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APPLY A PROJECT CORE VIEW TO PROMOTE PROJECT SUCCESS

ABSTRACT

Achieving successful projects is critical and the project manager's role is beyond dispute. Hence, successful recruitment processes that put critical competence requirements in focus could facilitate successful project outcomes. It is fundamental that a certain project supports the organization's core product, because that is the basis for the organization's success in the first place. Therefore it is important that the project core product is viewed since it is supposed to support the core product. Further, it would be helpful to distinguish between general competences and core competences in order to avoid focusing on more or less insignificant general qualification requirements while missing to elucidate the core qualification requirements that should be decisive for the outcome. This paper aims at shedding light on the necessity of paying careful attention to project core product and project core competence as basic conditions for project success. Implications for practice and research are discussed.

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INTRODUCTION

The expectations and the demands on project managers are known to be huge. An experienced Swedish project manager once whispered in confidence: "If I manage to create and deliver something successful the sponsor is praised, and if I fail, I will be blamed, no doubt. Besides, it is almost impossible for me to know in advance what it finally takes to succeed." Behind his somewhat cynical declaration it was quite obvious that he felt a little bit tired of the conditions surrounding his job situation. So, is this a common way of reasoning? Findings in the literature support this experienced project manager's dejected view (e.g. Avots, 1969; Gillard & Price, 2005, Ruuska & Vartiainen, 2003; Thomas & Mengel, 2008) and right below are four striking examples presented that could be regarded as typical statements about job conditions that project managers' are supposed to deal with. Starting with James Roberson, principal at Atlantic Systems Guild:

• "What I've observed over the years is that when a project fails it is usually because the requirement gatherers didn't get the requirement right. /.../ All the other aspects of project management, like organization skills, personality, resources, they're not going to be effective if you don't know what you have to build." (Computerworld Today, 2004).

Meta Group program's director of enterprise planning and architecture strategies, Deborah Weiss:

"The reason most IT organization projects fail is symptomatic of poor project management discipline. /.../ When explored further, the root cause is attributable to poor project estimating techniques, ineffective project team structure, a lack of client project participation, unmanaged scopes and taking on large-scale project risk without any contingencies." (Computerworld Today, 2004).

Tim Sheedy, IDC research director of software and services:

• "I think that when you look at these failures, 95 percent of the time it's a project management issue. /.../ The managers of these projects set out the requirements at the beginning of a project and they get it wrong." (Computerworld Today, 2004).

Robert Goathem, principal at Calleam Consulting Ltd:

"As Project Manager, juggling all of the balls is important, but keeping your eye on the right ball is the key to delivering truly successful projects" (Goathem, 2014).

The huge expectations and demands on project managers are however based on the fact that project managers are keys to achieving successful project outcomes. That is the major reason for the importance of successful recruitment of project managers. Besides, it is obvious that project success is crucial for project managers' appreciation. Further, it is necessary for their professional reputation, which has bearing on their opportunities for future coveted assignments since they are often temporarily employed (e.g. Hölzle, 2010). The basis for being regarded as highly qualified are successful project outcomes even though it is not crystal-clear what a project success really means. According to Calleam Consulting Ltd. (2012) there are five layers in the project success triangle illustrating

that a project is regarded as successful if: i) "it delivers all or most of what it said it would (the scope), regardless of schedule or budget performance", ii) "it delivers what it said it would, on schedule and/or within the agreed budget". iii) "it delivers what it said it would, on schedule, within the agreed budget and to the expected quality standards", iv) "it delivers on all agreed project objectives, be they scope, schedule, budget, quality or outcomes based (i.e. goals to be achieved or strategic positions to be attained)", and v) "the product produced by the project creates significant net value for the organization after the project is completed.".

There are various answers available to questions about what project success really means and these answers are not always united. Still the project manager is usually picked as responsible for the outcome and especially when things did not work out as expected and the whole project was regarded to be a failure. Besides, measurements and definitions of project success could be complex and ambiguous per se (e.g. McLeod et al., 2012). Project success could for example be measured by how well the project's outcome is aligned with the company's core product. A core product is of central importance for the business because that is what attracts customers to have business relations with the company, and is often described as the basis for a company's competitive advantage (e.g. Prahalad & Hamel, 1990; Zook, 2007). Hence, core competence inherently defines the skills that are needed to create the core product.

