Masculinity in project-based information systems service organizations

Gyeung-Min Kim*   Namjae Cho**
Ewha Womans University   Hanyang University

Abstract

In Korea, known as one of the internationally recognized ICT (Information and Communication Technology) powerhouses, female workers are largely under-represented especially within IT-service companies. Workload pressure and disruption of work-family balance are considered as the major reason for such female under-representation. However how the IT industry's project-based work practice in Korea influences the female under-representation has not been explored systematically in previous research. The objective of this study is to investigate (1) how the IT industry's project-based work practice influences the working life of female professionals in Korea and (2) how IT industry creates opportunities and constraints that influence the career development of female professionals. The research questions are explored using narrative analysis of female managers from large companies that represent Korean information systems service industry.

Keywords: masculinity, IS service, IT industry, project-based organization

1. Introduction

Korea is known to be one of the supreme ICT(Information and Communication Technology) powerhouses around the globe. Despite the increased size of IS (Information Systems) industry and overall shortage of highly qualified IS professionals, women are largely under-represented in the IS workforce, especially in the middle to upper levels of organizational hierarchy. Workload pressure and disruptive work-family balance are considered as contributing to female under-representation. While this has been a part of a general discussion concerning the IS gender gap in Korea, how the IS industry's project-based work practice influences the female under-representation problem has not been studied systematically.

Project-based contract is a typical form of work-model of IS service organizations, whose major business is to provide the development and management services related to IS to customer organizations. Such practice is supported by the conception that each IS project is unique and complex requiring a unique sequence of actions is mandated for the management of each project. The typical challenge of an IS project is to achieve project goals while managing the project scope and allocating resources in an efficient manner. According to Lindgren and Packendorff (2006), work lives of IS project participants are characterized as high-level of time-pressure, disruptive work-family balance, and repeated negotiations concerning scope, tasks, and responsibilities.

  * gkim@ewha.ac.kr
 ** Corresponding author: njcho@hanyang.ac.kr

Organizational practice is not, however, an isolated outcome of an organization nor an industry. It is a socially constructed artifact emerged from a complex interaction between the organization and outer entities situated in the whole economy and the society. Furthermore, the environmental differences among countries which come from disparities in cultures, political, economic and legal systems have impacts on business practices (Hills, 2006). Although recent decades observed the increase in women participation in social, economic, and political dimensions of activities in Korea, the role of women in executive and administration activities is still very limited. This is also true in IS industry, which used to be considered as a new genre of business casting more opportunities to female workers. The situation is even considered slightly worse in big IS service companies.

We believe that the increased levels of consciousness in political and social justice as well as the sense of equal rights of gender have contributed to the increase of women participation. However, we also admit that the traditional gender role identity -- man in public affairs and woman in family -- still has an important impact on the modern life of women in Korea. We recognize the importance of the effect of history, especially a long-lasted strong history, on social and cultural developments. For example, the Yi Dynasty (1392-1910), which lasted over 5 hundred years under a strong Confucian ideology, is considered reinforced patrimonial value that emphasized the family-caring role of women as the basis of smooth governance. The Confucian ethics are also characterized as an emphasis on royalty to a hierarchical structure of an authority. Rules of the conduct including obedience and respectful behavior to superior in socially defined inequality relationships such as male-female, parent-children, old-young, and teacher-student are considered to have an impact on women's life in Korea.

The objective of this study is to investigate (1) how the IS service industry's project-based work practice in Korea influences the structural formation of masculinity/femininity in work lives in Korea; and (2) how the intrinsic nature of the IS service business in conjunction with broader industrial and social context creates opportunities and constraints to careers of female professionals in Korea. The research questions are explored from a gender construction perspective using narrative analysis of managers in multiple organizations in Korea.

A gender perspective reflected in language, gesture, and symbolic social signs is acknowledged by others (Tyler and Cohen, 2008) and is both socially and culturally shared, and historically constituted. In this vein, we also maintain the contextual hierarchy perspective as depicted in Figure 1 as we believe understanding the contextual effects is crucial in understanding the emergence of business practice. Task characteristics in workplaces are affected by surrounding organizational culture and practice, which cannot be independent from industrial and market context including demanding customer organizations work practices. The industrial practice again should also be influenced by the social context, which, in turn, affected by the historical context.

