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## Why advertise the obvious? Learning outcomes from analyzing advertisements for recruitment of Swedish IS/IT project managers

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### Abstract:

When Swedish employers advertise for IS/IT project managers they tend to list almost obvious qualification requirements instead of describing those that are unique for their companies' competitiveness, or more precisely, instead of expressing those that really matters. The research behind this paper studied job advertisements during four years (2010–2013). The findings point to an inadequate ability to understand and/or express the requirements that should be decisive for the appointment in order to grasp the essence of what the job actually involves, which brings on problems for both the applicants and the employers. The practical implications of the study pursue a need for employers to stop advertising mostly general requirements for the benefit of more specified ones, that take the sector's, the organization's and the project's requirements into consideration. By doing so, the prospect applicants have a better opportunity to understand what a certain job entails and the employers have a better chance to appoint the right individual. The research implications point to a need for acknowledging, and set about solving, problems concerning qualification requirements in advertisements for IS/IT project managers.

### Keywords:

appointment; recruitment; IS/IT; project managers; general competence; general qualifications; general descriptions vs. specific requirements; standards; professionalization.

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## 1. Introduction

When staffing a project, the most important role to fill is usually the project manager's, since the project manager is accountable when it comes to producing and delivering the ordered product, i.e., the project's result [1]. Hence, it is an essential and weighty task to recruit and appoint *the right* individual for the assignment, which stresses the importance of scrutinizing which qualification requirements that are put down in job advertisements (henceforth ads.), and further how the ads. are worded/formulated. There are principally two main alternatives that could be applied, either could the ads. request: i) general project competence, or ii) unique competence that could be adapted to the specific project. Projects are by definition unique, therefore a critical question appears concerning the opportunities of supplying unique projects with merely general requests and models [2]-[4]. This reasoning indicates a paradox that makes it legitimate to question if it is reasonable to assume that project managers using solely general project models are best fit to lead unique projects, or if the paradoxical situation requires that unique projects are matched with specific competence. Even though it is rather well described, e.g., in the PMBOK Guide [2], what kind of tasks/duties a project manager is supposed to master, these descriptions are still on a general level. Hence, they do not provide enough information, at least not if used as the only source for a job description/request. It is not clear if the matching problems originate from: i) a lack of understanding what the project manager's assignments, responsibilities and qualifications are; ii) a lack of understanding the specific requirements due to a unique project; iii) if the problems are descending from a straitjacket effect caused by a too strict following of the standards available; or from iv) ignoring the standard. It might even be possible that the answers, at least partly, could depend on how the job ads. are formulated.

A lot of responsibilities are inherent in the project manager's assignments such as "... understanding and applying the knowledge, tools, and techniques that are recognized as good practice" [2, p. 17]. Besides, competencies regarding interpersonal skills are mentioned as necessary for effective project managers. Further, project managers are expected to behave properly during the project and its related activities. A project manager needs to master both specialized knowledge, as well as experience from the field, and there is a fundamental wish to find the individual who's competence and experience meets these requirements with a good balance between them [5]. Discussions have been going on for years about whether project management in general has gained status as a profession, and there are for example different opinions about project management standards' contribution to the professionalization process, and likewise about the employers' involvement in the process as corporate members of project management associations [6]-[9]. As regards IS/IT project managers, the discussion about their competence and qualification requirements had an upswing right before the year 2000 because of the millennium shift, which was feared by many in and around the IS/IT industry because of the technical problems that was expected to occur to all kinds of information systems [10].

All the different areas that project managers are supposed to master are often mirrored in the ads. through sometimes almost overwhelming lists of competencies, experiences and personal traits. Hence, there is a risk that the requirements in the ads. will confuse the applicants more than they are being helpful. Alongside of this rather well-established view of project managers' individual responsibilities, and as a contrast to the spectrum of nearest unattainable qualification demands, there are also voices [11, p. 86] advocating that it is almost "inappropriate" to make the project team fully responsible for whether a project is successful or not. The reasons behind the latter argumentation are based on the customer's obligations to share the responsibility for how the project turns out in the end, meaning if the product will satisfy the organization's needs as expected. This throws light on the customers'/clients'/roles and their responsibilities as competent professionals, who can determine what should be delivered from a certain project in order to fulfill the goals. The sponsors are expected to be competent when it comes to explicitly expressing the critical requirements for a certain project's result (i.e., the product). Consequently, it is just as important that the organization's representatives (e.g. managers, Human Resources (HR) personnel) including the project sponsor are able to clearly, and as exactly as possible, formulate relevant qualification requirements for the recruitment of project managers.

Recruitment always involves great responsibility and precision from the employers' side since it is on the one hand essential to hire *the right* individual, and on the other hand it is a costly and delicate procedure, not least in case of a mismatch leading to an unsuccessful appointment. Recruiting IS/IT personnel in general makes no exception from this

basic principle and recruiting IS/IT project managers could easily be regarded as particularly important and essential for the prospect of successfully handled projects that deliver, the right product within budget and meet or exceed the requirements. Taken together it can be regarded as difficult to attract and hire *the right* IS/IT project manager [12]. Hence, there is a need to find ways to facilitate and further develop the delicate task of recruiting IS/IT project managers.

Even though there are some project standards available, often referred to as bodies of knowledge (henceforth BOKs) these do not seem to be enough informative when it comes to formulate qualification requirements. One of the greatest player in the field of project standards is the PMBOK Guide [2], which is frequently referred to when project management standards are on the table. Nevertheless, to solely apply standards in the project management practice or in the recruitment process do not provide any guarantee for successful projects or recruitment of *the right* individual, at least not without any further attention [13], [14]. An example of such further action is, for example, ability to differentiate with regard to the actual context, which means to tailor the project to the current organizational culture [15], which probably could be just as adequate to highlight in the recruitment process (e.g., in the ads.). Another perspective of the standardization discussion lays in the paradox that is inherent in the project standards; on the one hand assuming that all projects are alike and generalizable, and on the other hand that projects are unique [6]. Hence, the standardization of project management could also lead to "... 'blackboxing' of knowledge," [7, p. 431] meaning that the guidelines in the standards do not provide a clear answer to "... what skills, knowledge and competence" [2, p. 441] it will take to manage a certain project. Still these variables need to be seriously acknowledged in a recruitment process and should possibly also be decisive, at least partly, for how the ads. are formulated since the advertising usually is an important part of this process. For being additionally helpful for the applicants, the ads. should also disclose the employer's expectations on the individual that is being appointed. Ahsan et al. [16] studied project manager ads. in the public domain in order to analyze competencies and recruitment signals. They [16] took a standpoint in various standards (e.g. PMBOK Guide [2]) when they formulated key variables from the literature for the analysis, and their main findings were differences between industries and countries but also regarding how industry ads. vs. the literature highlight competencies.

