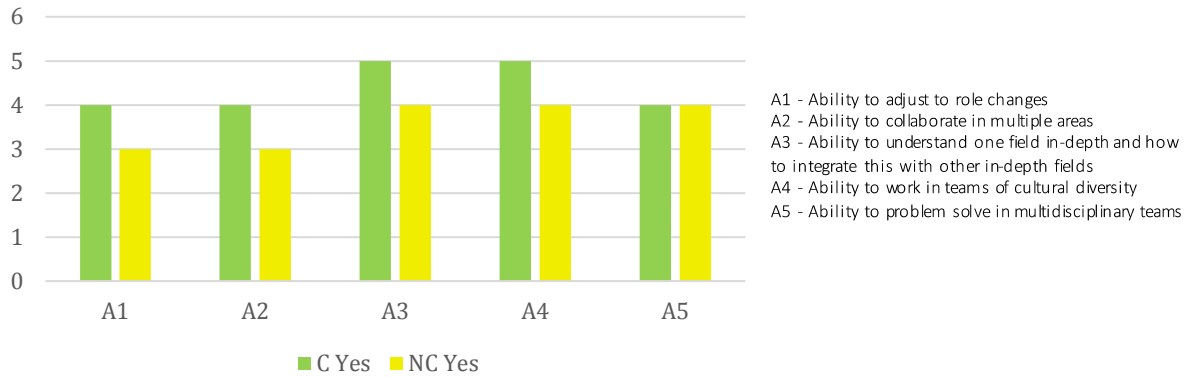
Management appears to be the job position that requires the highest level of T-shaped abilities. When compared to entry-level positions, it requires slightly less need for the ability to adjust to role changes (A1); however, compared to graduate programs, the demand for managers to have the ability to understand one field in-depth and how to integrate this with other in-depth fields (A3), is higher. Additionally, the ability to work in teams of cultural diversity (A4), and the ability to problem solve in multidisciplinary teams (A5) involve teams and these were in demand. This is true for both consulting companies and non-consulting companies. One of the companies that said no to A1 claimed that, “the manager is expected to be able to work with people that are doing different roles and that is why they are not expected to change roles as often”. Companies that thought all the abilities were necessary said things like, “a proven record of managing people is what we look for, as well as, the ability to bring out more competence from others, so that they perform at a higher level is what we demand” said one consulting company and “we want to see a candidate that shows a history of delivering results when working with people” said one consulting company.

The majority of the companies interviewed would not look at newly graduated students when hiring for a management position. Most of the companies would actually look for internal candidates for management positions.



Graph 4: Abilities in Demand for Management Positions

Abilities that Consulting Companies and Non-Consulting companies Look for When Hiring Management Positions



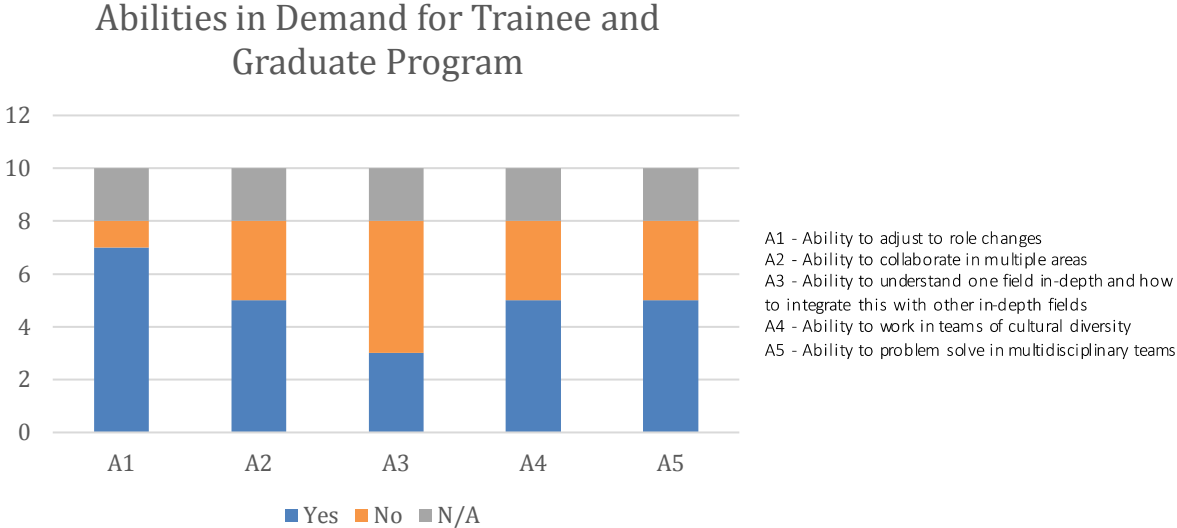
Graph 5: Abilities that Consulting Companies and Non-Consulting Companies Demand When Hiring for Management Positions

4.1.3 Abilities in Demand when Hiring for Trainee and Management Programs (Question 3 Recruiters)

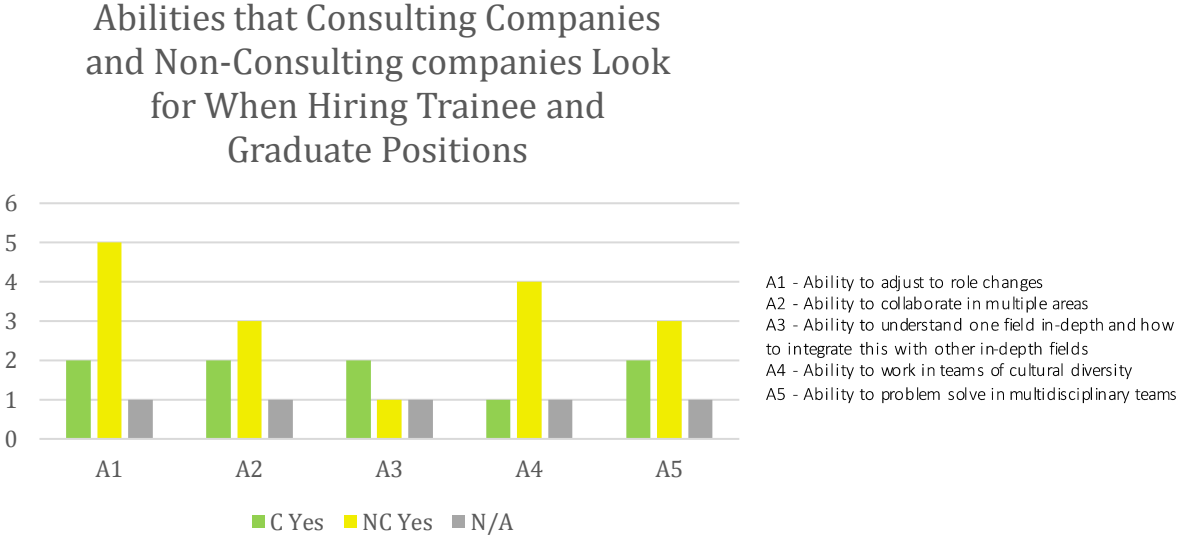
Just looking at graph 6 we see that the ability to adjust to role changes (A1) is in demand, along with the ability to work in teams of cultural diversity (A4) and ability to problem solve in multidisciplinary teams (A5). When looking at this job position there is more clarity when looking at the industry comparison, see graph 7. It can be seen that non-consulting companies are looking for more t-shaped abilities than consulting companies when looking for people to start their graduate or trainee program. Only one consulting company did not have trainee or graduate programs and is therefore not included in the graph. The graduate and entry level positions have almost opposite results when comparing consulting companies and non-consulting company demands. To illustrate this finding, more than one consulting company has said, “when looking at entry level positions we want to see a proven track record of being the best”; conversely, more than one non-consulting company has said, “we look for the potential to do well at developing and this is true for our graduate programs”.

Along with these findings is the indication that some non-consulting companies seem to have more rigid degree profiles that they look for. This might indicate a reason to why they look for potential when interviewing candidates because when candidates are interviewed, they already possess a specific undergraduate degree that is being sought after. Several non-consulting companies highlighted that degrees in engineering, finance and law fit into a job category quite specifically and a master’s degree in management would be an interesting bonus. Conversely, the company that said their industry does not change much (mentioned earlier) made the comment, “education is not that important, work experience is the best thing to have”. This comment may give support to our decision to focus on abilities of job candidates rather than simply university degrees. Several interviewees use the following

phrases to describe trainee programs when considering the T-shaped abilities, “can be developed further”, “important”, “if you have the potential to develop the five abilities listed, you would do well in a junior consultant’s position”.