In the remainder of this paper, previous research regarding the project-based work and gender construction is reviewed. Secondly, the research methodology is presented. A set of relevant bodies of literature allows this study to identify specific narratives that hold significant potential for understanding gender construction in the project-based IS service industry in Korea. Finally, different narratives linked to gender construction in project-based work are extracted by means of thematic analysis. Thematic analysis is a combination of the deductive and inductive approaches in which theoretical themes are formed deductively as a framework to extract specific narratives inductively (Boje, 2001).

Figure 1. Contextual hierarchy and business practice
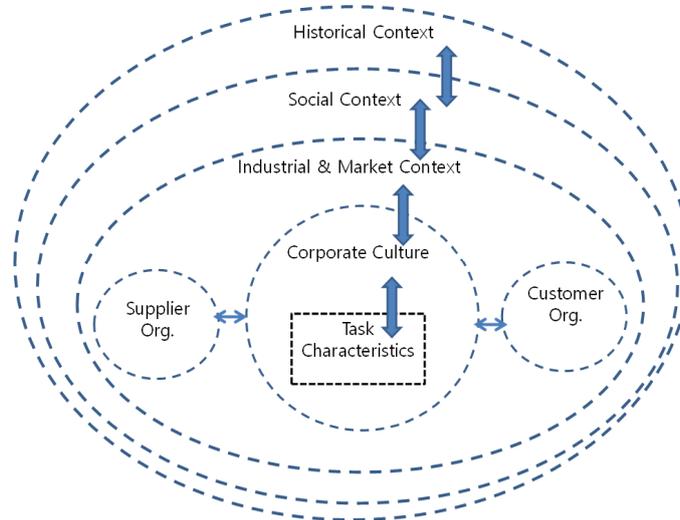
2. Theoretical framework

2.1 Project as a post-bureaucratic work organization

A project is defined in terms of (1) project goals and requirements, (2) activities to be performed in each phase of the project, (3) deliverables to be produced by the end of each phase, (4) resources and time requirements in each phase, and (5) responsibilities of project members (Beise, 2004; Dvir et al., 2003; Valacich and DeLuca, 2006). By drawing its members across organizational boundaries both internally and externally, a project intends to deliver one-off assignments with a firm control over time, resources, and quality. Based on task assignments and deadlines, the project manager monitors and controls the progress of project members throughout the project life cycle.

Projects emerged as 'post-bureaucratic' work organization methods with the aim of being adaptive to the business environment where technology is changing rapidly, market boundaries are blurred, successful business models are unclear, and market players are ambiguous and shifting (Teece et al., 1997; Eisenhardt and Martin, 2000; Sirmon et al., 2007). While bureaucracy is characterized by rigidity, stability, bureaucratic regulations, and inefficiency, a project emphasizes permeable organizational boundaries, flexible work roles, autonomous self-regulating individuals, and efficient use of resources (du Gay and Salaman, 1992; Hodgson 2004). Project management techniques and tools permit a tight control over project scope, responsibilities, resources, costs, schedules, quality and risk. In this regard, projects are often viewed as a post-bureaucratic control strategy that is essential for economic success in the increasingly uncertain and complex modern business world (Hodgson, 2004). Pursuing project goals and efficiency simultaneously, projects are often considered as challenging in contrast to ordinary work practices (Pinto, 1996; Gill, 2002).

2.2 Project management as a control mechanism

Project management is concerned with managing schedule and progress, materials, labor and costs in order to complete a project in an orderly manner to meet objectives within time and budget. At the planning stage, the entire project is divided into phases, phases into activities, and activities into specific tasks. The definitions of deliverables and tasks, and the sequence to be followed are reflected in the WBS (Work Breakdown Structure) of the project. Each task in WBS is graphically represented in a Gantt chart as a horizontal bar whose length is proportional to the duration of the work for completion. The Gantt chart shows when an activity should begin and end. With the help of project management software, the duration can be scheduled and represented in minutes, hours, days, weeks, and months. The tasks can also be represented in a PERT chart. In a PERT chart, the sequence of task performance is graphically coded by connecting a task with its predecessor and successor tasks. Based on the project plan of a task assigned to each individual, the project manager needs to monitor the progress of the overall project. To facilitate monitoring of the progress, communication procedures regarding when and how team members should report the status of their tasks are outlined. Progress standards and procedures for task acceptance are also pre-determined (Valacich et al., 2009).