The purpose of this study was to search for issues that could facilitate recruitment of *the right* IS/IT project managers. Ads. for IS/IT project managers were chosen as study objects since particularly many examples of unsuccessful projects origin from the IS/IT sector [17]. The increased risk for failure puts even more pressure on these projects which consequently leads to even higher demands for IS/IT project managers in general. Appointing *the right* individual is fundamental for achieving project success and fulfilling project goals [1]. To judge from the problems connected with achieving IS/IT project goals, which is mostly blamed on the IS/IT project manager's achievements, finding *the right* one seems to be easier said than done since the project goals are often not reached successfully [17]. A weighty reason for why recruitment is difficult seems to a large extent being related to the paradox of project standards and best practices [2], which implies that projects are very much alike, and at the same time projects are known to be unique (at least to some extent). In other words the standards could actually be more difficult to apply properly than the eagerly suggested applicability that branch organizations make pretense of [6]. As a consequence of this paradox, a mismatch between the IS/IT project manager and a certain IS/IT project could convey that the project outcome would be negatively influenced, or even that it would become a total failure [1]. Yet, another purpose of this study was to fill a gap within research regarding the paradox of standards in the context of recruiting IS/IT project managers.

The propagated use of standards on the one hand and the project uniqueness on the other hand, which both are in play when IS/IT project managers are recruited, are important issues to deal with, and should therefore be acknowledged in the formulation of the job ads. The first research question is: *How can the paradox of project standards' general applicability and projects' uniqueness be overcome in order to enhance recruitment of IS/IT project managers?* The second research question is: *How can the ads. be formulated in order to facilitate recruitment of the right IS/IT project manager?*

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The remaining of this paper is structured as follows: section 2 provides a background to project managers' qualification requirements in the recruitment process; section 3 presents the research design and data collection; section 4 gives a presentation of the findings; section 5 analyzes and discusses the findings; and finally, section 6 concludes, i.e., answers the research questions, presents implications and suggests further research on this topic.

## 2. Background to the qualification criteria in ads. for project managers

The paradox that lays in project management standards [2]-[4], which on the one hand hold out the prospect of simplification and generalization possibilities, and on the other hand paint a picture of project uniqueness [6], is problematic in the light of finding the project manager, who has the right qualifications for a certain project. The project managers' professionalization process is closely connected to the standards by, for example, project management associations' certifications and some companies' own career models which could be comparable to standards.

### 2.1 *The strive for professionalization of project management*

Projects have their roots far back and examples of famous ancient projects, described in the Bible, are for example the building of the Noah's Ark and the Tower of Babel. Daniel Defoe published a book about projects "An Essay upon Projects" [18] in the 17th century that describes Prince Rupert's weapon manufacturing in 1680. However, project management, as we know it today, started in the armed forces as huge US defense and aerospace projects during the cold war. Projects like the Manhattan project (the first atomic bomb), the Polaris projects (naval missile systems), as well as the Apollo projects (to put a man on the moon in the US space program), are all precursors of today's projects. Subsequently, the methods gradually spread to other industries, a development that led to an initial need for synchronization, and furthermore to standardization initiatives concerning project methods and theories. Besides, project managers also needed their own arena for co-operation and support, something that the project management associations provided as well. Standardization activities have served as means for further development of project management as a profession [19]-[21]. Career models, developed in individual companies, are other examples of how project management workers have moved towards professionalization as in-house project competence cf. [22]. Organizations sometimes fear that project workers will move on to other organizations while striving for further career opportunities, and one way to counter such a competence draining process is development of career models connected to specific companies. However, individual companies have limited opportunities to control their own career models since these finally rest on standards developed in the project management associations, at least if the career models should gain any real legitimacy [22].

In addition to different companies' career ladders [22], and various project associations' BOK initiatives (e.g. PMBOK Guide [2]) another professionalization movement, called corporate professionalization, thrives [23], [24]. Corporate professionalization includes factors like [23]: organizational membership; client engagement; competence-based closure; and internationalization. The tactics and strategies behind corporate professionalization differ from other professions' tactics and strategies (e.g. law and medicine) for example as regards: i) knowledge co-production with the industry (competence focus); ii) market closure (not statutory closure); iii) legitimization (by market value - not public benefit); iv) individual as well as organizational membership (but not only individual); v) not licensed or regulated by state; vi) close engagement with clients; and vii) international jurisdictions [23, p. 460]. Important issues of corporate professionalization are the employing organizations' functions "... as sites of professional formation and regulation" since the corporate memberships are based on corporate interests and the project management associations aiming at increasing their focus on commercial services to attract new corporate members continuously [23]. Besides, the employing organizations, the project management associations and the project managers (individuals) influence each other and have mutual interest in convincing the market about the value-adding that lays in professional project workers who could realize the project goals. At the same time they have partly different modus of operandi when it comes to accreditations and certifications. An example of this is that only individual project managers can be certified through the project management associations, and the corporations are not allowed to certify their own personnel "...en masse" [23, p. 453], and likewise the corporations career ladders are exclusively addressed to their own employees.

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Project management associations stand behind various project management certifications connected to these associations respectively (e.g., [2]). Even though these certifications have attracted many organizations and project managers certifications are not especially highly represented among Swedish employers' competence/qualification requirements, at least not if judged by Swedish ads. for IS/IT project managers [25].