It is important to further question the meaning of project success since the answers, even though they often are unanimous, reveal a lot of the expectations and the preconceived ideas that surround projects. Examples of questions that are often associated with concerns regarding successfully carried out projects are:

- Did the project manager choose the right model and method (and how were they applied)? (E.g. PMI, 2013)
- Was the ordered product correctly delivered on budget and time? (E.g. Lech, 2013)
- Were the project manager's leadership (e.g. conflict management) and management skills (e.g. planning and risk assessment) sufficiently carried out? (E.g. Creasy & Anantatmula, 2013)
- Was the right project team appointed (and by whom)?
 (E.g. Stevenson & Starkweather, 2010)
- Was the project manager's relationship building capability good (e.g. with stakeholders, clients and project members)?
 (E.g. Mazur et al., 2014; Müller & Martinsuo, 2015)
- Did the project manager have the sufficient skills (e.g. communication skills) and knowledge (e.g. about sector, stakeholders' perspectives, product and project method/model) for carrying out the tasks/project objectives? (E.g. Creasy & Anantatmula, 2013; McLeod et al., 2012)
- Did the project manager's personality traits suit the project and its context? (E.g. Cohen et al., 2013; Creacy & Anantatmula, 2013)
- Were the product requirements correctly described and ordered?
 (E.g. West, 2010)

It is obvious that a project requires competence for successfully delivering of the outcomes, and that an essential part of a project's success depends on the project manager's competence (i.e. education, knowledge and experience) and personality traits. Naturally, the rest of the project members' and the sponsor's competences and personality traits could also influence the project's success rate as well as the organizational structure and context. However, in comparison with other factors, the project manager's impact on the suc-

cess is outstanding, which makes the recruitment of project managers both particularly important and complicated.

Of the eight questions listed above, seven of them could be directly connected to the project manager's achievements and qualifications, and to some part even to the last one on the list. Especially, if it is taken into account that the project manager already in an early phase should understand if there are any gaps in the project order, or if the requirement list, or other issues are not described accordingly. In such cases a good project manager should act on this immediately and demand sufficient definitions and better criterions before he / she accept the assignment. Since a project manager unquestionably is that close connected to the project success it must be of great importance who is actually appointed, and consequently also how the recruitment processes are carried out (e.g. which qualification requirements are used) (Marcusson & Lundqvist, 2015). There are two parts with particular importance surrounding the recruitment process of Swedish IT project managers i) the employer's demands on their work tasks, education, experience, and personal traits e.g. apparent in job advertisements (henceforth ads.) or during job interviews, and ii) the project managers' views on their own work situation including the demands that are laid on them.

Regarding the competence requirements there are two more factors that are critical to consider: i) The general competences that will be needed as well as ii) the more specific competences i.e. the core competences (Marcusson & Lundqvist, 2015). The former, the general competencies, are usually described in various body of knowledge (BOKs) that surround the project management profession. BOKs are sometimes defined in accordance with a specific sector's (e.g. construction, the building trade, or IT), company's (e.g. SAAB, Ericsson, or Telia) or project's (e.g. certification criteria) requirements. As regards BOKs for specific sectors and companies these contains both general competences and core competencies by definition since they are adapted to what is specific for the sector and / or the company. Project managers could be certified in accordance with standardization criteria (e.g. BOKs) from project management associations like PMI (2013), Prince2 (2007), and IPMA (2006). Certifications of Swedish IT project managers are however more often demanded from the employers' side when the projects are carried out in a context of a global arena than locally in Sweden, due to more focus on certifications outside Sweden (Marcusson & Lundqvist, 2014). Still, project management certifications are often pointed out as means for project managers to develop their skills, and also as an assurance of quality (e.g. PMI, 2013) even though there are some critical voices saying that certifications ought to be better updated in accordance with research findings in the field of management (e.g. Crawford, 2005; Morris et al., 2006).