Project management tools and techniques such as WBS, Gantt chart and PERT enhance accountability, and thus increase control over project members throughout the project life cycle. To keep the project on schedule and assure the quality of project deliverables, such means as reporting and inspection are used to monitor, assess and control project progress and employee performance against pre-designed standards (Hodgson, 2004). If the project is ahead of schedule, the project manager adjusts resources, activities and budgets accordingly. Measuring the time and effort associated with each activity helps the project manager improve the accuracy of estimations on the whole project. Gantt chart shows the progress against a plan and PERT charts help managers understand the ramifications of delays in an activity. Progress monitoring enables and mandates each team leader to evaluate and appraise each team member. Occasionally changes in work assignments request changes in personnel, and feedback is provided to the supervisor of team members. Essentially project management software focuses on close monitoring and control of human resources, time, and costs (Metcalfe, 1997).

Through deadlines, procedures, standards, and inspection, project management is regarded as a bureaucratic system of control. Hodgson (2004) asserts that "project management can be seen as an essentially bureaucratic system of control, based on the principles of visibility, predictability and accountability. Project management is also operated through the adherence to the formalized procedure and the continuous reporting mechanism. At the same time, however, project management draws upon the rhetoric of empowerment, autonomy and self-reliance central to post-bureaucratic organizational discourse (p. 88)." Project management tools like Microsoft Project allow a project manager(PM) to trace team members' status in comparison to the project plan and also allow the manager to see if certain team member is available to talk or interact with IM (instant message).

Instrumentality that involves an effective achievement of ends through efficient application of means is repressive for others (Knights and Kerfoot, 2004). The instrumentality is considered as pre-condition and consequence of masculine preoccupation with success (Kerfoot and Knights, 1996). Instrumentality can be amoral since it implies the emphasis on goals over ethical means.

2.3 Institutionalized gender orientation

Acker (1992) asserts that "the law, politics, religion, the academy, the state, and the economy, are institutions historically developed by men, currently dominated by men, and symbolically interpreted from the standpoint of men in leading positions, both in the present and historically (p. 567)."

Higher status, wages and power tend to be occupied by men. The majority of managers are men. Their behaviors serve as behavioral exemplar for everyone in an organization (Acker, 1992; Gherardi, 1994; Martin, 2001). Since success requires devotion to work, winning the competition and controlling subordinates, commitment, competition, and conquest. Control of senior managers defines successful performances in business. Producing high performances is considered as ideal (Kerfoot and Knights, 1993; Knights and Tullberg, 2011) and control is performed mostly by men. Acquiring a managerial status, sustaining male bonding, displaying authoritative expertise, and thinking rationally and taking risks are described as masculine acts (Knights and Kerfoot, 2004; Tyler and Cohen, 2008; Knights and Tullberg, 2011). If women are to maintain their leadership positions within such hierarchy, they are also naturally expected to perform these masculine acts (Pullen and Knights, 2007; Wajcman, 1998; Knights and Tullberg, 2011).

Butler (1988) views gender acts in social setting, either masculine or feminine, as strategies compelled by one's belief in its necessity and naturalness. The practices which enforce the masculine prescriptive as a kind of reality that employees should admit, are termed as politics of gender acts (Butler, 1988). The gender act mediated by language, gesture, and all types of symbolic social signs is based on the desire to project a compelling identity acknowledged by others (Tyler and Cohen, 2008). The act is not within the control of an individual. It is both socially and culturally shared, and historically constituted. This perspective is in the consistent line with the view of this research as depicted earlier in Figure 1. Gender acts are considered to be in accordance with an ontological, epistemic schema that positions masculinity over femininity in hierarchical orderings (Butler, 1988; Borgerson and Rehn, 2004).

Historically in many cultures and societies, men and masculinity occupy the dominant position over women and femininity. Thus, the hierarchical ordering of masculinity over femininity is considered to be historically constructed and socially and culturally shared. Acker (1992) posited that gender stratification is present "in the processes, practices, images and ideologies, and distributions of power in the organization (p. 567)." Therefore, gender stratification is deeply institutionalized and difficult to disrupt (Acker, 1992; Martin, 2001). Women's traditional child-bearing and family-caring duty is considered prohibiting long hours of work and devotion to work, commitment, competition, and conquest, which conforms to masculine acts. For a career success, female managers are expected to behave as a 'bearded mama' acting like a man (Gore, 1993).

2.4 Performance orientation and IS service industry

The performance orientation of modern business organizations focusing on rapid return, changes in stock prices, and quarterly financial review is criticized as dangerous short-term management practice (Roberts, 2014). The performance myopia which emphasizes only capital efficiency and growth is considered endangering 'real' or long-term productivity, increasing conflict between management and labor, and triggering high level of social costs (Roberts, 2014: pp. 306-308). The performance orientation is in line with typical masculine business practices. Such masculine perspective tends to ignore the importance of caring behavior, spending time playing with minorities and the isolated as these activities are considered as non-economic, inefficient, and resource- wasting managerial behavior.