## 2.2 Standards as a short cut to professionalization – or the longest way round

The project management workers' strive for being regarded as professionals have led to development of standards and certifications. Professionalization was primarily about finding effective ways to grasp and execute the project sponsors' goals for their projects. To satisfy their requests and needs have always been critical if the project manager's work should be acknowledged as successful. Project management associations have developed their own set of guidelines and standards for this purpose. The PMBOK Guide [2] is an example of a so called global standard of project management that emphasizes both of the above perspectives (efficiency and professionalization). This standard is often promoted as an assurance to attain excellence in project management performance while emphasizing project management as an accepted profession. The Project Management Institute's (henceforth PMI) first version of the PMBOK was established in 1976 and published in 1983, and several other project management associations published their own guidelines over the following 10-15 years. Major companies are large consumers of standardization products (e.g. BOKs, certifications) often due to a seeking of assurance for their projects, which is an important step towards professionalization of project management [26]. Hodgson [27, p. 819] stated that the professionalizing attempts that have been carried out "... have already served to enforce a mode of discipline over managers and staff".

Even though the project management standards are widespread and highly appreciated, there are still opinions asserting that the research is insufficient regarding the connections between the following of standards and successful project outcomes. Another common critique of the standards concerns how research findings are (or rather, are not) utilized in order to update the standards, while allowing the practitioners to benefit from recent research outcomes. Critical voices argue that only few (if any) changes have been made to the standards (BOKs) over the years, thus the standards are considered as being too dated to pay any real attention to [26]. Sometimes the competence of the practitioners, who originally developed the standards, is questioned as well. According to some researchers in this field it is risky to consider BOKs as reliable sources of best practices [13], [14], [26].

Brunsson [28] stated that standards are simplifications that disregard experiences and issues that are not generic and generalizable. Hällgren et al. [9] pointed out that practical project experiences that are transferred through standardization to best practices actually lose their relevance instead of becoming more useful. The latter is due to a kind of double-fault since these best practices, that are simplified generalizations, and not specializations, subsequently are transferred back to reality [9].

Milosevic and Patanakul [29] studied standardized project management variables and found three (tools, leadership and process) that were of a generally higher interest for project success. However, these findings concurrently showed that standardized project management variables that suited one company did not necessarily fit others, which led to the following statement: "...each organization may have its own set, or 'size' of standardized project management factors on the OPM level" (p. 191), (OPM stands for organizational project management). Milosevic and Patanakul [29, pp. 188–189] also found that organizations tended to standardize to a certain point, i.e., to the "inflection point", meaning that the key to project success actually involves to find the point of standardization that maximizes the project success since going beyond the "inflection point" would most likely decrease the project success. This is an example of a pragmatic attitude to standardized project management that would allow trusted project managers to set the standards aside when it seems to be more convenient for the time being. Milosevic et al. [15] stated that standards cannot solely serve as means for project success, not without any further actions taken concurrently. Hodgson and Cicmil [7] argued that the PMBOK (3rd edition from 2004) did not satisfy the information needs that should be decisive in order to determine what would be the most appropriate skills and competencies for a project team. Furthermore, the authors [7, p. 444] criticized the PMBOK's attempt to establish a "globally accepted terminology, indeed ontology, for the field of project management" even though these terms were not unique to project management. The PMBOK's glossary's 2nd



edition ran to 15 pages and the 3rd edition to 34 pages [7]. The latest edition of PMBOK [2] of the term glossary includes 42 pages. The glossary could be perceived as a sign of PMBOKs' aim at conveying their view of best practices and normative rules to the project management practice as a whole. Hodgson and Cicmil [7, p. 446] discussed problems related to this normative approach and stated: "... that the 'black boxing' of knowledge in this area, as definitions, techniques and procedures become set in stone, effectively removes ethical and political questions from the agenda", and also expressed their concerns about best practices that are not adapted in a manner that allow project managers to let their projects diverge from the "imposed standardization" that comes out of these BOKs [7, p. 447]. Muzio et al. [23, p. 444] argued that "... 'corporate' professionalization which departs in significant ways from established paths and which is more appropriate" is preferable for project management. Project management is different in many ways not least because of its temporary nature, the demarcation of jurisdictions as well as its hierarchical structure and temporary matrix organization [23].

### 2.3 Recruitment of project managers in general and IS/IT project managers in particular

Recruitment of project managers are known to be both challenging and crucial for the prospect of successful project outcomes, particularly as regards IS/IT projects [2]. Ahsan et al. [16] studied job ads. for project managers in the public domain, in Australia and New Zealand. The study focused on comparison between well-known standards from the literature and how the ads. were formulated. The most prominent findings were that the ads. emphasized soft skills and competencies in a different way that the literature (e.g. BOKs and standards), which in turn point to a contradictory distribution of competencies, demands and recruitments. Ahsan et al. [16] suggest further studies in the field of recruitment of project managers, e.g., as regards how ads. attract prospect applicants.

When it comes to recruitment of highly specialized personnel, as is the case with IS/IT project managers, it is essential that the employers realize what competence a specific project core product will require, i.e., which project core competence will it take to manage a certain project in order to deliver the requested product. The company's core product is critical since the project's core product is supposed to support the company's core product and therefore it adds tremendously to successful project outcomes if the core competence is elucidated throughout the recruitment process [30], [31]. According to Chipulu et al. [32], industry are however more interested in generic skills than in specific competence such as project management knowledge and expertise knowledge.

In order to succeed with the recruitment yet another factor should be acknowledged as important for the outcome: the individual's personality traits [33] that could enhance the opportunities of applying a holistic view of the project. Working as a project manager requires a combination of several competencies and qualification requirements, as well as of specific personality traits if the best possible match should occur; besides the job context is also of importance for the outcome [33].

### 3. Research design and data collection

An inductive, longitudinal study over a period of four years (2010-2013) has been carried out that studied Swedish employers' requirements for IS/IT project managers from the perspective on how the job ads. were worded/formulated. The data from the study was principally qualitatively analyzed with some quantitative features included [34], [35]. The research design was chosen in order to gain an understanding of how Swedish employers estimate the value of IS/IT project management competence. The literature review was mainly carried out firstly after the data collection had taken place and the analysis had started. The choosing of research design always involves a search for a valid and reliable way of collecting the empirical material. In this case the ads. were considered to provide such information/data. The collection of the ads. was carried out once a year between 2010-2013, and the fact that the findings hardly differ within these four years, was interpreted to indicate stability of the findings.