Purpose

Today's Swedish ads. for IT project managers focus on presenting foremost general requirement qualifications, on a detailed but still general level. Such requirement descriptions are not that helpful for decisions concerning recruitment of the most suited individual for a certain project. The reason for this is that these job ads. mainly consist of i) general work task descriptions, ii) general demands of qualification requirements, and iii) personal traits. If only a general level of the descriptions is applied there is a considerable risk that the details that are of immediate interest for the specific work that needs to be carried out in the project would be ignored. How the ads. were formulated showed that the employers were not interested in certified IT project managers even though certifications comprise general qualifications and work tasks for project managers (Marcusson & Lundqvist, 2014). The purpose of this research was to study how the content of the ads. relate to the project managers' general competencies and their core competencies (Marcusson & Lundqvist, 2015). When competence connected to projects is in play it would be more sufficient to talk about project general competences and project core competences.

Research questions

With the importance of the project manager's competence for the project's success in mind (i.e. to deliver successful outcomes / products), the research questions of this study are formulated as follows:

How can a model that catch a project core view be depicted? The project core view should include both the project manager's project general competencies and project core competencies.

How can recruitment of project managers be facilitated?

1. Method and data collection

This research has extended over several years and consists of elements that will be further presented in this section: First, the method (1.1) for the longitudinal study will be accounted for, and then five descriptions will follow that presents the data collection that was carried out in the areas of IT project managers (*PM*) ads. (1.2), other ads. (1.3), LinkedIn project manager (*PM*) (1.4), LinkedIn Certification (1.5), and e-mail questions (1.6).

1.1 Method

The study was carried out as a longitudinal study during the years 2010 to 2014, and the data collection was effected in eight steps. Initially the data collecting procedure were designed to reflect the employers' unaffected views about the requirements and demands that were apparent in the ads. (2.2 and 2.3). Interviews were avoided because there would have been a risk that the employers unintentionally should

have tried to adapt their opinions to what they believed that the interviewers searched for (Gummesson, 2001; Thång, 1984). However, discussions on LinkedIn (1.4 and 1.5) could have been partly affected due to the fact that they are public and anyone could read it (e.g. employers, colleagues). Additionally, they could also have been affected because professionals / academics put the questions in the forum and steered the discussion in some way. Email (1.6) could be a weak instrument for data collection because they risk to be influenced by the fact that the answers are directly sent to the researchers (e.g. Gummesson, ibid., Thång, ibid.). The collected data was registered in Excel.

Data processing was accomplished in five steps. The first step processed data from the ads., the second processed forum discussion, the third processed data from ads., the fourth also processed data from ads., and the fifth step processed all data from all sources.

Literature and theories were chosen in accordance with the alignment of the articles respectively.

1.2 Ads. for IT project managers

Ads. for recruitment of IT project managers were collected once yearly over a period of four years, at the end of February or at the beginning of March. Two sources were utilized; Employment Agency (2010–2013) and Computer Sweden (2010 and 2013). After removal of any duplicates there were 325 ads. remaining.

1.3 Ads. for other occupations

Findings from the ads. for IT project managers indicated that job descriptions were omitted or too general to really matter. Hence, a comparative study was carried out that collected data from ads. concerning other occupations both within the IT sector, and within other industries. This study was realized in autumn 2010 at the web site of the Employment Agency. In total 75 ads. were collected within the professions of: CIOs, workshop managers, CEO NGOs, senior officials, computer operators, IT strategists, gas station assistants, speech therapists, foresters and actors.

1.4 LinkedIn PM

To further complement the study of IT PM ads., four discussion forums were applied during September 2010. The theme for these forum treads, realized in Swedish, was "project managers' work and knowledge". The forums on LinkedIn were: Framtida projekt (i.e. Future projects) with 23 members, and Projektledarnätverk (i.e. Project managers network) with 328 members, and a forum on OPGPort with 736 members and finally, Svenskt projektledarforum (i.e. Swedish project managers' forum) with 731 members. How many of the members that participated in these discussions respectively are accounted for in the findings section.

1.5 LinkedIn Certification

When an article about PM certification had been published (*Marcusson & Lundqvist, 2014*) a new discussion on LinkedIn "Swedish project managers' forum" was started (*June – September, 2014*). The basis for the forum discussion was a popular science description of this article's abstract.