The practice of performance orientation has a direct effect on IS service industry. Companies recently have started to treat IS services as a 'commodity' or 'utility' meaning reduced differentiability as perceived by customer organizations. This trend reflects that companies have shifted away from fully owning, controlling, and operating IS assets at the local level. The marginal value of differentiation and customization of information systems led the game of competition in IS service industry into the race for price reduction. In addition, the view of top management on 'IS as a commodity' together with the experience of global financial crisis led to budget cuts in the IS sector (McKeen et al., 2009). This implies that the growth of IS service companies and IS project

sales should be achieved in spite of tighter budgets and increased demanding pressure from client companies. As a result, the work lives of the project participants have become harsher than before. From a gender perspective, workload pressure in the IS sector is considered to increase turnover of female professionals (Pascale and Carayon, 2006).

The representative nature of the new economy is characterized as intelligent economy, digital economy, and the 4th industrial revolution (Schwab et al., 2016). The new economy calls for heightened mobilization of creativity, flexible thinking, and right-brained imagination. This trend highlights the importance of feministic caring behavior. Careful and close caring of minor opinions, discovering the potential of isolated ideas, and incubating pre-matured thought are considered important for the design of disruptive new business models and breakthrough new products (Ross, 2016). Non-rational right-brained imagination and sensitivity to emotional subtleties are considered to contribute to long-term sustainability of an organization as well as the whole society (Pink, 2005).

3. Research approach

The empirical part of this study was performed through interviewing managers in multiple organizations within IS service sector. We first identified initial themes to be used in the interview through literature review. We tried to seek stories in three dimensions: views on female professionals in each organization, views on work as related to family life, and views on organizational policy. The interviews were arranged with five individuals (they are named as Sue, Suzan, Sam, Mike, Tom for research purpose) who have extensive experience managing employees and projects in IS service organizations. The interviews were tape-recorded and transcribed. Based on the transcribed protocol, we extracted narratives related to masculinities in project-based IS work.

Four out of the five managers were from IS service organizations which are subsidiaries of large conglomerates. One manager, Sue, was from D corporation, which used to be a subsidiary of a large conglomerate but later has become an independent company. By arranging interviewees from different organizations, we believed to extract more generalized findings than narratives from managers in one organization. For a further objectivity, female manager's views as well as male managers' are taken into account, as there is a possibility that male managers might draw different interpretations than women from a similar situation. Collectively, their narratives would reveal masculinity reality of the Korean IS service companies.

Further *Tamara* is used as a metaphor to explore the multiplicity of collective storytelling processes. *Tamara* is a play based on a true story that originated from the diary of Aelis Mazoyer. In the play *Tamara*, a dozen characters (butlers, maid, chauffer etc.) unfold their stories. The audience has to choose which character to follow (Boje, 1995). In this metaphor, the characters and the audience are co-constructors of each story. Emphasized are the existence of multiple story interpretations. Just as the audiences of Tamara develop their own interpretations of what is happening in the story, organizational participants (managers in this study) are considered to have their own interpretations of what is happening in the organization. This reflects multiple reality of organizational life. Boje(1995) used *Tamara* metaphor to study formal as well as darker sides of Disney legends. *Tamara* metaphor emphasizes the importance of plurivocal (multiple story interpretations) theory of competing organizational discourses. We use *Tamara* metaphor to capture different aspects of organizational masculinity and develop images of the whole picture.

4. Key stories from Korean IS service industry

In this section, we will present part of the interview protocols, which we found useful and meaningful to understand the overall story of masculinity in IS service organizations in Korea. As mentioned earlier, the fragments of the story were from discourses of the five interviewees, but could be interwoven to complete a whole picture of the masculinity practices in reality.

4.1. Female capability and ambition

Sue, a female executive of D Corporation, appreciated her mother in-law's dedication for raising her children as one key contribution to her success. According to her, at the early stage of recruitment, the number of female employees were not so small. In addition, at the beginning of their career female professionals were recognized as ones who have a good potential to do a good job by their supervisors:

"When we hire new employees fresh out of college, 30-40% of the employees are female. Female professionals tend to be considered smarter than men." (Sue, D Corporation)

Sam, human resource manager of S Corporation, also views that female professionals enter their respective organization with high capability and ambition. However, their ambition seems to be maintained only until their marital status remain as single:

"At the beginning of their career, female professionals have high ambition and try hard not to lose the competition with men. While they are single, they really want to be successful and to become a good manager. They eagerly develop a CDP (Career Development Plan)." (Sam, S Corporation)

4.2. Problems in career path: male bonding, long working hours, and industry culture

Beyond the stories around early-stage ambitions in the career of female professionals, there comes an element of 'war stories'. Several interviewees referred to male bonding and long work-hours as industry conditions very difficult to endure and hurdles they cannot do much about.