The decision to collect ads. only once yearly relates primarily to the fact that it is rather easy to drown in an overload of information [36]; still the longitudinal perspective was considered to be helpful for providing a realistic picture of what was actually requested in the ads.

The collecting of the ads. were carried out with the following considerations in mind: i) to study changes, on a longitudinal basis; and ii) to ensure that sufficient time had passed in order to avoid collecting the same ads. over and over again. The sectors included in this study were foremost IS/IT, but also other sectors that were in need of hiring IS/IT project managers. The collecting of the job ads. has geographically included Sweden as a whole, and the companies were acting on a Swedish and/or a global market (further accounted for in sub-section 4.1). The study applied ads. instead of questionnaires or interviews in order to avoid employers/HR personnel/recruiters being tempted to talk warmly for e.g. the need of certifications, or against it, without being really convinced of either of the alternatives just because they wanted to please the interviewer who they thought was searching for something in particular. It is well known that interviewees sometimes try to adapt their opinions to what is expected of them in a given situation [37]. The ads. on the other hand are what they are since they were not touched up because of the ongoing study.

The ads. for IS/IT project managers were collected at the end of February or at the beginning of March. They were collected from the publication Computer Sweden's (henceforth, CS) job advertisement's website (2010 and 2013), because this site is a very common place for Swedish IS/IT project manager ads., and from the Swedish Employment Agency (2010-2013), (henceforth, EA), which is another frequently used place for all types of recruitment ads., the latter also available online. The ads. were analyzed in order to study what type of knowledge, personality traits, experience and/or education that were requested. As regards the years 2010 and 2013, data was collected from two sources (both from EA and CS websites) conveying a risk for redundancy when both sources had been simultaneously employed. In order to avoid misleading data (i.e. redundant), the material was searched for duplicates and, if two similar ads. were found in both the EA and the CS, one of them was removed.

Content analysis of the ads. was chosen as research tool. The qualitative content analysis provided the conceptual framework and the quantitative content analysis gave measurable terms for the framework [34], [35]. The content analysis was much inspired by Burnad's work [39], [40] as regarded the step-by-step procedure that was applied. To begin with, some fundamental and rather obvious categories, which should be expected in recruitment ads., were formulated, and then a database was designed in Excel based on these categories. Examples of basic categories are knowledge, education, experience and personality traits as well as profile data for the companies/organizations such as sector/industry and market. The collected ads. were printed out, and key words related to the categories were marked and entered into the database. As the collecting of data continued, a need for subcategories appeared, e.g., subcategories for sector and market, as well as qualification requirements on different levels of importance and priority (e.g. qualification requirements *vs.* additional requirements). During the whole first year, and partly during the second year, of the data collecting, the need for generating new subcategories consecutively were more urgent than the following years (i.e. 2012, 2013). Another thing that had to be handled throughout all the entering of data into the database was to relate similar, but not exact, word matches into the categories and subcategories, and it was sometimes difficult to translate words/expressions to English in case there were no exact matches available. The most obvious examples of this work is related to the descriptions of the requested personality traits, but also to descriptions of the work tasks, for example could "lead" be expressed in various ways and when no exact match was available the chosen translation was assessed to point in the same direction as the Swedish word that had been used.

The data was preliminary analyzed after the first round of the data collecting in order to find relevant literature for the theoretical background. When the data collecting was completed after four years, and the categories and subcategories were in place, the content analysis was mainly carried out by using word count in which the words were put in relation to the actual context (e.g. if they were mentioned as qualification requirements or additional requirements). Further, the analysis compared the findings with a commonly applied global standard for project management (i.e. PMBOK Guide [2]). The reason for choosing a standard to compare with relates to the well-grounded practice behind standards, even though standards *per se* sometimes are subject to criticism (e.g. [7], [9], [26]). The reason for choosing PMBOK Guide is that it is regarded as a leading global standard [2]. Certifications from PMI, that stands behind the PMBOK Guide [2], are applied in Sweden.



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About nine months after the first data collection an additional collecting of data was carried out (as a comparison) concerning ads. for other posts than IS/IT project managers. The reason was that the early/primarily data analysis showed that the descriptions of the assignments and the qualification requirements were scarce. Hence, 75 ads. for specialists, workers and managers were collected for comparison. This additional data collection was carried out once with the intention to compare whether other job ads. were just as scarcely described, or if they were more detailed.

#### 4. Presentation of the findings

This section presents the study's findings. It should be noticed that tasks, qualifications and personality requirements that were mentioned only occasionally/solitary in the ads. have been excluded from the findings.

##### 4.1 Some background data for the studied ads.

The 325 advertisements that are included originate from 158 companies. Additionally, the ads. were categorized by: i) the type of company (Table 1); and ii) the type of market (Table 2) they belong to. The main part of the ads. came from IT and recruitment companies on Swedish and global markets.

Table 1. The dispersion of companies

Type of company	No.	%
IT	170	52.3
Public authority	22	6.8
Recruitment	90	27.7
Other	43	13.2

Table 2. The dispersion of markets

Type of market	No.	%
Swedish	175	53.8
Nordic	34	10.5
Global	116	35.7

##### 4.2 About requirement criteria in the ads.

The data revealed that the ads. sometimes lacked specific information about requirement criteria, for example information about work tasks (Table 3).

Table 3. Requirement criteria not listed in the ads. for IS/IT project managers

No listed requirement criteria	No.	%
Work tasks	105	32.3
Personality	71	21.8
Knowledge / education	58	17.8
Experience	20	6.2

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As Table 3 shows, one out of three ads., or more precisely 105 ads. (32.3 %), did not specify any work tasks at all.

#### 4.3 About the occurrence of work tasks in other job ads.

Because of IS/IT project managers' managerial positions (irrespective of project manager's temporary leader status) comparison with managers in general, and to some extent also with specialists, was possible when it came to the listing of work tasks, but also regarding co-workers as, for example, IT strategists, computer operators and petrol station assistants. The comparative study that was carried out once in 2010 included 75 ads. (Table 4).