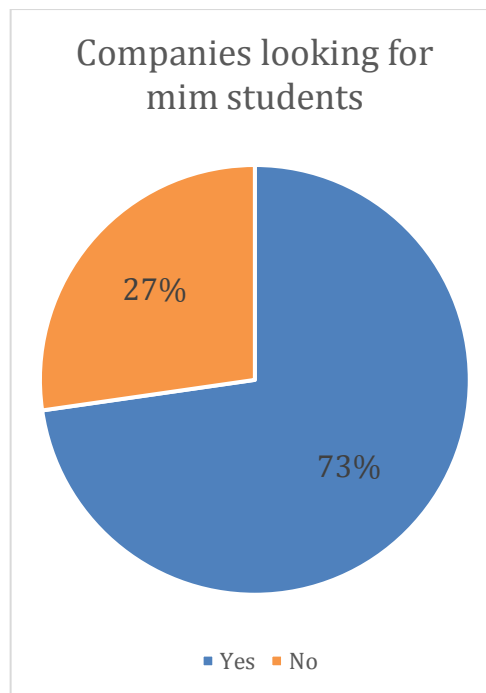
Graph 6: Abilities in demand for trainee and graduate program



Graph 7: Abilities that Consulting Companies and Non-Consulting Companies Demand When Hiring for Trainee and Graduate Positions

4.1.4 Demand for the MiM Graduate (Question 4 Recruiters)

In interviews that did not use terms like “MiM graduate” or “T-shaped individual”, but directly asked if the student with a non business degree and a masters in management is in demand, each company gave good insight on this question. It can be seen that most companies said yes to this question; however, most all of the companies that said yes had specific undergraduate degrees to mention. The companies that said yes specified that candidates would need in undergraduate degree in one of the following fields: Engineering, informatics, Business, Law, finance, economics or marketing. Companies that did not specify an undergraduate degree said that candidates could either have, a “solid proven track record”, or “relevant work experience”. One consulting firm said that they had a flexibility in every department except for auditing. Only one company that said yes, did not specify an undergraduate degree that they were specifically looking for. The 3 companies that said no to the MiM graduate profile said that they only demand a degree in business, law or engineering.



Graph 8: Demand for MiM Students

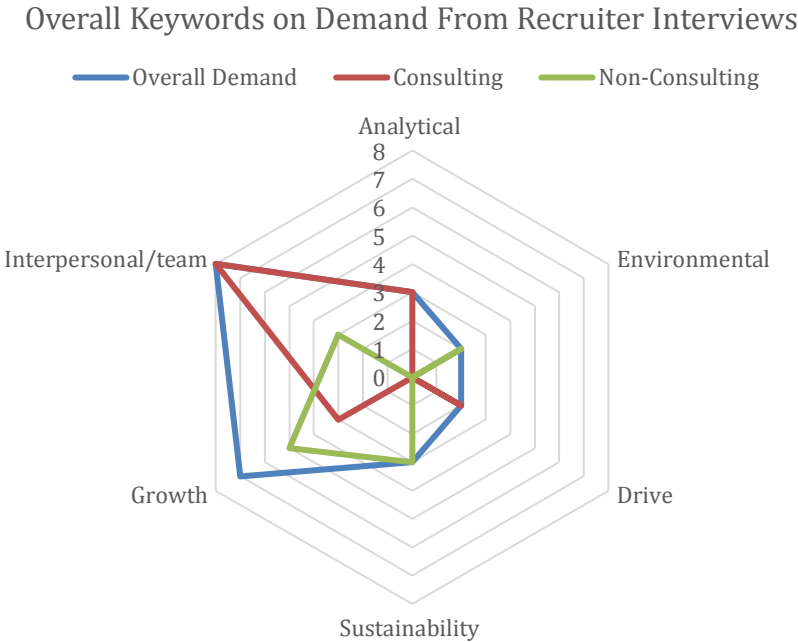
4.1.5 Keywords describing What Recruiters Demand

This section refers to the open coding findings from interview answers. The two tables talked about in this section can be found in appendix A.

The most interesting findings, shown in table 4, from this open coding is the number of keywords that were used to describe specific abilities when addressing specific job position demand. The ability to understand one field in-depth and how to integrate this with other in-

depth fields (A3) for management and the ability to work in teams of cultural diversity (A4) for entry level positions received the most amount of keywords. This is interesting because it might be interpreted that many different keywords showed elaboration on these abilities according to the job we were asking about. When discussing A4 individuals used keywords that indicated that A4 was obviously to be expected, or “a hygiene factor.” Possibly this description should be considered when addressing the demand for this ability. If it is a hygiene factor, maybe it is an ability that depends on a situation and has less dependency on what an individual brings with them to a job. Another interesting finding is that A3 for management has key phrases that augments the interpretation of the demand. Interviewees said things like, “actually a manager needs a helicopter view”, or “the ability to connect to people that have the in-depth knowledge is more important than knowing the in-depth knowledge personally”.

Looking at the general keywords from all interviews with recruiters, see table 5 in appendix A, we can see that the two industry categories we have focused on have two different kinds of demand categories. We see that consulting companies have demands that are best described using the terms “analytical” and “drive”. Additionally, we see that non-consulting companies have demand that fits the categories of “environmental” and “sustainability”. Using these findings from the open coding of our interviews with recruiters might give validation to why some of the demands vary among the industries we have interviewed. Additionally, some of the demand for T-shaped abilities is the same among the industries and this is understandable given that some of our keyword decoding shows that both types of industry have demand that is described best by the category words “growth” and “interpersonal/team”. Graph 9 here below, illustrates these findings and shows a trend towards, interpersonal/team and growth.



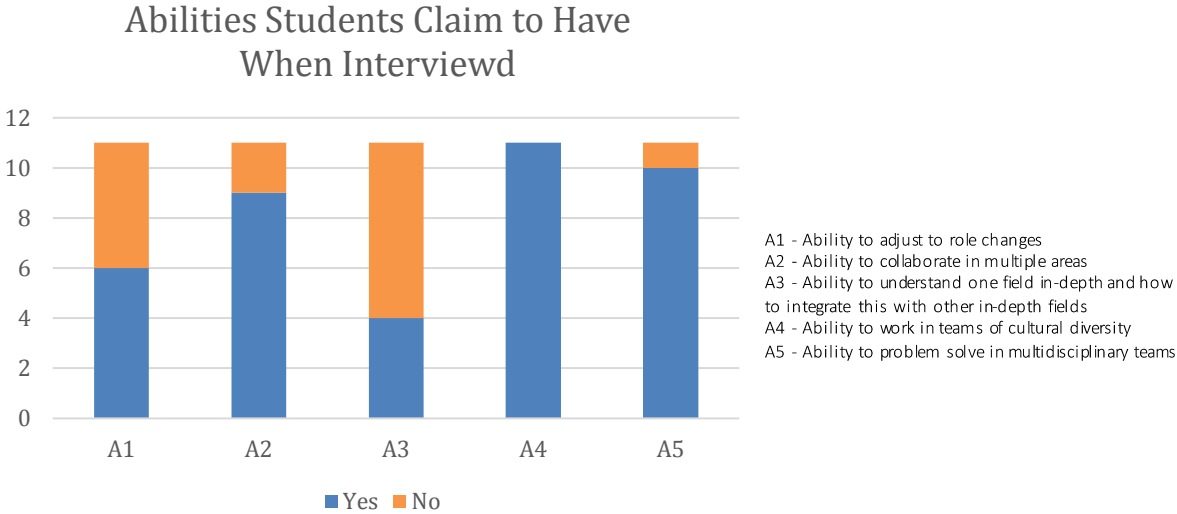
Graph 9: Overall Keywords on Demand

4.2 Qualitative Findings from MiM student Interviews

During the interview students were asked to answer a question on whether or not they believe they were T-shaped individuals. More than half of the participants said that they are T-shaped. It is important to clarify, that if a student did not give a clear yes or no with a reason for why they believe their answer is true, the answer given was interpreted as a no.

4.2.1 Abilities Student Claim to Have

The student interviewees gave good insight to whether or not they believe they have the T-shaped abilities listed and whether or not they consider themselves to match the T-shaped profile. Among the students we interviewed, the majority claim to have the ability to work in teams of cultural diversity (A4) and ability to problem solve in multidisciplinary teams (A5), see graph 10. One Interesting finding is that most students that claimed to have the individual t-shaped abilities did not say that the ability was a result of the MiM program; however, many do state that they have improved during the program and developed these abilities further.