Tom, human resource manager of C Corporation, says that to remain on a successful career path IS service industry, an individual needs to stay in project teams. IS project teams, however, demand them to frequently work late at night, adhere to the group culture of the team, and have a close relationship with clients. Facing such demanding atmosphere, female professionals tend to prefer back-office works such as writing technical manuals and quality control:

"The developers often work at client sites and overnight. I think the development task is the right job for women. However, once clients are involved, things get tougher. Moreover, the development project is normally large scale and involves a highly coordinated team of workers. You cannot leave the work even though you are done with your task. The team members need to stay together for the test of overall system and for the parallel tests. It's such a huge 'group culture'. That is why many female workers move to an operational supporting part or writing technical manuals and quality control. Those tasks can be done inside the head office and is related to supporting roles."(Tom, C Corporation)

Similarly, Mike, human resource manager of a DB Company, says that to be on a successful career track, an individual needs to be involved in project teams and work late at night. He mentions that female professionals prefer operational tasks which can be performed in the office:

"Female workers do not prefer the development tasks. It's because often they have to work over night.

The female workers want to move to operations after spending sometime in the development side. Most of the female workers are in the operations side. In the case of consulting, the job often requires overnight work with the team members or with clients." (Mike, DB Company)

Sue, a female manager of D Corporation, says that to stay on a successful career path one needs to be project manager or sales manager. However such role request managers to stay late at night and often have dinner together with clients, which normally involve drinking sessions, to keep a close relationship with clients. The female professionals do not like that practices though:

"Once you reach a certain point of your career, the career path available becomes either PM or sales. There used to be female professionals in the sales department, but now they all left. If you made a choice to become a PM, you are expected to keep a close relationship with clients and have lots of drinking sessions with them. Female professionals can't handle this. Thus, their job assignments are limited to certain areas. There are so many problems. Too much… Women can't sustain for a long period." (Sue, D Corporation);

"The people who place an order in the client firm, are in their forties or over age of 35. They don't want a female PM counterpart." (Sue, D Corporation)

Sue further refers to male bonding culture and practices in IS service industry, which cannot be changed in the short run and also deeply embedded into the practice of clients. The tight control with regard to time and budget has gotten worse due to recent economic situation:

"When public service organizations are looking for a company to perform public IS projects, they tend to expect the project be completed within 80% of the original budget in order to minimize expenses. In the case of IS service companies which are subsidies of large conglomerates, companies could generate sufficient revenue to cover minimal total costs from providing similar IS services to family companies. Such companies can even bid at 60% of the formally announced budget limits listed in RFPs (request for proposals). This practice has been going on for more than 10 years. This situation casts a high level of difficulties to IS service companies that are not subsidies of conglomerates like mine." (Sue, D Corporation)

4.3. Problems in career path: marriage and child care

To be on a right track toward a successful career in IS service organizations, professionals are expected to be involved in project teams and client contacts. Such role tends to involve working late at night and adhering to the group culture of IS service teams posited in the related industry.

Susan, a female executive of L Corporation, says that the high level of ambition and potential of female professionals is well recognized but seems to fade away once they have children:

"Female professionals are very capable and show good performance in the company. However, once they reach in a certain point of their career (i.e. the director of a department), they usually quit for child caring. We try to provide several motivation to keep them, but such measures are not yet very helpful in persuading them." (Suzan, L Corporation)

Sue, a female executive of D Corporation, also says that pregnancy and work-family balance concerns make female professionals quit the job or transfer to back-office tasks which are not related to working late at night:

"After getting married, female professionals come and ask me to send them to positions working in the

office rather than customer sites or R&D Center. However, those positions are limited. They wait for an opening. After a while, they came back to me, hugging and bursting into tears saying I am leaving.'' (Sue, D Corporation)

According to Mike, human resource manager of a DB Company, not being able to participate in the development or consulting teams due to pregnancy and/or work-family balance, makes the female professional give up the success career:

"According to the labor standard law, pregnant women can't work overnight even though they voluntarily want to work overnight. Most Korean women would like to have a baby after marriage. Since the development or consulting function cannot fully avoid working late night, female professionals tend to request to change their roles not to place an adverse effect on the company. I hardly see pregnant women in the development unit." (Mike, DB Company)

Sam, human resource manager of S Corporation also shares a similar view:

"When they are single, they want to be successful and to become a manager. They develop a CDP. However, after getting married and becoming a mother, they lose all their fighting strength and prefer tasks conforming 9 to 6 work hours." (Sam, S Corporation)

4.4. Organizational gender policy and culture

As companies recognize the importance of female professionals, various programs tried to introduce institutional support to female workers so that they keep juggling different roles as wives and mothers as well as professional employees. The supporting mechanisms include flexible work options, telecommuting, and day care. However, despite such policies in place, according to Suzan, a female executive of L Corporation, only a few female professionals actually utilize the women support programs due to their limited practical value :

"The family-friendly policy is not really helpful in improving women's job satisfaction. Female professionals do not appreciate such programs much. They simply recognize that 'my company has a caring system'. There is a nursery center at the headquarter. However, if you work at Gangnam district (which is far and across the river from the headquarter), it is practically impossible for you to go to the headquarter to drop and pick up your child." (Suzan, L Corporation)

Tom, human resource manager of C Corporation, mentions that only a few women professionals think the institutionalized women support programs are helpful. According to Tom, there is a significant gap between the policy arrangements and the aspirations of female professionals in reality. The culture of the firm must be perceived by the female employees to like staying:

"Companies have their own family-friendly policies for female workforce. However, I don't think that's the main issue. Such policies are just complementary measures to irrational aspects of the system. The crucial issues to make female workers to stay in the company are the women-friendly culture and work style of the companies. Basically, the culture of a firm must be something good so that all employees feel like staying regardless of the gender. I think the fact that company having many policies is not in the same line with the notion of being a good company." (Tom, C Corporation)

Mike, a manager of a DB Company, states that despite all the programs to help women workers, child caring still remain as the main reason for female professionals to leave the work:

"Nevertheless, most female workers quit their job for caring children. As a matter of fact, running a nursery center is costly for the company. However, analysis of factors that lead female professionals to resign shows that the most important factor is childcare." (Mike, DB Company)

5. Integrative formation and interpretation of the narratives

In this section, we tried to integrate the fragmented bits of stories to grasp the diverse dimensions of the reality. The integration will help reveal the big picture of masculinity practices prevalent in IS service industry in Korea.

This study finds that female professionals in IS service industry begin their career in companies with well recognized capability and high level of ambition. They want to be successful in their career and participate in CDP to become a good manager. However this ambition is maintained only as long as they are unmarried.

Individual professionals need to participate in project teams to accomplish a successful career track in the IS service industry. The problem begins as IS development projects often require working late at night and adhering to the group culture as a member of project team in IS service industry. All project members of a team are expected to remain at the site when integration and tests are required in the course of system development.

Moreover, to be on a successful career track, after certain level of experiences individual professionals need to take the role of a project manager or a sales and consulting manager. Project managers or sales or consulting managers cannot avoid frequent working late at night whenever needed and may have to participate in dinner and drinking sessions to maintain an intimate relationship with clients. As female professionals do not like to lead such life style, event client managers do not want to have female project or sales managers. Several interviewees in this study perceive such male bonding and the industry-wide long work-hours as hurdles they cannot easily overcome. This masculine practices and atmosphere make female professionals refrain from maintaining management career in the IS service industry.

For this reason, once they get married and have children, female professionals quickly lose all their fighting spirit. Pregnancy and concerns on work-family balance prevent female professionals from joining project development or consulting teams. So female professionals tend to quit the job or try to transfer to the job, tasks of which allow '9 to 6' work hours such as the technical writing and quality control tasks, which are regarded as feminine tasks. Not being able to be a participate in consulting or development teams due to pregnancy and concerns on work-family balance makes the female professionals not suitable to become a successful senior manager. Managers in the research consistently viewed that masculine organizational environments such as long hours and work-family balance problem lead female professionals to be excluded from performing to their highest potential.

The masculine characteristics of IS service industry gets worse for another two reasons. One is in the economic dimension and the other is in the social and historic dimension.

In Korea, many public IS projects have been implemented in order to provide a variety of public services based on the world-class nationwide digital infrastructure. Due to a couple of economic downturn since 1997, a national IS evaluation system was adopted to maximize the performance of public IS investment. Public organizations tend to seek IS service providers that can complete the project within 80% of the listed original budget to save costs. This practice has been considered as a reality of IS service industry for more than 10 years. As customers want to solve their development requirements quickly and at a lowered budget, most project teams are given unrealistically short project duration and tight competition.