1.6 Email questions

In March 2014, 15 project stakeholders were contacted by email. The positions of the three stakeholders, who accepted the email invitation to answer the questions about recruitment, were as follows: One retired consultant seller, one company contact from the studied ads., and one representative for a certification institute. Both questions and answers were sent by email.

2. Findings from analysis of job ads. for Swedish IT project managers

In total there were 325 ads. collected from 158 unique companies over four years. The distribution over the years was:

- 2010 79 ads. from 40 unique companies this year
- 2011 93 ads. from 58 unique companies this year
- 2012 62 ads. from 45 unique companies this year
- 2013 91 ads. from 53 unique companies this year.

The ads. provided information about the companies, the recruitment process (including contact person), work tasks (2.1), and further they expressed requirements and demands on knowledge (i.e. education, qualification requirements, additional qualifications) (2.2), experience (2.3) and personality traits (2.4). Besides, from the available information an overall view of Swedish IT project managers appeared (2.5).

2.1 Work tasks

The occurring work tasks for the project managers were described in 219 ads. (67.4 %) and were omitted in 106 (32.6 %). That is to say that not mentioning any work tasks at all was the second most frequent alternative as concerned work tasks in the ads. The following comprehensive categories of work (i.e. similar words are represented by a few chosen words) tasks were listed in the ads.:

- lead 195 ads. (45.1 %)
- oplan 86 ads. (19.9 %)
- report 71 ads. (16.4 %)
- ocooperate 42 ads. (9.7 %)
- ocommunicate 21 ads. (4.9 %)
- product development 9 ads. (2.1 %)
- educate 8 ads. (1.9 %)

The only tasks with some kind of uniqueness were product development and educate. Both these are unique when they are compared with descriptions of project manager tasks in the PMBOK (PMI, 2013). This uniqueness was apparent when core competence was utilized as a lens for analysis of the work tasks from the ads. (Marcusson & Lundavist, 2015). Hence a body of knowledge (BOK) could be considered to describe project manager work tasks on a general level that fits all sectors and companies, because they are typical project manager duties. That is to say that lead, plan, report, cooperate, and communicate could be applied to any project manager irrespective of alignment to specific sector and / or company. However, product development and educate are not examples of general project manager work tasks and should rather be categorized as work tasks that require project core competence (Marcusson & Lundqvist, 2015).

2.2 Knowledge

Applying the reasoning about using core competence as a lens (cf. product development) on knowledge (Table 1) shows that both knowledge in language (Swedish / English) and sector seem to be unique requirements for a specific project i.e. more of core competence than general competence (Marcusson & Lundqvist, 2015). When it comes to project managers employed at IT companies and particularly those acting on a global market, it is apparently more important to hold a PM certification also for Swedish project managers

(Marcusson & Lundqvist, 2014). Having an academic degree was however the outstanding qualification requirement in the study.

2.3 Experience

Using a core competence lens on experience shows (Table 2) that experience of business development, sector, IT, IS, web and project management (part of) as well as having an academic degree could all be considered to have that kind of uniqueness and importance for the product (project's result) that is typical for a project core competence, in contrast to that kind of general competence that is available in for example BOKs (e.g. Marcusson & Lundqvist, 2015; PMI, 2013).

2.4 Personality traits

The personality traits, which were mentioned in at least ten percent of the ads. (less than so was not considered to be significant enough to analyze *further*), show a picture of who the Swedish IT project leader should be according to what the Swedish employers search for in the job ads. However, it can be difficult for one person to hold all these traits that are apparent in the ads. even as concerns only those that were mentioned in at least ten percent of the ads. Still it is fairly reasonable to assume that the five most quoted personality traits in the ads. could apply to project managers in general. Hence, the findings indicate that a Swedish IT project manager should be driven 38.5 %), communicative (32.0 %), structured (21.2 %), self-sufficient (20.0 %) and have social ability (19.1 %) according

	Qualification requirements		Additional qu cation	ıalifi-	Total	
	Number	%	Number	%	Number	%
Academic degree	213	49.8	4	5.8	217	43.7
Language knowledge	137	32.0	0	0.0	137	27.6
Sector knowledge	30	7.0	13	18.8	43	8.7
PM certification	14	3.3	38	55.1	42	8.4
Model/method education	20	4.7	9	13.0	29	5.8
Project Management education	14	3.3	5	7.2	19	3.8
Sum	128	100	69	100	/197	100

TABLE 1. How knowledge was apparent in the ads.

to the employers opinions that are revealed in the ads. Likewise these findings indicate that these five personality traits could be applicable to all types of managers, and therefore they could be referred to general demands that do not have to be unique for any particular sector, company or project.