Graph 10: Abilities Student Claim to have When Interviewed

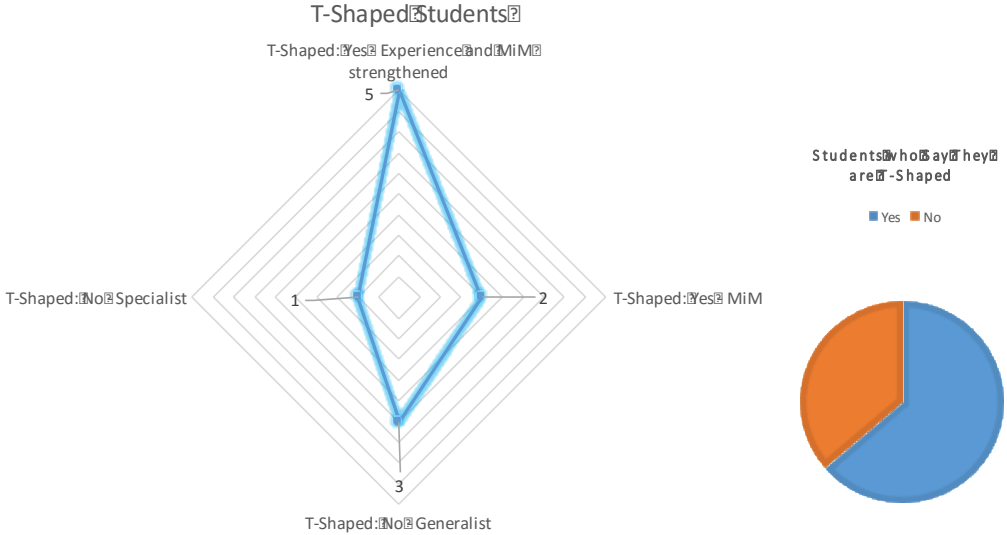
4.2.2 T-Shaped Students

During the student interviews, each interviewee was asked to say whether or not they think they are T-shaped. They were then asked to give a clear example for why they said yes or no, see table 6 in appendix A.

Our findings after analysing the data, show that we have four categories that the students can be divided into. Two categories for the students who said they were T-Shaped and two categories for students who said they were not T-Shaped. This categorisation was done by looking at the explanation given for why the student thought they were T-shaped or not. Within the yes category we found students who were T-shaped either from the MiM program or from previous experience. In the no category we found students who were not T-shaped because either they were generalist or specialist, this is illustrated in graph 11 here below.

An Interesting finding is that the majority of the students claimed to be T-shaped before the MiM program, describing it to be from the undergraduate degree together with work experience. However, these students also mentioned that the MiM program has developed them further as T-shaped individuals. This would give reason to believe that the T-shaped abilities and the profile is not emerging from the MiM in general, rather developing and strengthening.

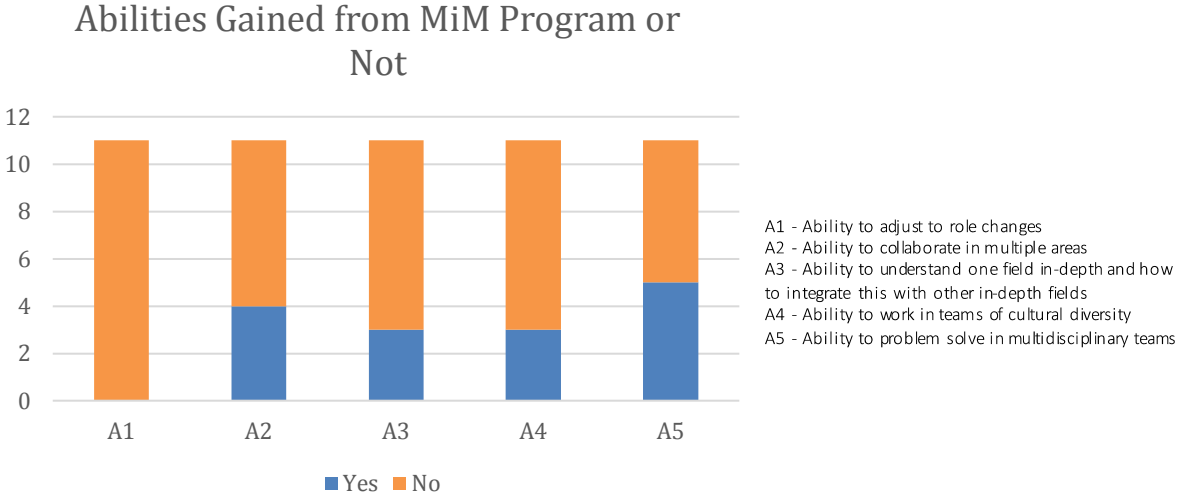
Students claiming not to be T-shaped state that they have either too short of a vertical or horizontal part of the T for them to be T-shaped. This is because they have either 2 general degrees and general work experience, or a very specialist profile from undergraduate degree and many years of previous work experience.



Graph 11: T-Shaped Students

4.2.3 Abilities from the MiM Program

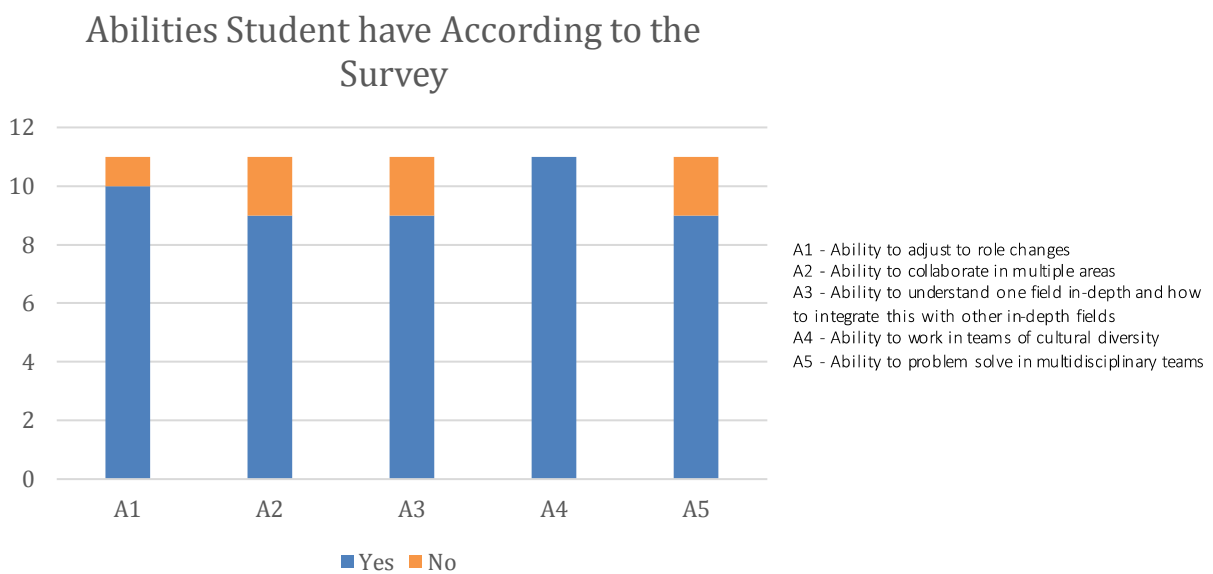
In graph 12, the abilities gained from the MiM program are displayed. Important to keep in mind is that this shows if the ability is claimed to have started during the MiM program. A majority of the students did say that the MiM program strengthened the ability, but the most common answer was that the abilities were gained from: working experience, studying an abroad, undergraduate degree or sports. The fact that the graph shows that only a small number of students gained the abilities from the program could be interpreted as good selection of candidates for the program. Applicants showing signs of these abilities might have been accepted to the program just because of this. Therefore, many students already had these abilities and only developed the existing abilities during the program.



Graph 12: Abilities from MiM program or not

4.3 Quantitative Findings from MiM Students

Looking at graph 13, it can be seen that all students have all the abilities to some extent. In our randomized sample, we ended up with many students that had working or other experiences outside the undergraduate degree. This has been taken into account when analysing the survey data and results. Looking at the specific abilities, we can see that the ability to work in teams of cultural diversity (A4), is the ability most students say they have to a very large extent. In the interviews, student stated that A4 was developed from working experience and studies abroad, others said that they gained it from the program alone, see graph 10 above.



