



**Assessing the status of project management within a city hall
of a European capital with regards to maturity and knowledge
management**

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Assessing the status of project management within a city hall of a European capital with regards to maturity and knowledge management

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Abstract

We live in times of big changes. The credit-crunch has affected businesses and organisations all over the world and Iceland particularly, its consequences being layoffs, cutbacks in projects due to lack of funding amongst other things. The municipality of Reykjavik is no exception to this; it is one of the largest workplaces in Iceland with operations that are both diverse and complex. Employees are well educated specialists and many have studied management of some sort. No project management office is in place, and therefore there is no standardized set of practices and procedures regarding the preparation and execution of projects, nor a centralized documentation of projects completed (or failed) within the municipality. The HRS (human resource system) does not list the abilities and education of its employees and no formal knowledge management is practiced. The level of project management maturity is uncertain and this paper attempts to give an overview of the maturity level of the municipality by fitting the PM practices to the project management maturity model (PMMM). Finally a suggestion is made on how project management practices and knowledge management might be strengthened in order to increase support and cooperation between offices and departments, enhance the level of project management consciousness and skills and - hopefully - improve the efficiency of municipal organisations.

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Keywords: project management, project maturity, municipality, knowledge management

Please tick (☒) as appropriate:

	S1	Project Management Standards & Integration
	S2	Managing Programmes & Project Portfolios
	S3	Green project management, social and corporate responsibility, incorporating the Environment, Sustainability & Community Engagement
	S4	Project Management Governance, Benchmarking and Business Process Optimization
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	S6	Client & Stakeholder Identification of Needs, Risk Reduction & Management of Expectations
	S7	Time & Schedule Management of Projects.
	S8	Project Costs & Financial Issues, Return on Investment & Benefits Realization.
	S9	Quality in Project Management, Quality Delivery of Projects.
	S10	Project Management Competencies, Training & Professional Development, Soft Skills, Reward, Empowerment and Ethics.
x	S11	Project Management Maturity and Organizational Development.
	S12	Project Management of Large Projects, Project Management Complexity, Cross-border Cooperation, Cultural Aspects & Diversity Issues.

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1 Introduction

Project management is becoming more and more integrated into organisation of all kind all over the world. About one third of the economic activity takes place in projects and the percentage is growing (Bredillet, et al., 2007). We all work on projects in our lives but at the workplace the better equipped the employee is in using project management practices the more likely the project is to succeed within scope, on time, on budget and with the quality expected. As it becomes more widespread the need for co-operation and knowledge transfer between projects and between teams becomes more and more important, as part of increasing the maturity of organisations in the use of project management practices. Documenting the know-how and skills is a large part of managing a project but what is done with that documentation once the project is over?

Do organisations such as Reykjavik Municipality inhabit the level of knowledge and skills in using project management practices that is needed to successfully complete projects and learn from them? Are they using standards and the tools suitable for the organisation?

The aim with this paper is:

- To examine the status of project management within Reykjavik Municipality's departments and offices, looking towards the Project Management Maturity Model (Crawford, 2007).
- To document how knowledge is managed in Reykjavik's Municipality within a project and on a project-to-project basis both within and between its organisational units.

Once the maturity and knowledge management has been mapped I will attempt to suggest a way to improve the knowledge transfer and documentation in order to improve project and knowledge management in such a large, complex and diverse organisation as the municipality of Reykjavik.

1.1 Reykjavik Municipality

The Municipality of Reykjavik is one of the largest workplaces in Iceland. All in all there are around 8.000 employees. Its operation is both diverse and complex and frequent changes in the centralised administration do not simplify matters.

In post credit-crunch times the municipal is in need of skilled project managers to lead the municipality in times of changes. The municipal is a dynamic organisation "suffering" from political environment causing regular changes, departments are being merged, cutbacks have been made and the workload on those still employed increases. Offices are physically being moved as well to maximise office space utilisation.

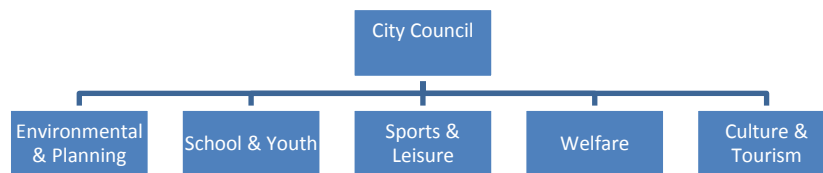
Even though the municipality is both large and diverse organisation, it has one supreme goal which is to supply the citizens with services needed. It also offers services to other organisations and house owners in the municipality. It could therefore be argued that coordination and cooperation between divisions is vital to fulfil this goal. Reykjavik's projects, along with these stakeholders mentioned above, affect across departments in many cases.