Other personality traits that were requested were for example: Having leadership qualities (15.7 %), being interactive (13.5 %), cooperative and collaborative (13.5 %), responsible (12.6 %), businesslike (10.8 %), full of initiative (10.8 %), creative (10.5 %), listener / responsive / sensitive (10.5 %), team player / team worker (10.5 %), committed (10.2 %).

Eligible personality traits were described in 254 ads. (78.2 %) and not mentioned at all in 71 ads. (21.8 %). The latter was the third most frequently applied alternative.

2.5 The general picture of an eligible Swedish IT project manager

A Swedish IT project manager will handle work tasks that embrace leading, planning and reporting, and must also meet with the frequently pronounced requirements for academic degree and knowledge in language (Swedish / English). It was also often required that applicants should be experienced project managers, who also had experience both from the particular sector and from IT. Further, they should be experienced in project models and methods. As regards the personality traits a Swedish IT project manager should be driven, communicative, structured, self-sufficient and should have social ability.

3. Findings from other Swedish ads.

Ads. for other occupations were collected once in the autumn 2010 for comparison with IT project manager ads. The findings indicated that

Swedish job ads. were formulated in different ways. When ads. for managers and specialists were scrutinized it was obvious that they were described in a more general manner than ads. for co-workers, the latter revealed more details about work tasks and competencies. These findings slightly indicate that a less qualified work seems to require more detailed descriptions than a more qualified one, which needs to be further studied. Nevertheless, the IT project manager ads. did not differ conclusively from job ads. for other managers and specialists, which were the jobs that could be compared with an IT project manager job.

4. Findings from forum discussion on LinkedIn about work tasks and project management

Four discussion threads were started but only one of these led to ongoing discussions (Svenskt projektledarforum). This forum discussion that put forward some specific questions, comprised 26 posts of which seven were posted from the same individual, which means that 19 unique individuals participated in the discussion. Of these 19 participants, there were three who talked about other subjects, so it was in fact 16 individuals, who contributed to the discussion. The findings from the qualitative analysis of the answers / opinions showed that the most influential factor for projects were considered to be the size of the project which a majority of the participants pointed out. Other factors of particular interest were for example culture and whether a certain project is internal or external. Further, knowledge about project methods is required. When it comes to the personality traits the most mentioned influential factors were having leadership qualities, to be driven, humble and not being prestige-minded.

	Qualification requirements		Additional qualification		Total	
	Number	%	Number	%	Number	%
Project management	249	39.2	12	21.8	161	23.3
Sector	75	11.8	9	16.4	84	12.2
IT	77	12.1	2	3.6	79	11.4
Model/method	63	9.9	15	27.3	78	11.3
Agile	38	6.0	12	21.8	50	7.2
Complex project	35	5.5	0	0.0	35	5.1
IS	21	3.3	1	1.8	22	3.2
Webb etc.	16	2.5	1	1.8	17	2.5
Leadership	14	2.2	2	3.6	16	2.3
Multiple project	14	2.2	1	1.8	15	2.2
Business development	11	1.7	0	0.0	11	1.6
Project control	9	1.4	0	0.0	9	1.3
Small project	7	1.1	0	0.0	7	1.0
Group methodology	4	0.6	0	0.0	4	0.6
Budget responsibility	2	0.3	0	0.0	2	0.3
Sum	635	100	55	100	690	100

TABLE 2. How experience was expressed in the ads.