Secondly, in Korean social context, the Confucian ethics are still prevalent and have a profound impact on

the style of modern life of women. Confucius tradition clearly separates the roles of male and female throughout their life. Men are expected to participate in public affairs and women are expected to focus on domestic affairs in the family. In addition to that, Confucius culture sharply separates public concerns from private needs. This tradition makes female professional refrain from publicly speaking out, in their company, the request for help with family caring, child caring, and balancing work and life.

Many firms recognize the importance of women professionals in their organizations. Various programs have been institutionalized to support women so that they can maintain professional career while performing the roles as wives and mothers. These arrangements include flexible work options, telecommuting, and day care. However, even such institutionalized policies are not very helpful and only a few female workers utilize those programs. The reason is the significant gap between the institutional arrangements and the aspiration of female professionals in practice. Further research should be done to identify reasons why the rhetoric of policy do not become a realistic solution. And an increased level of commitment in the process, culture, and acceptable and effective work practice will need to be adopted. A successful adoption of such effective institutional arrangements is believed to have a positive long-term potential.

The overall structure of hierarchical context in relation to the masculinity of Korean IS service can be summarized as in Figure 2.

Figure 2. Contextual structure of Korean IT service industry
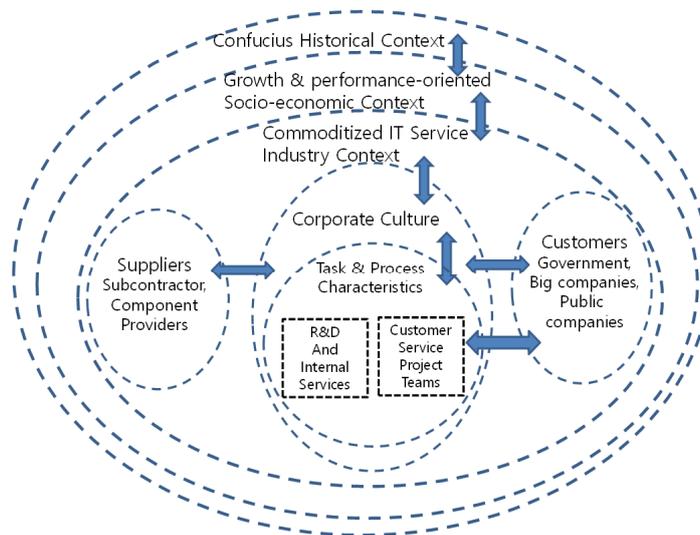
We could draw some insightful interpretation from the stories found from the set of discourses we collected from interviewees. The interpretations can be summarized as a list of axioms to be explored and tested in future research. Some of these axioms are inferred from comparing the stories and also from understandings on organizational research. The interpretive axioms in the form of research propositions are as follows.

1) At the outset of organizational life, attitude on management career is identical between men and women professionals in IS service industry.
2) For women professionals, several business practices of IS project service including working overtime and staying last as a project team member are more burdensome than men.

3) Responsibility to develop and maintain an intimate relationship with clients involves informal inter-actions including dinner sessions.

4) Dinner interactions with team members and clients, which frequently include drinking sessions, become very difficult to go through for married female professionals than for male or unmarried workers.

5) Clients with more traditional masculine culture have more masculine influence onto IS service teams than less clients with less masculine culture.

6) Some organizations have more masculine culture than others. Organizations big in size are more masculine than small ones, manufacturing business organizations are more masculine than service or culture business, traditional manufacturing organizations than new, high-tech organizations, public and utility organizations than private and consumer goods producers, government and military organizations than private organizations, etc.

7) IS service teams in big IS service companies dealing frequently with massive projects have to interact with clients with more masculine culture (e.g. big, manufacturing, public, government, military, or utility organizations) than IS service companies small in size.

8) Consequently big IS service companies are more masculine than small ones.

9) Within a same IS company, teams dealing with clients, e.g. boundary spanning units (Thompson, 1967) have more work practice than other teams, e.g. R&D or international operations.

10) Organizational policy to support female professionals' working life to balance work and life can be more effective by considering the industrial and social context.