Graph 13: Student Abilities from Survey

4.4 Hiring Trends

During the companies interviews the recruiters were asked to give their view on the hiring trends over the last few years and how it looks now. Some companies stated that there is a generation change happening and work life balance is becoming more important. Several companies said this is something future managers need to keep in mind when using human resources in the most efficient way. Applicants today are more likely to expect that flexible working hours and working from home is a given, paternity and maternity leave is something every employee shall be entitled. With this in mind, other companies stated that applicants today have more power, they can choose their employer and demand certain benefits to accept a position. Where as before, the company had more power in picking and choosing candidates, today the applicant has the power to choose globally where to work. Companies said they need to offer flexible working hours, one company used the phrase “smart working”, meaning that, a person may not need to be at the office 8 hours per day to complete all their duties, which could allow a better work life balance. Companies need to offer their applicants something other companies cannot, otherwise the applicant will find a better offer.

4.5 Summary

The majority of student participants say that they have the abilities presented and that they are T-shaped. However, there are students claiming that they had been T-Shaped before the program, and that the MiM program only strengthened or developed these abilities and the T-Shaped profile. Findings from interviews with companies show that there is a demand for all the abilities. However, there are differences within companies when considering job positions, and between industries when comparing consulting firms and non-consulting firms. In general, companies think that the MiM profile is attractive for hiring, but many companies have made specific statements about undergraduate degrees that are most attractive when filling job positions in certain departments at different companies.

5 Discussion

5.1 Research Question 1: Is the MiM Program in Lund a Source for Training Abilities that Match the T-Shaped Individual Profile?

Since students say to have gained T-shaped abilities from previous experiences such as working or participation in student, athletic or government organizations it is our interpretation that these abilities come from experiential learning. Furthermore, when students said that their abilities came from the MiM program they cited their experiences in their MiM program base teams. When we interviewed the students they primarily highlighted experiential learning and this is what has given us this perspective, along with our student interview findings that show students primarily think that they have the ability to collaborate in multiple areas (A2), which involves collaboration and the ability to problem solve in multidisciplinary teams (A5) involving team-working abilities. Additional A2 and A5 were claimed by students to have come from the MiM program.

One interesting finding is that none of the current MiM students said that the, ability to adjust to role changes (A1), came from the MiM program and this is the ability with the highest level of demand at global companies according to our study. One student said, “the MiM program has strengthen my perspective, but it is a school program and I did not experience any role changes... I considered my experience to be a gradual process.” Our answer regarding this research question is supported by the indication that practical learning is what is needed to develop managerial skills; additionally, you can only tell a person so much about how to swim until it becomes necessary to take them to the pool (Mintzberg, 2001). It is our opinion that students have the opportunity to try different roles in the Lund MiM program and it is also their choice to change roles for self-development and learning. For example the 2016–2017 MiM class developed several different departments for their class collaboration project with the private company Celemi (personal observation, 2016).

Looking at the student survey, we see that the MiM is primarily strengthening t-shaped teamwork abilities (A4 and A5), because these are the abilities that were said to be possessed by students to a large extent and to a very large extent in the student follow up survey. Interesting finding here is that there were more students claiming to have abilities in the survey answers than during the interview. This can be interpreted in several different ways. First, the interview was done one week before the students did the survey. This could have allowed too much time discrepancy between the interview in the survey. Additionally, students might have had more time to think about their answer and this could have led to a higher number of students saying yes on the survey. Second, the students that were uncertain of whether or not they have an ability, were marked as no during in the interviews and

possibly our threshold was too high. Our goal was to have as much certainty as possible in our answers, thus this could have contributed to a higher number of people saying yes on the survey when we counted them as no during the interview. Third, it can be understood that students want to have these abilities and therefore they are self-bias when doing the survey, and give themselves a stronger profile than they might actually have. In any of these cases, the current scenario is better than the alternative. The alternative is to have students say yes in the interview and then later say no in this survey when they are answering a question anonymously. Either way the finding from our interview and the survey support that the program is the source of some individuals' ability to collaborate in multiple areas (A2), ability to work in teams of cultural diversity (A4) and the ability to problem solve in multidisciplinary teams (A5); which are, primarily teamwork and collaboration oriented.

5.2 Research Question 2: Are the Abilities of the T-Shaped Individual in Demand at Global Companies in 2017?

To address this research question we used two assessments. We asked companies if the five abilities from the literature on the T-shaped individual are in demand and we also asked if the MiM profile was something that would be attractive when considering a job candidate. Some of the following discussion points come from our main findings in the interviews with recruiters. We think that there is a demand for the T-shaped profile based on the finding that all five abilities have demand. The MiM profile is interesting in the opinion of the recruiters we have spoken with, but the undergraduate degree is still very specific for many positions at both consulting and non-consulting companies.

It is not surprising that recruiters highly value the ability to adjust to role changes (A1), because today we are in a time of service innovation making need for flexibility because customers expect new enablement from products and services (Demirkan and Spohrer, 2015). Based on our industry analysis using keywords from interviews, we think that consulting companies and non-consulting companies both highly value an employee's ability to handle role changes. One non-consulting company said, "we are always thinking of the long-term and we are moving toward an agile work style, this might mean that a person needs to know how to change the role they are currently in." Making candidates module so that they can, work in different set-up teams and also fixed are current demands for today's companies (GAMC, pp. 28, 2016). Non-consulting companies used keywords that fit into the categories of "environmental" and "sustainability". We think that the words in these categories indicate that non-consulting companies describe their demand in a long-term context. One consulting company said, "We sometimes expect our consultants to change roles throughout the day." Consulting companies' keywords have been grouped to, category words "analytical" and "drive". The words in these categories came from descriptions of job descriptions that involve frequent changes. Possibly consulting companies have a project-focused perspective on their demands. Taken together we think that both industries demand A1, but from slightly different

demand perspectives and this may account for some of the slight variations we see for the other T-shaped abilities as well.

We have interpreted the demand for the ability to work in teams of cultural diversity (A4) and the ability to problem solve in multidisciplinary teams (A5), as another indication that the T-shaped profile is in demand. One consulting company has said, “We approach our customers in teams and the ability to work in teams is crucial.” Additionally in our keyword analysis, both industries fit into the categories “growth” and “interpersonal/teams”. The interpersonal/teams category is primarily filled by consulting companies, However non-consulting companies value, “collaboration across departments” and “team players” or “people skills” we think that these key phrases illustrates ability A5 quite well and the T-shaped profile supports this ability. Flexibility in teams is one of the main concepts of the T-shaped profile as a result of interdisciplinary education experiences and multiple perspectives gained from creative abrasion working with people (Karjalainen et al., 2009) and being boundary-spanning professionals (Demirkan and Spohrer, 2015).

Companies spent a considerable time describing their demand for the ability to work in teams of cultural diversity (A4). Looking at keywords in Table 4 (Appendix A), it can be seen that it is one of the two largest categories for keywords, other than words describing its importance, it was referred to as a “hygiene factor”, the company that said this explained that global awareness and cultural diversity is a reflection of an organization's “hygiene”. It is our interpretation that experience with this ability is highly sought after. Additionally trainees with this kind of experience were said by one interviewee to be, “thinkers with a wide view”. It is our interpretation that the ability to collaborate in multiple areas (A2), is in demand because it has the least demand variation among all three positions we investigated and also it has the least variation when the industries are compared.

Another discussion point from our recruiter interviews is on the finding that the ability to understand one field in-depth and how to integrate this with other in-depth fields (A3), is quite low in demand for graduate programs. By looking at our qualitative interview analysis (see table 4), we see that the perspective on graduate programs is that ability A3 “can be developed” or is “less important because a person needs an overall view”. With this being the case, we don’t think that the low demand for this ability for graduate programs lowers the overall demand for A3 because we interpret the recruiter's perspective of this ability to be something that is gained specifically from work experience at the organization. Furthermore, the ability is in demand for manager positions, as well as, entry-level positions. Our impression is that companies believe that candidates for graduate programs are most likely to show potential went selected and therefore the demand for this ability has been lowered in our findings. Despite this, we still think that this ability contributes to demand for the T-shaped profile.