5. Findings from forum discussion on LinkedIn about project management certification

In the LinkedIn forum Projektledarforum, a brief presentation about project management certification was published. The discussion that followed can be parted in four "rounds". Round one collected posts from nine participants in twelve entries (of which three individuals had two entries each). Round two had seven participants with ten entries (and one individual made three entries). Round three collected posts from two individuals, who made one entry each. Round four had three participants with one entry each. In total there were 17 unique individuals participating, of whom one was a manager, a couple was project manager coaches, and the remaining was project managers. It can be concluded that the participants collected opinions about project manager certifications was that is it worthwhile to take on the work that it conveys to get hold of such a certification – at least when judged from an individual perspective. However, being certified does not guarantee that the project manager will do a better job per se. Besides, nor does it seem to be better prospects of being appointed in Sweden since Swedish employers show weak interest for project manager certifications when they advertise for IT project managers (Marcusson & Lundqvist, 2014).

6. Findings from e-mail questions

The findings from the latest captured data during this study origin from the questions that were e-mailed to a few chosen contact persons for the studied ads. The main findings from the qualitative analysis are reported respondent by respondent since they represent completely different areas.

The retired consultant seller, from a global consultancy company, pointed out that certifications are required quite frequently by customers who formulate conditional requirements during the procurement process. Certified project managers also give the company an opportunity to hold a higher hourly rate. The company in question has its own internal certification program for project managers. These certifications are both increasing the project managers' status, and provide an important step on

the individual's career path. He stated that being certified provided advantages for employment. Further he argued the most important personality traits to be: Planning ability, being orderly, having leadership qualities, being communicative and a good listener. The retired consultant seller said: "Project manager is a respected profession that is also well-paid and it has its own development opportunities and career path." The consultancy company had also appointed coaches for established project managers and regarded practical experience to be just as important as theoretical knowledge.

The contact person from one of the

advertising companies revealed the following opinions. It matters what education the project managers have and which educational organization that stands behind it. In contrast, it does not matter which organization that provides a particular certification and nor does it matter what sector, country etc. the practical project experience comes from. The most important personality traits are: To being structured, flexible and having leadership qualities. The company does not believe that there is any reason to describe the tasks in the ads. However, a ranking of important factors are: i) experience of project management, ii) project management certification, iii) education in project management, iv) personality traits, and v) sector knowledge. The importance (scale 1 to 6, where 1 is not important at all) of; project management education is 5, certification is 2, experience is 6; method and education is 2, experience is 5, education regarding the sector is 3, certification is 1 and experience is 4.

The contact person from one of the certification institutes pointed out that project management certification implies that the competence is ensured. That makes it easier to match the person and the mission (i.e. the project). Certification is however not dependent of the sector. Requiring that an applicant should be certified actually means to ask for a kind of quality grading. The project leader needs both theoretical and practical skills. The

most important personality traits are: good leadership qualities and good behavior; being able to apply ones experience and education in practice, and being capable of transparent reporting (i.e. honesty). The strength of certification is that independent people judge the individual's leadership, behavior, knowledge and experience.

7. Discussion

The discussion section starts with a summary of the findings presented in the previous sections 2–6, and continues with a discussion about recruitment of project managers at the background of projects' uniqueness.

7.1 A sum up of the findings

This section summarizes the findings from i) the ads. (for IT project managers and others), ii) the LinkedIn discussion threads, and iii) the e-mail answers

PM work tasks that a project management certification encompass (eg. PMI, 2013; IPMA, 2006; Prince2, 2007) cover the general requirements that project managers should master (e.g. Cohen et al., 2013; Creasy & Anantatmula, 2013; Lech, 2013; Mazur et al., 2014; Müller & Martinsuo, 2015; Stevenson & Starkweather, 2010; McLeod et al., 2012; West, 2010). A similar general level of description was found in the ads. to describe the IT project managers' work tasks, and was also found in comparison with other ads. i.e. as regards managers or specialists (which are more feasible to compare than the remaining from other ads.). It should be pointed out that it was the work tasks description level (i.e. detailed or general descriptions) that were compared with "other ads." even though such similarities also were found. For example, a general description level for method knowledge (i.e. usually it was not mentioned which method) as well as experience of project management (without closer specification of which kind of projects) are general descrip-