6. Conclusion and discussion

The required competency of managers is in accordance with the perception of how an organization must work in order to be successful. This necessitates employees wishing to be managers to develop particular attributes required to perform primary activities of management. In this sense, the required competency of a manager is constructed through a material-cultural process of formation and transformation (du Gay et al., 1996). Organizational practices such as induction, training, and promotion are intentionally crafted to influence the processes of constructing managerial competency (Alvesson and Willmott, 2002). These practices are developed in ways that have implications for shaping and directing management identity. This is called identity regulation that is recognized to be a significant organizational control (Alvesson and Willmott, 2002). The politics of identity such as membership of a work group or team work as regulations within an organization (Barker, 1999).

If you demonstrate that you are a capable project leader (i.e. being able to deliver a project satisfactorily with a tight budget), you will be assigned better projects next time. A pursuit of power and control could lead to neglecting the consequences of such behavior for female professionals. Career anchor theory suggests that one of the career anchors by which an individual is attracted to a particular occupation is aspiration to have status derived from working at a prestigious organization (DeLong, 1982) in addition to self-perceived talents, values, needs, abilities, attitudes and motives (Schein, 1990; Pless and Maak, 2004).

According to Knight and Kerfoot (2004), masculine discourses are repressive for the self and others. Men routinely mobilize masculinity at work without consciousness and conflate masculinity and work dynamics. Women experience masculinity mobilization as harmful especially when conflated with work. Martin (2001) posits that "men mobilize masculinities at work in ways that with no harm intended, nevertheless frequently are harmful to women (p. 590)."

This study found that masculinity discourses around Korean IS service industry -- tight budget, more control, long work hours, and a deviation from the career path -- are continuously repeated and reproduced. In this situation the consequence of project-based IS work for gender stratification would become worse. The nature of the Korean IS industry and industrial competition continuously make maintaining a close relationship with clients vital for sales negotiations and success. Masculinity is in consistency with the current condition of both Korean IS service industry as a whole and also an individual IS business. Each time new project is launched, this practice implies continuous masculinization of the work lives of employees. A vicious cycle of tight budget, more control, long work hours, emphasis on intimate relationships with clients, and female deviation from desired career path can be continuously repeated.

In the case of Korea, several aspects of the masculine practice are socially and historically deeply rooted. Historically Korea has gone through a widespread Confucius period for 600 years. Confucius philosophy and practice has become part of every social and individual life. According to Confucius tradition, men are expected to participate formal administrative position and women are expected to limit their role to activities to take care of family and children. Further, private and personal issues are supposed to be sharply separated from public organizational issues. According to Acker (1990), work is a phenomenon of social contextualization. Collinson and Hearn (2005) extend this perspective to propose that organizations are versatile and historical in nature. In this vein we interpret that the Confucius tradition of Korean society and the consequent cultural codes still affect several aspects of modern organizational life. Although today the business practice is going through a transition in modern enterprises in Korea, women's cry for institutional support for child care is easily ignored or underestimated.

Instrumentality involves an effective achievement of ends through efficient application of means. This instrumentality is considered as a condition and consequence of socially and historically institutionalized masculine preoccupation (Kerfoot and Knights, 1996; Knights and Kerfoot, 2004). Instrumentality can be amoral since such institutional arrangement can potentially be deviated from ethical means to achieve the goals. Social and organization policy arrangements can formally be placed in order to overcome such limitation. However, as observed from this research, superficial arrangements such as flexible work options, telecommuting, and day care center did not work as effectively as intended. Considering that the problems of gender in organizations are related to "how people covey meaning, respond to gender expectations, and respond to gender identity in the workplace (Yang, 2012)," a more careful scrutiny is necessary in the design of institutional policy to make such arrangement work effectively.

The characteristics of femininity are friendliness, sentimentality, and tenderness and typically associated with weakness, while masculine characteristics are associated with being authoritative, rationality, toughness, strength, performance-driven management style, hegemonic identity, and emphasis on personal performance (Yang, 2012). Considering that the representative nature of the new economy is characterized by intelligent economy, creative innovation, flexible thinking, and right-brained imagination, feministic management practices such as close caring of minor opinions, isolated ideas, and pre-matured thought have a good potential to improve organization capabilities, work life, and active participation of women professionals (Ross, 2016) as well as the destiny of the whole society (Pink, 2005).

Although this study does not reflect the views of all managers in the related industries and draw inferences only from a very limited number of managers, the managers quoted here offer a deep insight into masculinities in IS service industry. Future research can extend our findings to further explore how gender institution in the Korean IS service industry mobilize masculinity and shapes women's interpretations and experiences of behaviors. A systematic understandings can be a base of improved gender policy as well as organizational capability.

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