An interesting aspect from our findings on industry comparisons of non-consulting companies and consulting companies are the opposite demands they have for T-shaped abilities when hiring for entry-level positions versus graduate programs. This information is interesting

because it might be beneficial for MiM students when finding the right job position category to apply for. We see an indication that individuals with T-shaped abilities might have a higher likelihood of being in demand if applying for graduate programs at non-consulting companies, or entry-level jobs at consulting companies. These are the industry and job category matches that have shown the highest demand for the T-shaped abilities. These appear to be valid findings because our qualitative interview content demonstrates that for entry-level positions at non-consulting companies the undergraduate degree is indicated to be a determinant in job placement, “the masters degree does not change the undergraduate degree, the person would still need an engineering degree to work here”. Looking at the findings from consulting companies we see that individuals, with a “proven track record of managing people and work experience”, or “clear potential to be a leader with the evidence of providing results” are important, said several consulting companies. With that being said consulting companies have exceptions. Legal, as well as, many human resources positions require understanding or experience with law knowledge. However one consulting firm said, “all of their departments have some flexibility when it comes to the undergraduate degree, except for finance.”

One concern that we mentioned in our research limitations section of the paper, was that interviewees might provide us with many abilities that were not in our list of T-shaped abilities and the recruiter’s answers would not be comparable because of demanding many different abilities. After collecting and analysing our data, we do not think that this was a problem for our study because every interviewee was asked to provide additional abilities during the interviews. Only one recruiter said that they would give a different list of abilities when hiring only for a management position. The List this person gave was “collaborate, engage, communicate and motivate”. Since the ability to collaborate and the ability to communicate are included in our list of T-shaped abilities (A2 and A3), we do not see our proposed limitation as a setback for the study. Additionally this interviewee specifically said no to wanting to hire the MiM profile. From this we must make note that some companies such as this non-consulting company may have very clear and rigid guidelines when hiring. We think that companies like this are to be expected in any job market. All other interviewees used keywords to describe the extent to which they think the individual t-shaped abilities are in demand; however, no one else clearly said that our list was something they would rewrite. Interviewees either said “yes”, “no”, “we do not have the position you are asking about”, or they said, “We would look for the potential to develop some of these abilities”. As a result we see an indication that the abilities we have selected for representation of the T-shaped profile relate to the current job atmosphere in 2017.

Another aspect that we mention in our possible research limitations is that interviewees might become confused when we describe the MiM graduate or the T-shaped abilities. This could be due to the fact that the MiM is a relatively new program and not familiar to recruiters and companies yet, as some of the recruiters had no experience from hiring MiM Graduates. To help prevent this problem, we asked each interviewee if they had time to go through the questions before the interview and if they had questions about the purpose of the interview after reading the questions. All interviewees except for one said that they had had time to look

over the questions. The person that did not look over the questions prior to the interview had the longest interviewing time because this person spent time familiarizing themselves with the interview questions. We saw this as an indication that other interviewees were prepared for the interview. Several individuals needed us to clarify our purpose and we explained the graduate profile to them. They seem to be okay with this explanation and “tuned in”.

Taken together, demand for each of the T-shaped abilities has been well supported in our findings and we see evidence that the T-shaped profile is in demand. However, the demand for MiM students varies among the two industries we have investigated and the undergraduate degree is still a strong determining factor for job hiring. This is true for non-consulting companies, as well as, some departments at consulting companies, making it difficult for us to determine the level of demand for the MiM graduate based on our findings.

5.3 Research Question 3: Do MiM Students Claim to be T-Shaped?

Before addressing the question in this discussion part, it is important to highlight the difficulty in assessing if an individual that claims to be T-shaped, is in fact T-shaped. In order to facilitate our interpretation, the students were asked to give examples of why they think they are T-Shaped; with this information the assessment was easier and supported. The students self-assessment and explanation to why they were T-Shaped or not, was what this study interpreted and listed as yes or no.

The majority of students we interviewed claim to be T-Shaped and they claim that the MiM program has helped them strengthen these abilities; however, why and from where they got the T-Shaped profile differ and has been difficult to assess as explained above. Among the students who said to be T-shaped, only two said they got this ability because of the MiM program. What is interesting about this finding is that it is not clear where the T-Shaped profile originates, since all students have different backgrounds and therefore picked up these abilities from various experiences. Hecht and Wiedmann (2016), concluded that non-business MiM students are in demand due to their T-Shaped characteristics which display a wide range of desirable qualities.

The representation of the T-shaped profile that we have received represents a spectrum of individuals that have experienced different amounts of development in their depth and breadth of knowledge. Four different groups have emerged from our sample that represent this interpretation. These groups are represented in graph 11 and are explained in table 6 of appendix A. The students that have said, “no I am not T-shaped” have said this because they are either a self-proclaimed generalist, or self-proclaimed specialist. It is our understanding that we have interviewed one person that is an I-shaped individual. Different kinds of learners and workers exist other than the T-shaped profile and these shapes include H-shaped, I-shaped and dash-shaped individuals (Demirkin and Spohrer, 2013). The I-shaped individual in our study said that they consider their profile to be a specialist due to 10 years of

experience working in a field related to their undergraduate degree. This person said that the MiM program gave them another perspective; however, the specialist knowledge best describes their ability set. With this being said, it is unclear whether or not work experience in the undergraduate degree field is what makes the vertical part of the T-shape. We still believe that a person having studied an engineering degree, with no work experience could likely have a developed depth of knowledge in one field; however, it appears that some individuals believe that their vertical knowledge is more defined and that this means they are not T-shaped, as a result of experience outside of their undergraduate degree.

The generalist was more common. These individuals primarily said that they had a generalist perspective before the program and a generalist perspective during the program. They then concluded that they were “purebred” generalists because the management program was claimed to be a general perspective. Another generalist said that they were; “shaped like a Lego toy piece” and claimed that they had broad general knowledge, but many specific abilities that could be applied in different places. This is described as a dashed-shaped individual (Demirkin and Spohrer, 2013). Something that was very interesting was that most of these individuals had career ambitions that matched these profile descriptions. This was a very interesting finding because it demonstrates that profiles other than the T-shaped individual might exist within the MiM program, which is an interesting aspect for further research. Unfortunately the current study did not have criteria for measuring other profiles and we acknowledge that our detection of the generalist and specialist profiles was a surprise. This is a direction for further research. Students that said, “yes I am a T-shaped individual” fit into two other categories, students that started their T-shaped abilities as a result of the program and students that strengthened their T-shaped abilities. The sources of their abilities is not clear and needs further investigation, but our current interpretation is that experiential learning is the source of strengthening and producing the T-shaped abilities we have researched.

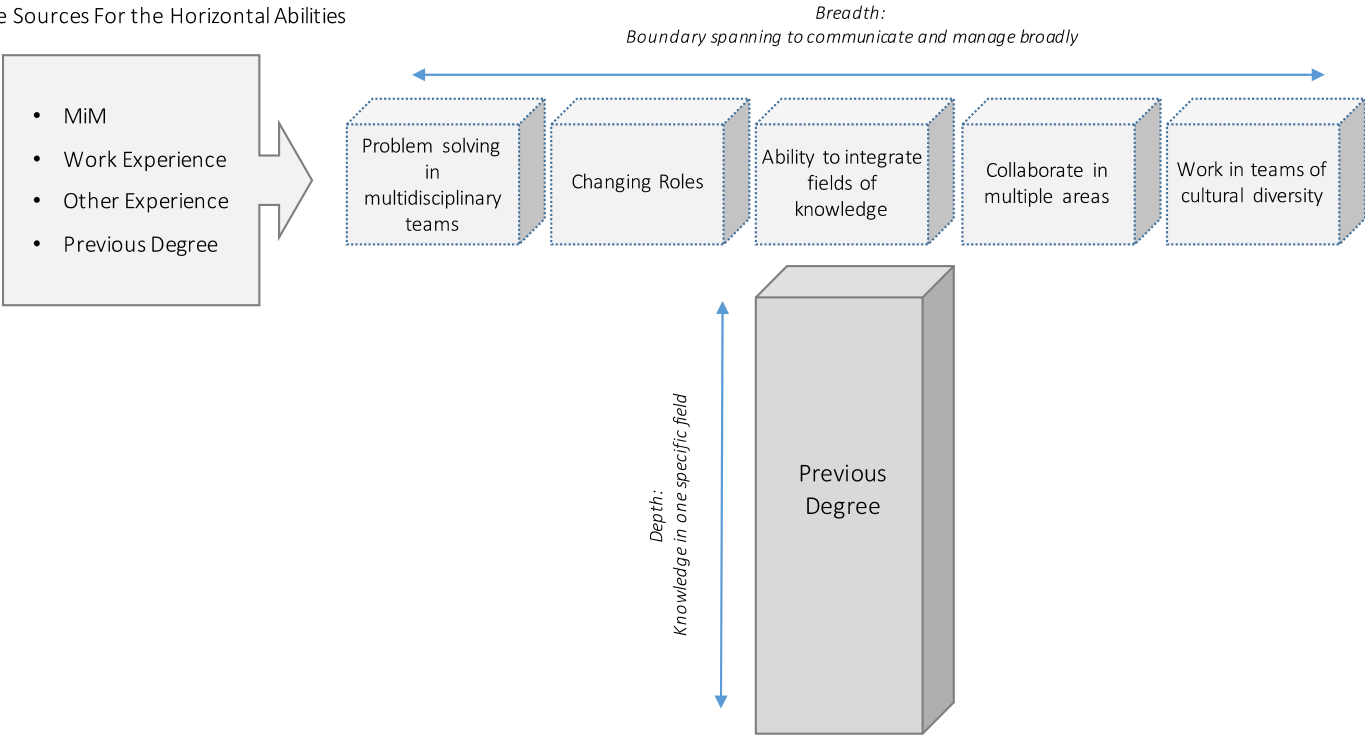
5.4 Our Discovery of The T-Shaped profile and The T-shaped Model