tions. The fact that in principle every work task that was mentioned on a general level would be covered by a project management certification, makes it reasonable to suggest that it could be sufficient to formulate qualification requirements in a way that presume that applicants should hold a project management certification (or equivalent). Besides, the ads. would benefit from adding specific requirements that are especially adapted to the particular sector, project or company. Moreover, these steps could enhance a project manager's decision about whether a certain project is worth applying for or not, and could also prevent those, who are not really a good match for the job, from applying for the job in the first place. It could entail fewer applications, instead of an abundance of more or less useless applications for the particular project. There is no real point in having unqualified and not suitable people to apply. It must be mentioned though that there are different opinions about these certifications' excellence and some state that they are not adapted accordingly to recent research findings in the area of project management (e.g. Crawford, 2005; Morris et al., 2006). Prior research has also shown that Swedish employers do not prioritize certified project managers – at least this is hardly required in IT project manager ads. (Marcusson & Lundqvist, 2014).

As regards personality traits (e.g. driven, communicative, structured, self-managed, prestige less and humble) these were often more specifically described than work tasks but it could be questioned if the specific and often inventive and creative descriptions really matters, or if these rather could be described in a more generalized way too, for example referring to Mayers-Briggs Type Indicator (Myersbrigg, 2015); Jung's personality types (Jung, 1941); the Big Five (e.g. Cattell, 1943) or to other personality trait models (cf. project manager certifications).

The findings from the study showed that beyond the descriptive general factors there were sometimes also specific demands like language skills (Swedish /

English), and specific sector experience mentioned, which are closer related to the core product and therefore could be categorized as core competencies.

To sum up, it was noticed during the data analysis that the qualification requirements in the ads. were mostly on a general level (i.e. general competence requirements or miscellaneous character descriptions) and not specific to the project, the line of business / sector or the country (i.e. no project core competence requirements). The wording in the ads. could at a glance seem to be very detailed and specific, but after a closer look the inner meaning was still on a general level. When the categories education, knowledge and experience were compared it was apparent that experience was mentioned in more ads. (Marcusson & Lun*dqvist*, 2015). This could be interpreted as if the qualification areas project management, line of business/sector and project method are particularly important to master since a closer look into which knowledge and education that were requested showed low connection to projects (table 1).

7.2 Project manager recruitment in the light of project uniqueness

A project is something unique, basically outside of a company's regular business. Nevertheless, it should still support the company's core product and should by no means interfere with it. The project is carried out by a temporary organization led by a project manager (e.g. Antvik & Sjöholm, *2012*). The project result (*product*) should support the company's business, particularly its core product (Prahalad & Hamel, 1990; Zook, 2007). Project models and methods are described in different BOKs and can be used in all sectors and companies (e.g. PMI, 2013), since the content in these BOKs is usually written in a generalized way and on a general level in order to be broadly applicable.

Project uniqueness can be connected to country, sector, company and project. In the studied IT project management ads. 8.7 percent listed sector knowledge as a qualification requirement (table 1) and 12.2 percent listed sector experience (table 2) both of which are examples of more specific competences (i.e. project core competences). In the first LinkedIn discussion culture, product and sector appeared as important. An e-mail conversation with a contact person from one of the advertising companies ranked the importance of education to score 3 (on a scale 1 to 6 where 6 was the highest / best), certification 1 (not important at all) and experience 4.

Analysis of the ads., the discussions / mail answers and the BOKs content substantiate a difference between the general and the unique. BOKs (models, methods, and tools) are on general level and projects are unique. To advertise for a project manager by only using general terms when the task is unique does not fit so good and could even be regarded as a mismanagement of the recruitment process. This is however not to say that the general is unimportant or irrelevant, but it should not be what is mostly, or as it often turns out to be solely, focused in the ads. In the ads., it would be better to start out from the general level (e.g. by relating to certifications or similar BOKs; some organizations have their own) and highlight the uniqueness (e.g. culture, sector, *company, project)* by putting most effort on qualification requirements that are connected to the projects core product i.e. the project core competencies that will be needed. The latter is what the employers should be primarily interested of since the companies compete with their unique products e.g. based on function, design, or price.