Table 4. How work tasks were handled in ads. collected for comparison

	Work tasks were listed:							
	Total no. of ads.		Not at all		In detail		In general	
	No.		No.	%	No.	%	No.	%
Managers*	31		3	9.7	9	29.0	19	69.3
Coworkers**	25		8	32.0	7	28.0	10	40.0
Specialists***	19		3	15.8	1	5.3	15	78.9
Total	75		14	18.7	17	22.7	44	58.7

\* IT managers, workshop managers, chief administrative officers, and senior officials

\*\* computer operators, IT strategists, and petrol station assistants

\*\*\* speech and language therapists, foresters, and actors

As shown in Table 4 the ads. that represent the managers' (69.3 %) and the specialists' (78.9 %) categories were more often generally described (i.e. the work tasks), compared to the co-workers category (40.0 %). The data also showed that a total of 22.7 percent of the ads. described the work tasks in detail. The comparison with IS/IT project manager ads. showed that the latter more often lacked task descriptions (cf. Table 3, 32.3 %), compared with other managers and specialists, but were almost equal to the co-workers ads. i.e. 32.0 percent (Table 4).

#### 4.4 The most frequently listed work tasks

The most frequently listed work task was lead (or similar wordings for lead) that was represented in 60 percent of the ads. The second most listed was plan (26.5 %) and the third was follow up/report (21.2 %) (Table 5). This could be compared to Table 3 and the fact that 105 ads. (32.3 %) did not define any work tasks at all.

Table 5. The most frequently listed work tasks in ads. for IS/IT project managers

Tasks	No.	%
Lead	195	60.0
Plan	86	26.5
Follow up, report	71	21.2
Co-operate	42	11.9
Communicate	21	6.5
Product development	9	2.8
Educate	8	2.5

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The most frequently listed work tasks in Table 5 are all typical management tasks, which however are just as applicable for IS/IT project managers as for other project managers and/or managers in general. The principal reason was that the tasks were described on a general level.

#### 4.5 The most frequently listed competence requirements

The listed competence/qualification requirements (Table 6) were mostly described in a general manner, i.e., experience of project management (no further demands on projects' type/size, project methods or sectors), and academic degree/education (no further demands on level, but the sector was usually pointed out). However, the language and certification demands were more precisely expressed, and the certification demand too, since project management at least was specified (there are a lot of other certifications of importance within the IS/IT sector). The far most listed competence requirement was experience of project management (80.3%) to compare with project management training that was mentioned in 5.8 percent of the ads. (4.3% as a qualification requirement and 1.5% as an additional requirement). The second most listed requirement was academic degree/education (specific to sector) (66.8%). The third most listed was language knowledge/skill as regarded Swedish and/or English (54.2%). PM certification was listed in 16.0 (of which 4.3% was a clearly expressed demand and 11.7% was mentioned as an additional qualification).

Table 6. The most frequently listed competence requirements in ads. for IS/IT project managers

Competence requirements	No.	%
Experience of project management	261	80.3
Academic degree / Education	217	66.8
Language "Swedish and / or English" knowledge/skills	176	54.2
Certification (Project management)	52	16.0
Project management training	19	5.8

Comparison with other professions showed that the competence requirements were mostly generally described in these too. The IS/IT project managers' ads. were however somewhat more informative, because of the language and the certification demands.

#### 4.6 The most frequently listed personality traits

When it came to personality requirements/traits, the most frequently mentioned one was to be communicative (32.0%). The second most listed was to be self-sufficient (20.0%) and the third was to be social (19.1%) (Table 7).

Table 7. The most frequently listed personality traits in ads. for IS/IT project managers

Personality traits	No.	%
Communicative	104	32.0
Self-sufficient	65	20.0
Social	62	19.1
Leader	51	15.7
Good at cooperation and collaboration	44	13.5

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These findings could be compared to Table 3 and the fact that there were no personality traits at all listed in 71 of the job ads. (21.8%), which is to say that it was more applied to not list any personality traits at all than to apply the second most listed alternative (self-sufficient).

## 5. Analysis and discussion

The first part of this section starts with an analysis of the findings from section 4 in the light of a commonly used global standard for project management (i.e. PMBOK Guide [2]); the second part discusses the findings and the analysis and the final part accounts for the limitations with this research.

### 5.1 Analysis - the findings compared with the PMBOK Guide's description of project management processes

The leading work on project management standards, the PMBOK Guide [2], describes project management processes as: i) initiating; ii) planning; iii) executing; iv) monitoring/controlling; and v) closing. The most obvious similarities between the studied ads. and the project management tasks, or processes, described in the global standard [2] are primarily that planning (mentioned in 26.5% of the ads.), executing (lead, 60.0%) and monitoring/controlling (follow up/report, 21.2%) occur in both, somewhat differently worded though as the words in the parentheses show, e.g. the ads. mentioned co-operate (11.9%) and communicate (6.5%), which could be construed as executing (Table 5). There were also some differences between the work tasks that were listed in the ads. and the standard's [2] processes; initiating and closing were missing in the ads.; product development (2.8%) and educate (2.5%) (Table 5) do not correspond to any of the processes and activities in PMBOK Guide [2].

The PMBOK Guide [2] describes project management interpersonal skills and the following items are mentioned: i) leadership; ii) team building; iii) motivation; iv) communication; v) influencing; vi) decision making; vii) political and cultural awareness; viii) negotiation; ix) trust building; x) conflict management; and xi) coaching. The comparison showed that the most apparent similarities between the studied ads. and the PMBOK Guide's descriptions were communication (communicative mentioned in 32.0% of the ads.) and leadership (leader 15.7%) (Table 7). Remaining skills from the PMBOK Guide [2] were only found in a few ads. (below 13.0%). Besides, personality items that were listed in the ads. only once, or a very few times, were excluded from the study and therefore not compared with the PMBOK Guide's listed interpersonal skills. The project managers' personality traits are however often regarded as an important part when it comes to the ability to apply a holistic view as a project manager [33]. The comparison between the standard's interpersonal skills and the personality traits signals a lack of consistency since the only listed item that possibly could be regarded as consistent to some extent was communication (communicative 32.0%).