Looking at all the sections from our findings and comparing them with the Hecht and Wiedmann’s (2016) proposal, there are some interesting findings that have led to our augmented model on T-shaped here below (Model 3). The initial part of the model is the same as we presented at the beginning of the paper. The vertical part of the T includes special knowledge in one field, but our research also gives reason to believe that the previous explanation of the horizontal part of the T being the MiM, has been further developed. There are more experiences that should be seen as corner stones to the development of T-shaped individuals.

Our research shows that it is unclear, from where the students acquire the five abilities and where they become T-shaped individuals. This is what is illustrated in our model 3 (below), but the horizontal part of the T is what allows individuals to share their knowledge with others

and this is what we interpret to be represented by the five abilities from the T-shaped profile. The box to the left in the model below, illustrates that abilities can come from many different sources. Our findings have shown that the abilities that make up the horizontal part of the T, developed from different sources between people. However, as stated in chapter 4, the participants who mentioned that they got these abilities from something other than the MiM, still say that the MiM strengthened these abilities. This new model can be used to visualize our definition of the MiM program in how it relates to the T-shaped profile. The MiM is not the top of the T, but just one experience that might lead to becoming T-shaped. Our definition of being t-shaped is in-depth knowledge within one field with the capability to share knowledge with others as a result of possessing boundary-spanning abilities as proposed by Demirkan and Spohrer (2015). We claim that the five abilities we have investigated describe a boundary spanning person.

Possible Sources For the Horizontal Abilities



Model 3: Current Modification of T-Shaped Model

5.5 Summary

Looking at all the sections from our findings and comparing the characteristics with Hecht and Wiedmann's (2016) T-shaped model in chapter 2 (Model 1), there are some interesting findings that have led to our amended model on T-shaped. The initial thought is the same that there is a vertical part of the T which includes the undergraduate degree, work, life experiences and the MiM; however, this research also gives reason to believe that there are more experiences that should be seen as corner stones to the development of T-shaped individuals.

6 Conclusion

This study aimed to assess the demands of global companies and the abilities of MiM students, investigating if the abilities of the T-shaped individual are in demand at global companies and supplied by students. Hecht and Wiedmann's (2016) thesis began the discussion of whether or not MiMs are T-shaped individuals, giving future researchers the initiative to look into industry demand and to focus on MiM students with non-business bachelors degrees. By focusing on companies demand and the student abilities along with their level of being T-Shaped, we discovered many interesting findings.

T-shaped abilities are in demand by companies; however, the demand differs according to job position. Recruiters say that the MiM graduate is an interesting profile; however, for most companies both consulting and non-consulting companies the undergraduate degree is a strong indicator of job placement. Both types of industry categories highlight several undergraduate degrees that are most likely to have demand and job placement; however, a masters in management is said to be an attractive aspect. For example, technical interviewees have said, "if a person has an engineering degree and a master's degree in management, this would be more interesting than a master's degree in engineering". Findings such as this support that the combination of science and or technology combined with management is a highly attractive combination for global companies and the MiM program at Lund University offers this kind of opportunity for development.

The majority of students from the MiM program say that they are T-shaped individuals and they give reasons for why they think they are T-shaped; however, only a few students say that they got their T-shaped abilities from the program. Most say that their abilities came from life experience, work experience or extracurricular activities. The students that say they are T-shaped and claim that this came from something other than the MiM program say that the program did strengthened these abilities; however, they highlighted the experiences from the program, as being the most beneficial. Looking at graph 12 (on page 32), we can see the number of abilities that students say, came from the MiM program. We can see that the ability to adjust to role changes (A1) is claimed by students to come from something else other than the MiM program. A1 is highlighted as the highest demanded ability according to the global companies we interviewed.

Considering that all, but one student claims experiential learning in the MiM program strengthened their T-shaped abilities and the majority of students that claim to be T-shaped say that the origin of being T-shaped is work experience; we conclude that t-shaped abilities require experiential learning for acquisition. Looking again at graph 12, we see that the ability to collaborate in multiple areas (A2), and the ability to problem solve in multidisciplinary teams (A5) are among the highlighted abilities that come from the MiM program. These

abilities are different, but both involve teamwork. Given the relatively high amount of teamwork experience that exists in the MiM program, this is understandable. MiM students have also said, “working in a base team” and “case studies involving the functions of management” are aspects that have given them T-shaped abilities or help them to strengthen T-shaped abilities.

Practical Implications

The current study supports that T-shaped abilities, which are said to be beneficial for jobs and management (Duckro, 2016), are strengthened through experiential learning and learning environments that connects a person to their education through teamwork and simulation experiences. The current study sets the stage for further research involving open-door education and demonstrates that multiple student profiles that exist in one MiM program can be identified. After further research this identification might be used to customize learning plans for individual and MiM programs; as well as, contribute to student’s strategy to market their abilities when finding a job.

Research limitations

At the end of our study we realized that none of the 5 abilities from T-shaped literature are inherently managerial, but the T-shaped individual has been claimed to be important for management (Duckro (2016) and that is why we selected them; however taken together we interpret that a person with these abilities might be fit for a managerial job in a field that is related to their vertical knowledge.

The current study focuses on understanding job recruiting demands, Based on interviewing recruiters that are primarily titled HR director, HR manager etc. There are undoubtedly other perspectives that could shine light on the demand for MiM graduates. We focused on current recruiters requests because we believe it was the easiest to compare; however, our study is limited to this perspective and cannot investigate opinions from potential co-workers or working managers within a specific industry.

The current study focused on T-shaped abilities due to the Hecht and Wiedmann’s (2016) proposal that MiM students are T-shaped; therefore, the T-shaped profile was considered to address our purpose. There are likely many more abilities other than the five we selected for this study, which could have helped us, investigate the demand for MiM students. Likely these abilities might have come from management literature; however, we decided to focus on the T-shaped abilities to further our understanding of T-shaped individuals. More abilities that are specifically claimed to be a part of managerial work might have furthered our findings and shined light on further ways that our study could contribute to MiM program development; however, support has been given here for the importance of experiential learning in a MiM program.

Future Research

We think that the students we have interviewed are an incomplete representation of possibly only one student profile that is present within the selected MiM program. The representation of the T-shaped profile that we have received represents a spectrum of individuals that have experienced different amounts of development in their depth and breadth of knowledge. Several different student responses have emerged from our sample group that represent this interpretation. These profiles are represented in table 6 (appendix A). Future research might be conducted to investigate what other profile categories exist within MiM programs, as well as, the demand that exists for different shaped profiles such as I-shaped, or dashed-shaped individuals. Future researchers should also include larger sample sizes.