IT project manager ads. that are expressed in a generalized way could be interpreted as even though a project is inherently unique these ads. are not created accordingly. If they are not created with a standpoint in the projects' uniqueness, this could convey a risk of focusing on less important qualification requirements whilst missing those that are of a critical nature for the particular project. If the ads. are not adapted to the project's uniqueness it would imply a contradiction between

the project and the ads. that is essential to be aware of. Ads. that are formulated in a way that mostly or only provides general descriptions of work tasks and competence requirements could give an impression of insignificancy regarding information on a more specific and detailed level. Ads. that are formulated in a generalized way could be interpreted as if the applicants should be able to know by themselves what the job will need, provided they have the "right" competence, knowledge, experience and personality traits that would be needed for the job.

7.3 Future research

The findings from this research should be further studied and the model presented in the conclusions (section 8) needs to be tested, and for example one study could be to co-operate with personnel who create / formulate ads. for project managers and apply the project core view to the advertising and to the recruitment process.

The description level of the IT project manager ads. was compared with Swedish ads. for other jobs which resulted in that the IT project manager ads. neither turned out to be specifically characteristic nor could it be stated that they fully followed the concept of other Swedish job ads. However, the IT project manager ads. did not differ conclusively from job ads. that could be compared with an IT project manager job such as other managers and specialists. The ads. that were not comparable to IT project managers' ads. indicated that less qualified jobs entailed extensive work task descriptions on a detailed level while less qualified almost lacked details, which would be interesting to look further into.

8. Conclusions

The aiming of this research was to study how the content of the ads. relates to project managers' general competencies and their core competencies (*Prahalad & Hamel, 1990; Zook,*

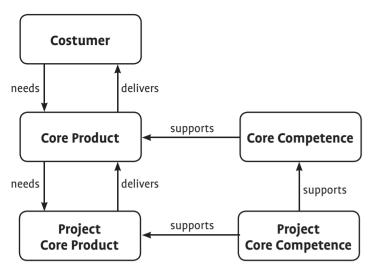


FIGURE 1. The project core view model

2007). The answers to the research questions will sum up and conclude this paper.

The first research question: "How can a model that catch a project core view be depicted?" To sum of the findings would result in the following bullet list that describes what is important as regards the project manager's job:

- It is fundamentally general (e.g. could be related to certification knowledge, BOKs and general personality models).
- Since the project is unique the project's uniqueness ought to be mirrored in the qualification requirements.
- The basic requirements are general and the unique requirements are core (i.e. project core product needs project core competencies.

The project core view model is presented in **Figure 1**.

The model's components show the project core view, which for example could be utilized as a starting point for a facilitated recruitment process of project managers (and not only IT project managers but any project managers). It is fundamental for the project core view that the result of the project (its product) should support the organization's core product.

The answer to the second research question: "How can recruitment of project managers be facilitated?" could be based on the project core view model (figure 1), which raise the importance of acknowledging which the project core product is, and consequently which project competence that would be needed. Furthermore, it is necessary that the recruitment process (e.g. the ads.) encompasses both general and core project competences. Something that could really facilitate the process is to utilize already formulated general demands for the general parts and for example require that the applicants should hold some kind of project management certification or equivalent.

The implications for practice are mainly that project managers who have been recruited with the project's core product and therefore its core competence in mind are probably better equipped to master the difficulties and problems that project managers usually experience throughout the projects (e.g. Avots, 1969: Gillard & Price, 2005, Ruuska & Vartiainen, 2003; Thomas & Mengel, 2008). Hence they should also be better prepared to deal with the kind of frustration that the introducing quotations from project managers demonstrate.

The implications for research are foremost as input for creation of new theories about project core product and project core competence i.e. the project core view.

To sum up, the project core view visualizes the initial need for understanding the company's core product in order to catch the project core product. This concerns both project sponsors and project managers equally, since a company's competitiveness is based on its core product, and the project order / directive is the starting point for the project. For the project core view to be really meaningful and credible it is crucial that both general competencies and project core competencies are included. One way of realizing this is to start out from generalized concepts of what project managers need to master, i.e. the kind of issues that project management certifications and BOKs encompass, and then complement with the project core competencies that are needed for delivering the project core product.





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