The analysis and comparison showed on the one hand some degree of consistency (processes and work tasks), and on the other hand inconsistency (interpersonal skills and personality traits) still these findings could be regarded as interesting. Not least when considered in the light of professionalization of project management even though professionalization and standardization sometimes are seriously questioned by some (e.g. [2], [7], [23], [27], [29]). The standards and best practices that are supposed to support the professionalization process might also be utilized when it comes to formulating and creating ads. that reveal what the work actually would entail and the expectations on the individuals that are being appointed. As a consequence the basic processes and interpersonal skills that are described in the standards should not even be necessary to list in the ads. since they should be regarded as obvious and easily accessible via the standard compilations (e.g. the PMBOK Guide [2]). However, the processes listed in the standards that could be regarded as a baseline for project managers' work tasks should be complemented with further information about core competence requirements in order to be really useful [30], [31].

### 5.2 Discussion about the information gap in the Swedish IS/IT project manager ads.

Today's ads. for IS/IT project managers in Sweden can actually be looked upon as a display of the Ames room, i.e., a distorted room that is used to create an optical illusion that does not match the reality. Instead it displays a picture that could be quite the opposite of reality and its true perspectives. The findings showed that there were some information

gaps in the ads., principally regarding the work tasks that the IS/IT project managers were expected to handle, but also when it came to the competence (knowledge, education, experience) and personality requirements. It is not evident why the ads. hardly ever provided more than just general requirements (if any at all) even though the literature findings point to possible explanations, such as certain companies' own developed career models [22], [23]. Companies that prefer to educate and train their project workers in accordance with company specific standards could be a reason for being brief instead of providing detailed qualification requirements. In any case, it would be necessary to consider that these career models still need to follow established project associations' guidelines and standards in order to gain legitimacy [22]. It should also be noted that there are insufficient research findings available about possible connections between the following of standards and successful project outcomes [13], [14], [26].

It was a common finding from the ads. that the tasks, demands and requirements that were specified were of a general type, and that only seldom was something pointed out that was unique to the industry, the company or even to the project and/or the product. Requirements that actually were more pronounced in the ads. were of a type that were nearest obvious and self-evident, which could be interpreted as they were still on a general level. It did occur a few times though that the ads. related the demands, experience and/or training to a specific industry. Still, when put together, the findings could be understood as if the same requirements were considered to be just as applicable for all project managers as long as they practice in the same industry or work in the same company. Since these requirements were described in a way that were in accordance with global project standards e.g. the PMBOK Guide [2] the possibility appears that it might be an opportunity to simply refer to these instead; even though the standards' applicability sometimes are questioned because of their general nature [9], [28]. Brunsson [28] pointed out that standards are simplifications that discard experiences and Hällgren et al. [9] emphasized that best practices actually lose their relevance when they are transferred back and forth between practice and generalization time after another.

About a third (32.3%) of the Swedish employers omitted more specific information about the work tasks; 21.8 percent did not include eligible personality traits, 17.8 percent did not request anything regarding education or knowledge, and 6.2 percent left out demands on experience (Table 3). Apropos of the latter, experience of project management was the most listed requirement of all (80.3%). Still the ads. only rarely explained the particular experience that was sought after. If these findings were related to an understanding of that it should be enough to simply define the job as belonging to IS/IT project management, or if it was due to other reasons could not be answered by this study. Project management is different compared with many other occupations/professions, partly because of its temporary nature, but also because of the necessity for project managers to adapt standards and methods in accordance with what seems to be the most appropriate for a certain project [7], [23]. The project uniqueness and the standards are paradoxically intertwined, which makes it even more troublesome for project managers, who are not allowed/expected to diverge from general best practices/standards, when it on the other hand is seriously recommended in the literature to do that if the project/product would benefit from it [6]–[8], [15], [23], [29]. Another finding with importance for the project outcome, i.e. the lack of specific and specialized core competences, is that the most frequently listed competence requirements (Table 6) indicated that the projects' core competence requirements were not acknowledged [30], [31] in the IS/IT project manager ads.

The ads. were for the most part solely providing general demands and descriptions and only rarely are there any details or more specific demands about sector, company or the project. General descriptions could however just as well be found in the BOKs, which opens up for the opportunity to simply refer to BOKs when it comes to general demands and qualifications (the white area in Fig. 1). Instead it would be more accurate to concentrate on listing specific information and demands that relate directly to the project core competence needs [30], [31] (the grey areas in Fig. 1).



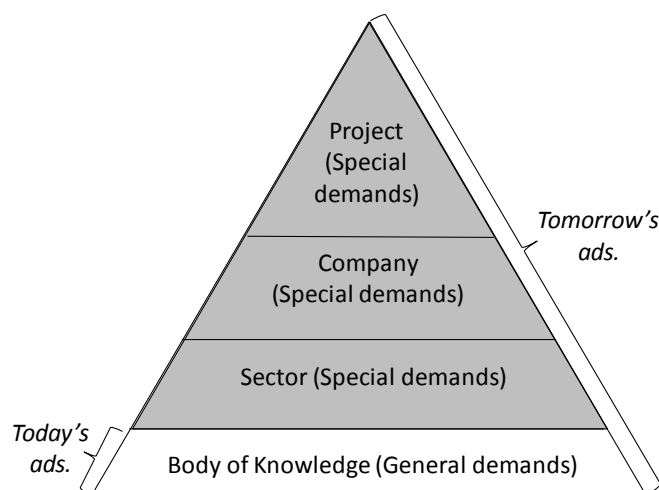


Fig. 1. What today's ads. contain and a suggestion for tomorrow's ads.

Even though standards sometimes are questioned since they are rarely updated in accordance with recent research findings, the “black boxing” [7, p. 446] of knowledge that lays in standardization, an understanding of the fact that general models do not necessarily (or rarely) fit all projects [15], [29], and also because best practices might be diluted when transferred between practices and generalizations [9] they still could have a place in order to express basic demands. Still, standards and also certifications could be applicable and helpful when it comes to providing general requirements, and it is the root of the matter that specific demands and requirements should be mentioned as well, simultaneously with references to standards. If the employers would focus more on the projects' scope and on formulating requirements accordingly to these, instead of describing almost solely generalizations this would most likely provide better opportunities for appointing *the right* project manager.