References

- Bowers-Brown, T. & Harvey, L. (2004). Are There Too Many Graduates in the UK? A literature review and an analysis of graduate employability, *Industry and Higher Education*, vol.18, iss.4, pp.243-254
- Bryman, A., & Bell, E (2015). *Business Research Methods*, Oxford: Oxford Univ. Press
- Business-Higher Education, F (2011). *Aligning Higher Education STEM Production with Workforce Demand through Professional Master's Degrees*. BHEF Issue Brief.
- Estrada Worthington, R, & Graduate Management Admission Council, 2016, 'Corporate Recruiters Survey: 2016 Survey Report', ERIC, EBSCOhost, viewed 23 April 2017.
- Cheit, E. F. (1985). Business Schools and Their Critics, *California Management Review*, vol.27, iss.3, pp.43-62
- Crilly, D., Schneider, S. C., & Zollo, M. (2008). Psychological Antecedents to Socially Responsible Behavior, *European Management Review*, vol.5, iss.3, pp.175–190
- Davis, B. D. & Muir, C. (2004). Learning Soft Skills at Work: An interview with Annalee Luhman, *Business Communication Quarterly*, vol.67, iss.1, pp.95-101
- Donofrio, N., Spohrer, J., & Zadeh, H. (2010). Research-driven Medical Education and Practice: A case for T-shaped professionals, College Employment Research Institute, Available Online: <http://www.ceri.msu.edu/wp-content/uploads/2010/06/A-Case-for-T-Shaped-Professionals-20090907-Hosseini.pdf> [Accessed 13 April 2017]
- Demirkan, H., & Spohrer, J. (2015). T-shaped innovators: Identifying the right talent to support service innovation. *Research-Technology Management*, 58(5), 12-15.
- de Holan, P. M. & Mintzberg, H. (2004). Management as Life's Essence: 30 years of 'The nature of managerial work', *Strategic Organization*, vol.2, iss.2, pp.205-212
- Donofrio, N., Spohrer, J., & Zadeh, H. (2010). Research-driven Medical Education and Practice: A case for T-shaped professionals, College Employment Research Institute, Available Online: <http://www.ceri.msu.edu/wp-content/uploads/2010/06/A-Case-for-T-Shaped-Professionals-20090907-Hosseini.pdf> [Accessed 2 April 2017]
- Drucker, P. (1999). *Managing Oneself*, *Harvard Business Review*, vol.77, iss.2, pp.64-74
- Easterby-Smith, M., Thorpe, R., & Jackson, P. (2012). *Management Research*, 4th edn, London: Sage

- GMAC (2016). Corporate Recruiters Survey Report 2016, Available Online: <http://www.gmac.com/~media/Files/gmac/Research/Employment-Outlook/2016-corporate-recruiters-web-release.pdf> [Accessed 13 April 2017]
- Gosling, J. & Mintzberg, H. (2003). The Five Minds of a Manager, *Harvard Business Review*, vol.81, iss.11, pp.54-63
- Govindarajan, V. & Gupta, A.K. (2001). Building an Effective Global Business Team. *MIT Sloan Management Review*, vol.42, iss.4, pp.63-71
- Hansen, M. (2009). *Collaboration: How leaders avoid the traps, create unity, and reap big results*, Boston: Harvard Business Review Press
- Harris, P. (2009). Help Wanted: "T-Shaped" skills to meet 21st century needs, *T And D*, vol.63, iss.9, pp.42-47
- Hecht, E. & Wiedmann, L. (2016). Synthesis of Knowledge: The Perception of Graduates with Non-Business Bachelor Degrees and a Master in Management (MiM), Unpublished, Masters in Management Thesis Project, Lund University, School of Economics and Management Library
- Iansiti, M. (1993). Real-World R&D: Jumping the Product Generation Gap, *Harvard Business Review*, vol. 71, no. 3, pp. 138-147.
- Karjalainen, T. M., Koria, M., & Salimäki, M. (2009). Educating T-shaped Design, Business and Engineering Professionals. *Proceedings of the 19th CIRP Design Conference–Competitive Design*, Cranfield University Press, Available Online: <http://dspace.lib.cranfield.ac.uk:8080/handle/1826/3645> [Accessed 15 April 2017]
- Leonhardt D. (2000). A Matter of Degree? Not for consultants, *The New York Times*, 1 October, Available Online: <http://www.nytimes.com/2000/10/01/business/a-matter-of-degree-not-for-consultants.html?pagewanted=all> [Accessed 13 April 2017]
- Littlejohn, S., & Foss, K., (2009). *Encyclopedia Of Communication Theory*. [Elektronisk Resurs], n.p.: Thousand Oaks, Calif. : Sage, cop. 2009, Library catalogue (Lovisa), EBSCOhost, viewed 16 May 2017.
- Lund University (2017). Master's programme in Management Available Online: <http://lusem.lu.se/study/masters/programmes/management/overview> [Accessed 26 April 2017]
- May, T. (2011). *Social Research: Issues, Methods And Process*, [e-book] Maidenhead: Open University Press: 2011, Library catalogue: (Lovisa), EBSCOhost, viewed 8 May 2017. LUSEM University Library website <http://eds.a.ebscohost.com.ludwig.lub.lu.se/eds/search/basic?sid=1c9dab5c-bb9b-428d-9ad3->

c8335ae7232d%40sessionmgr4009&vid=0&hid=4205 [Accessed 8 May 2017]

McKinsey. (2016). Advanced Professional Degrees, Available Online: <http://www.mckinsey.com/careers/your-career/your-background/advanced-professional-degrees> [Accessed 15 March 2017]

McMurray, S., Dutton, M., McQuaid, R., & Richard, A. (2016). Employer Demands from Business Graduates, *Education+Training*, vol.58, iss.1, pp.112-132

Paglis, L. L. (2013). A Review of Managerial Skills Training in the Classroom, *Journal Of Management Education*, vol.37, iss.4, pp.472-498

Pedler, M., Burgoyne, J., & Boydell, T. (1994). *A Manager's Guide to Self Development*, 3rd edn, London: McGraw-Hill

Peters, J. (2012). Educating Designers to a T, *Design Management Review*, vol.23, iss.4, pp.62-70

Pfeffer, J. & Fong, C. T. (2002). The End of Business Schools? Less success than meets the eye, *Academy of Management Learning and Education*, vol.1, iss.1, pp.78–95

Saunders, M, Lewis, P, & Thornhill, A (2012). *Research Methods For Business Students*, Harlow: Person Education

Spohrer, J. & Kwan, S. K. (2009). Service Science, Management, Engineering, and Design (SSMED): an emerging discipline—outline and references, *International Journal of Information Systems in the Service Sector*, vol.1, iss.3, pp.1-31

Spohrer, J., Golinelli, G. M., Piciocchi, P. & Bassano, C., (2010). An Integrated SS-VSA Analysis of Changing Job Roles, *Service Science*, vol.2. iss.1-2, pp.1-20

Siegers, R. (2013). Master in Management's Popularity Rises in the East, *Financial Times*, 11 November, Available Online: <https://next.ft.com/content/7954e12e-46dd-11e3-9c1b-00144feabdc0> [Accessed 15 March 2016]

Spohrer, J. & Kwan, S. K. (2009). Service Science, Management, Engineering, and Design (SSMED): an emerging discipline—outline and references, *International Journal of Information Systems in the Service Sector*, vol.1, iss.3, pp.1-31

Symonds, Matt. (2014). The Rise And Rise Of The Masters In Management, *Forbes*, 20 May, Available online: <https://www.forbes.com/sites/mattsymonds/2014/05/20/the-rise-and-rise-of-the-masters-in-management/#20f8d1166fae> [Accessed 23 March 2017]

Wilhelm, W. J. (2004). Determinants of Moral Reasoning: Academic factors, gender, richness-of-life experiences, and religious preferences, *Delta Pi Epsilon Journal*, vol.46, iss.2, pp.105-123

Waddock, S., & Lozano, J. M. (2013). Developing More Holistic Management Education: Lessons learned from two programs, *Academy Of Management Learning & Education*, vol.12, iss.2, pp.265-284

Appendix A

Table 3: Open and Axial Coding Demand of Abilities for Job Positions, (Saunders et al., 2012).

How to read table 3: This table demonstrates our open coding (Saunders et al., 2012) findings and should be read from left to right. It corresponds to questions 1, 2 and 3 on our interview questions (see Appendix B). The table was created to demonstrate the keywords that were said during interviews with recruiters when answering the extent to which each of the five T-shaped abilities are in demand. The abilities are listed in the leftmost column. Each job position it is then listed in the centre left column because we ask each recruiter if the ability was in demand for each individual job position. The keywords that were used to describe the level of demand for the ability according to job position is in the middle right column and the category word is in the far right column. The category word was used to support our interpretation of interviewees' perspective on the ability as it relates to each job position.

Open Coding Demand of Abilities for Job Positions			
Ability	Position	Keywords	Keywords Categories
Ability to quickly adjust to roll changes	Entry-Level	Important Mindset for change Adaptability	Important Mindset for change
	Management	Important Crucial	Crucial
	Trainee	Important	Important
Ability to collaborate in multiple areas of an industry	Entry-Level	Important No-prerequisite Desirable	
	Management	Important	Important
	Trainee		N/A
Ability to understand one field of knowledge in depth and how to integrate this knowledge with people that have a different in depth knowledge.	Entry-Level	Desirable	Desirable
	Management	To some extent Collaborate Engage, Communicate, Motivate People skills Overview	Connect the people who hold the knowledge
	Trainee	Can be developed	Can be developed
Ability to work in teams with cultural diversity	Entry-Level	Desirable important Hygiene factor Important Crucial	Hygiene Factor
	Management	Important	Important
	Trainee	Wide view	Wide view
Ability to start collaborative problem solving in multidisciplinary teams.	Entry-Level	Desirable Important	Desirable
	Management	Important	Important
	Trainee	Important	Important

Table 4: Overall Keyword Describing Demand

How to read table 5: This table demonstrates our open coding (Saunders et al., 2012) findings and should be read from left to right. The words in the leftmost column were taken from all of the interview answers with recruiters. We organized all of these words into categories and the category titles are presented in the middle column. After we did this, we then looked over our interview data and found the Industry (consulting or non-consulting) that said the keyword that is in the leftmost column. We then created the rightmost column, which places each industry in the keyword category (middle column) that best represents its answers.

Overall Keyword Describing Demand		
Keywords from companies	Demand Category	Industry
Analyst	Analytical	C
Numbers		C
Number crunching		C
Project oriented	Drive	C
Desire to do better		C
Global economy	Environmental	NC
Knowledge management is a challenge		NC
Smart working	Sustainability	NC
Flexible working hours		NC
Worklife balance		NC
Adaptability	Growth	C
Engage		NC
Communicate		C/NC
Motivate		NC
Mindset for change		NC
Curiosity		C
Challenge		NC
Daily role changes	Interpersonal/team	C
Abilities to work in teams (since we approach our clients with teams)		C
Potential leadership abilities		C
Problem solving and working in teams		C
Collaborate		C/NC
Ability to speak-up		C
Team player		NC
People skills		C/NC
Good feedback culture		C

Table 5: T-shaped students or Not

This table represents 11 answers we received from our 11 student interviews regarding being T-shaped. Both the students that have said yes and the students that said no to being T-shaped are presented. Each student's explanation for why they think they are T-shaped or not, is in the middle column. The source of being T-shaped is presented in the right column.

	Reason for being T-Shaped or not	T-Shaped from Where
YES	<ul style="list-style-type: none"> • From MiM program • Undergraduate was a general and broad education, but case studies in functions of management in MiM was very different from undergrad 	MiM
	<ul style="list-style-type: none"> • Program strengthened, but was T-shaped before program. • Had many roles in life, student, teacher, board member, but program strengthened • Both previous experience and MiM gave t-shaped view • T-shaped mind-set came before MiM program. • lots of work experience relevant to bachelors. After MiM T-shaped, because of new perspective 	Experience and MiM strengthened
No	<ul style="list-style-type: none"> • Generalist studied sociology and psychology. Management has broadened previous training as a generalist. • Psychology is general. With MiM I have two general degrees • Generalist. Horizontal part is longer than the vertical part 	Generalist
	<ul style="list-style-type: none"> • Extensive work experience related to undergraduate degree. MiM program was just another perspective. 	Specialist

Appendix B

Object 1: Interview Recruiters

Recruiter Interview Question

Dear Interviewee,

We are assessing the demand for a graduate student profile that has a non-business bachelor's degree and a master's degree in management. These individuals may have an undergraduate degree in engineering, design, psychology, or law, but all have a master's degree in management.

You will see a list of abilities below. Use this list to answer the three questions that follow.

List of Abilities:

Ability to In the text each of the 5 abilities are presented in the abbreviated form as follows: ability to adjust to role changes (A1), ability to collaborate in multiple areas (A2), ability to understand one field in-depth and how to integrate this with other in-depth fields (A3), ability to work in teams of cultural diversity (A4), ability to problem solve in multidisciplinary teams (A5).

Note: It should be noted that some companies only hire management positions internally and some companies do not have graduate programs. The companies that fall into these categories have abilities that are not applicable (N/A) in graphs

- adjust to role changes
- Ability to collaborate in multiple areas of an industry
- Ability to understand one field of knowledge in depth and how to integrate this knowledge with people that have a different in depth knowledge.
- Ability to work in teams with cultural diversity
- Ability to start collaborative problem solving in multidisciplinary teams.

1. To what extent do you believe the following abilities are needed for job candidates for entry-level positions?
2. To what extent do you believe the following abilities are needed for job candidates for management positions?
3. To what extent do you believe the following abilities are needed for job candidates for trainee positions?
4. Do you think a person with a management masters and a non-business degree is valuable for your company? And why?

Object 2: Interview Students

Student Interview Questions

Dear Interviewee,

We are assessing the abilities of a graduate student profile that has a nonbusiness bachelor's degree and a master's degree in management. These individuals may have an undergraduate degree in engineering, design, psychology, or law, but all have a master's degree in management.

-Thank you for your help

1. You will see a list of abilities below. As an applicant to your next job, which of the following abilities do you think you have and why, and how do you think you got them? You could have any number of these abilities or none of them at all. The answer is up to you.

List of Abilities:

- Ability to adjust to role changes
- Ability to collaborate in multiple areas of an industry
- Ability to understand one field of knowledge in depth and how to integrate this knowledge with people that have a different in depth knowledge.
- Ability to work in teams with cultural diversity
- Ability to start collaborative problem solving in multidisciplinary teams.

2. As an applicant to your next job, are there abilities you would add to this list and why?

3. The T-shaped profile is said to be the result of having in-depth knowledge in a field such as engineering, design, psychology, or law, combined with a postgraduate education in management. The abilities listed above are considered to be a part of the T-shaped profile.

Do you consider yourself to be T-shaped (Yes or no)? And why?

Table 6: Sought After Traits and Abilities by Industries Ranked in Order, GMAC (2016).

	Industry**							
	C	E/U	F/A	H/P	T	M	N/G	P/S
#1	Fit with company culture	Leadership potential	Fit with company culture	Fit with company culture	Ability to make an impact	Ability to make an impact	Ability to make an impact	Fit with company culture
#2	Ability to work in and build strong teams	Ability to work in and build strong teams	Ability to work in and build strong teams	Leadership potential	Fit with company culture	Leadership potential	Fit with company culture	Leadership potential
#3	Ability to make an impact	Fit with company culture	Ability to make an impact	Ability to work in and build strong teams	Ability to work in and build strong teams	Fit with company culture	Ability to work in and build strong teams	Ability to make an impact
#4	Adaptable	Strong business ethics	Leadership potential	Ability to make an impact	Leadership potential	Ability to work in and build strong teams	Adaptable	Ability to work in and build strong teams
#5	Strong business ethics	Ability to make an impact	Adaptable	Strong business ethics	Ability to use data to tell a story	Ability to use data to tell a story	Strong business ethics	Adaptable
#6	Leadership potential	Adaptable	Ability to use data to tell a story	Ability to use data to tell a story	Adaptable	Adaptable	Work independently	Strong business ethics
#7	Ability to use data to tell a story	Ability to use data to tell a story	Strong business ethics	Adaptable	Strong business ethics	Strong business ethics	Ability to build external networks	Ability to use data to tell a story
#8	Insightful	Insightful	Insightful	Insightful	Insightful	Insightful	Leadership potential	Insightful
#9	Work independently	Curiosity	Work independently	Executive presence	Curiosity	Curiosity	Insightful	Curiosity
#10	Curiosity	Executive presence	Curiosity	Curiosity	Work independently	Executive presence	Ability to use data to tell a story	Work independently

*All 12 traits that survey respondents were asked to rank are represented in this list of the 10 most influential in recruiting job candidates.
 **C = Consulting; E/U = Energy/Utilities; FA = Finance/Accounting; H/P = Health Care/Pharmaceuticals; T = Technology; M = Manufacturing; N/G = Nonprofit/Government; P/S = Products/Services.
 Source: GMAC (2016) Corporate Recruiters Survey.

Object 3: Student Survey

Quick survey on Abilities

1. To what extent do you have the five abilities described below?

Ability to quickly adjust to role changes?

- Not at all
- To a Small Extent
- To a Large Extent
- To a very Large Extent

Ability to collaborate in multiple areas of an industry?

- Not at all
- To a Small Extent
- To a Large Extent
- To a very Large Extent

Ability to understand one field of knowledge in depth and how to integrate this knowledge with people that have a different in depth knowledge?

- Not at all
- To a Small Extent
- To a Large Extent
- To a very Large Extent

Ability to work in teams with cultural diversity?

- Not at all
- To a Small Extent
- To a Large Extent
- To a very Large Extent

Ability to start collaborative problem solving in multidisciplinary teams?

- Not at all
- To a Small Extent
- To a Large Extent
- To a very Large Extent