### 5.3 Limitations

This study is subject to limitations, which should be accounted for. The most important is probably that the data collections possibly could have been carried out more often, which could have provided more data and presumably even more valid findings. Besides, including ads. for other project managers than for IS/IT project managers could have broadened the research area and provided more data *per se*.

## 6. Conclusion

This concluding section focuses on providing answers to the research questions that were presented in the introduction part. Additionally, implications of findings are presented as well as suggestions for further studies on this subject.

### 6.1 Answer to the first research question

The first research question was: *How can the paradox of project standards' general applicability and projects' uniqueness be overcome in order to enhance recruitment of IS/IT project managers?*

The answer relates closely to Fig. 1. Today's way of advertising for project managers must change in order to better deal with the paradox of generic standards vs. project uniqueness. The analysis of the ads. showed that the requirements and the tasks were either described in a general way or not at all, which does not match the fact that projects are inherently unique, and therefore in need of specific competence and qualifications, which in turn should be mirrored in

the ads. Hence, recommendations for employers and recruiters are that they take a standpoint in general requirements on the basis of standards, and formulate the ads. in accordance with such guidelines and requirements as a basis (the white area, Fig. 1). These general requirements must be supplemented with further requirements that are unique to the specific industry, the specific company and the specific project (the grey areas, Fig. 1). It should be noted though that both the white area and the grey areas are needed for enhancement of future ads. Adherence to these recommendations could contribute to further opportunities to provide a clearer and more specific picture of requirements for an IS/IT project manager's job. Besides, it would probably be easier to focus on the supplementary and more critical information that is likely to satisfy the project uniqueness better if the general and basic demands are referred to via BOKs. Additionally, if the project specific demands are visible in the ads. the applicant IS/IT project managers could be more certain of what would actually be expected of them.

### 6.2 Answer to the second research question

The second research question was: *How can the ads. be formulated in order to facilitate recruitment of the right IS/IT project manager?*

When employers formulate ads. in a way that solely display tasks and other requirements at a general level this could on the one hand mean just about everything, and on the other hand it does not say anything in specific, even though the qualification requirements *per se* could be overloaded with vivid descriptions. A concluding suggestion for how the ads. could be formulated in a way that provides more accurate and useful information, i.e. reveal more about what the job will actually imply, is pictured in Fig. 1. General information may well be referred to via BOKs or by demanding project manager certifications. Further, the basic information (the white area in Fig. 1) should firstly be given via references to standards or by demanding certified project managers, and secondly this information should be complemented with specific demands and qualification criteria that are adapted to the needs of the sector, the company and the project. Hence, the information referring to the white area in Fig. 1 should in tomorrow's ads. solely be given by references to BOKs and/or project management certifications in order to focus on the complementary, grey areas when the ads. are formulated.

### 6.3 Theoretical implications

The theoretical implications are principally connected to tying basic BOK criteria to the job descriptions in the ads. as general qualification requirements, which in turn conveys a need to supplement the basic demands with more specific ones that are connected to the project's core product, i.e. involving a need to discern which the project's core competences are.

### 6.4 Practical implications

The practical implications are mostly about facilitating the recruitment of IS/IT project managers (but should be applicable for any project manager), and about enhancing the possibilities for appointing *the right* individual with more certainty. Employers/recruiters who realize the necessity of describing demands and qualification requirements that actually match a certain project's specific needs, i.e. those that would acknowledge the project's core product and competence needs, are more likely to find *the right* individual for the job. Additionally, it would be more likely that prospect project managers, who are qualified will be motivated to engage more in applying certain jobs when the ads. clearly express what qualifications are sought-after.

### 6.5 Suggestions for further research on this topic

These research findings and their conceivable explanations point out the importance of further studies of why the Swedish employers do not find it critical to be clearer and more detailed about what they expect of their future IS/IT project managers when creating the job ads. Collecting and analyzing opinions about the possibilities to relate to standards for basic project manager qualifications and about the need for specific details regarding qualifications

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connected to the actual product, project, sector and methods would be helpful for further theory building. Yet another question to look further into is whether a fully realized professionalization of project management could further facilitate a consistency of decisive personality traits, or at least strongly preferred, for individuals aiming at project management posts.

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### References

- [1] I. Avots, "Why does project management fail?," *California Management Review*, vol.12, no. 1, pp. 77–82, fall, 1969.
- [2] PMI, *A guide to the project management body of knowledge (PMBOK Guide)*, 5th ed. Atlanta, USA: PMI, Global Standard, 2013.
- [3] Prince2, *Managing successful projects with Prince 2*. London, England: The Stationery Office, 2007.
- [4] IPMA, *IPMA competence baseline*. Nijkerk, Netherlands: IPMA, 2006.
- [5] E.M. Rojas, "Identifying, recruiting, and retaining quality field supervisors and project managers in the electrical construction industry," *Journal of Management in Engineering*, vol. 29, no. 4, pp. 424-434, October, 2013.
- [6] L. Crawford and J. Pollack, "How generic are project management knowledge and practice?," *Project Management Journal*, vol. 38, no. 1, pp. 87-96, March, 2007.
- [7] D. Hodgson and S. Cicmil, "The politics of standards in modern management: making 'the project' a reality," *Journal of Management Studies*, vol. 44, no. 3, pp. 432-450, May, 2007.
- [8] D. Hodgson, S. Paton and S. Cicmil, "Great expectations and hard times: The paradoxical experience of the engineer as project manager," *International Journal of Project Management*, vol. 29, no. 4, pp. 371-382, 2011.
- [9] M. Hällgren, A. Nilsson and T. Blomquist, "Relevance lost! A critical review of project management standardization," *International Journal of Managing Projects in Business*, vol. 5, no. 3, pp. 457-485, 2012.
- [10] R. Müller and R. Turner, "The influence of project managers on project success criteria and project success by type of project," *European Management Journal*, vol. 25, no. 4, pp. 298-309, August, 2007.
- [11] A. K. Munns and B. F. Bjeirmi, "The role of project management in achieving project success," *International Journal of Project Management*, vol. 14, no. 2, pp. 81-87, 1996.
- [12] R. Holman (2015, 01 26). *Yin and Yang of successful IT project managers* [Online] Available: <https://www.linkedin.com/pulse/yin-yang-successful-project-managers-ross-holman>
- [13] L. Crawford, "Profiling the Competent Project Manager," in *Project Management Research at the Turn of the Millennium PMI Research Conference*, Paris, France, pp. 3-15, 2000.
- [14] L. Crawford, "Senior management perceptions of project management competence," *International Journal of Project Management*, vol. 23, no. 1, pp. 7-16, January, 2005.
- [15] D. Milosevic, L. Inman and A. Ozbay, "Impact of project management standardization on project effectiveness," *Engineering Management Journal*, vol. 13, no. 4, pp. 9-16, December, 2001.
- [16] K. Ahsan, M. Ho and S. Khan, "Recruiting project managers: A comparative analysis of competencies and recruitment signals from job advertisements," *Project Management Journal*, vol. 44, no. 5, pp. 36-54, October, 2013.

Why advertise the obvious? Learning outcomes from analyzing advertisements for recruitment of Swedish IS/IT project managers

- [17] The Standish Group (2014, 04 15). *Chaos report. Reprinted by Project Smart* [Online]. Available: <http://www.projectsart.co.uk/docs/chaos-report.pdf>
- [18] D. Defoe, (2014, 10 27). *An Essay upon projects* [Online]. Available: <http://www.gutenberg.org/ebooks/4087>
- [19] T. Blomquist and A. Söderholm, "How project management go carried away," in *Beyond project management – New perspectives on the temporary – permanent dilemma*, K. Sahlin-Andersson and A. Söderholm, Eds. Malmö, Sweden: Liber, 2002.
- [20] T. Blomquist and J. Thomas, "Project manager's perceptions of the motivation for, and benefits, of certification," in *IRNOP VI*, Turku, Finland. 2004.
- [21] K. Myrén (2014, 02 13). *Certifieringar har mognat [Certifications have matured]* [Online]. Available: <http://csjobb.idg.se/2.9741/1.513393/certifieringar-har-mognat>
- [22] K. Bredin and J. Söderlund, "Project managers and career models: An exploratory comparative study," *International Journal of Project Management*, vol. 31, no. 6, pp. 889-902, August, 2013.
- [23] D. Muzio, D. Hodgson, J. Faulconbridge, J. Beaverstock and S. Hall, "Towards corporate professionalization: The case of project management, management consultancy and executive search," *Current Sociology*, vol. 59, no. 4, pp. 443-464, June, 2011.
- [24] S. Paton, D. Hodgson and D. Muzio, "The price of corporate professionalization: analysing the corporate capture of professions in the UK," *New Technology, Work and Employment*, vol. 28, no. 3, pp. 227-240, November, 2013.
- [25] S. Lundqvist and L. Marcusson, "Advertisements for ICT project managers show diversity between Swedish employers' and project management associations' views of PM certifications," *Problems of management in the 21<sup>st</sup> Century*, vol. 9, no. 1, pp. 35-55, 2014.
- [26] P.W.G. Morris, L. Crawford, D. Hodgson, M.M. Shepherd and J. Thomas, "Exploring the role of formal bodies of knowledge in defining a profession – The case of project management," *International Journal of Project Management*, vol. 24, no. 8, pp. 710-721, November, 2006.
- [27] D. Hodgson, "Disciplining the professional: The case of project management," *Journal of Management Studies*, vol. 39, no. 6, pp. 803-821, September, 2002.
- [28] N. Brunsson, *Mechanisms of hope: Maintaining the dream of the rational organization*. Copenhagen, Denmark: Copenhagen Business School Press, 2006.
- [29] D. Milosevic and P. Patanakul, "Standardized project management may increase development projects success," *International Journal of Project Management*, vol. 23, no. 3, pp. 181-192, April, 2005.
- [30] L. Marcusson and S. Lundqvist, "Applying a core competence model on Swedish job advertisements for IT project managers," *International Journal of Information Technology Project Management*, vol. 6, no. 2, pp. 1-17, April-June, 2015.
- [31] S. Lundqvist and L. Marcusson, "Apply a project core view to promote project success," *Journal of Modern Project Management*, vol. 3, no. 1, pp. 100-109, 2015.
- [32] M. Chipulu, J. G. Neoh, U. Ojiako and T. Williams, "A multidimensional analysis of project manager competences," *IEEE Transactions on Engineering Management*, vol. 60, no. 3, pp. 506-517, August 2013.
- [33] R.E. Boyatzis, *The competent manager – a model for effective performance*. New York, USA: John Wiley & Sons Inc., 1982.
- [34] K. Krippendorff, *Content analysis: An introduction to its methodology*. London, England: SAGE Publications, 2004.
- [35] V. Holzmann and I. Spiegler, "Developing risk breakdown structure for information technology organizations," *International Journal of Project Management*, vol. 29, no. 5, pp. 537-554, July 2011.

Why advertise the obvious? Learning outcomes from analyzing advertisements for recruitment of Swedish IS/IT project managers

- [36] S. Kvale, *Den kvalitativa forskningsintervjun [The qualitative research interview]*. Lund, Sverige: Studentlitteratur, 2006.
- [37] P. O. Thång, *Vuxenlärares förhållningsätt till deltagarefarenheter [Adult educators' attitudes to the participants' experiences]*. Gothenburg, Sweden: ACTA, 1984.
- [38] E. Gummesson, *Qualitative methods in management research*. Thousand Oaks, CA: Sage Publications, 2001.
- [39] P. Burnard, "A method of analyzing interview transcripts in qualitative research," *Nurse Education Today*, vol. 11, no. 6, pp. 461-466, 1991.
- [40] P. Burnard, "Teaching the analysis of textual data: an experiential approach," *Nurse Education Today*, vol. 16, no. 4, pp. 278-281, 1996.



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