'Reykjavik – one workplace' is a slogan frequently used but so far it has only been in theory and not praxis. Many employed by the municipality are titled project manager but not all work as such and many work as project managers without being so titled. High numbers of specialists are employed especially in the central administration.

At the end of April 2012 changes have been announced to the centralised administration and the merge of three departments decreasing the number from seven to five. Reasons given are that these changes will help cooperation and utilisation of practices and knowledge (Guðmundsdóttir, 2012).

According to the new proposal recently submitted to the city council by the majority three of the now working departments will be merged into one; Public Works, Environment and Traffic and Planning and Construction will become Environment and Planning Department. The purpose is to make the services of the municipality more effective and accessible. A proposal was submitted as well on change to the central administration with the aim to strengthen and simplify it and to increase efficiency (Reykavikurborg, 2012), making the municipality's service to its customers, the citizens of Reykjavik, better and at the same time decreasing the overhead cost.

Currently there are seven departments and seven offices and the plan is to reduce departments by two and offices by five.



In order to fully understand what is needed research into project maturity and knowledge management was conducted and will be demonstrated in the literature review chapter and later discussed in relation to the results from the survey done in the municipality of Reykjavik.

2 Literature review

2.1 Maturity in project management

Project management as a profession originated in construction and engineering but “the rapid rate of change in both technology and the marketplace has created enormous strains on existing organizational forms...thus the traditional structure must be replaced by project management” (Kerzner, 2009). Nowadays the tools of project management are being used in various organisations and professions and with increased emphasis on education it is becoming more and more valued by employers. Many methods have been used to implement project management and there should be at least one available for each sector and for any kind of projects.

Knowledge and experience is an important factor of maturity within organisations. Kerzner defines maturity thus:

Maturity in project management is the implementation of a standard methodology and accompanying processes such that there exists a high likelihood of repeated success.
(2009)

One of the ways that has been used to evaluate the use of project management is the Project Management Maturity Model (PMMM) which is a combination of the SEI-type maturity measurement and PMI's PMBOK knowledge areas (Crawford, 2006).

2.2 Project Management Maturity Model

After PMI's PMBOK was published more and more companies have accepted its knowledge management outline as a useful manual to manage projects in diverse disciplines. PMMM is based on the nine knowledge areas of PMBOK; Integration Management, Scope Management, Time Management, Cost Management, Quality Management, Human Resource Management, Communication Management, Risk Management and Procurement Management. There are five levels of maturity according to SEI's Capability Maturity Model that Crawford uses in his model.

- Level One: Initial Process
 - ✓ Ad hoc processes
 - ✓ Management awareness
- Level Two: Structured Process and Standards
 - ✓ Basic processes; not standard on all projects; used on large, highly visible projects
 - ✓ Management supports and encourages use
 - ✓ Mix of intermediate and summary-level information
 - ✓ Estimates, schedules based on expert knowledge and generic tools
 - ✓ Mostly a project-centred focus
- Level Three: Organizational Standards and Institutionalized Process
 - ✓ All processes, standard for all projects, repeatable
 - ✓ Management has institutionalised processes
 - ✓ Summary and detailed information
 - ✓ Baseline and informal collection of actuals
 - ✓ Estimates, schedules may be based on industry standards and organisational specifics
 - ✓ More of an organisational focus
 - ✓ Informal analysis of project performance
- Level Four: Managed Process
 - ✓ Processes integrated with corporate processes
 - ✓ Management mandate compliance
 - ✓ Management takes an organizational entity view
 - ✓ Solid analysis of project performance
 - ✓ Estimates, schedules are normally based on organization specifics
 - ✓ Management uses data to make decisions
- Level Five: Optimizing Process
 - ✓ Processes to measure project effectiveness and efficiency
 - ✓ Processes in place to improve project performance
 - ✓ Management focuses on continuous improvement (Crawford, 2007)

Crawford (2007) has identified three areas that significantly influence the adaptation of project management practices in organisations; project office, management oversight and professional development. These practices are situated in Project Integration (project management office (PMO)), Project Quality Management (management oversight) and Human Resource Management (professional development). According to Crawford "the project office makes the lives of project team members easier by supporting the team in the areas of scheduling, status reporting, project management tools, and training, amongst others....The project office facilitates improvement in project management maturity by being the focal point for consistent application of processes and methodologies". Lack of active interest on the management behalf decreases the possibility of the improvement of processes and "one of the more difficult and most important aspects of instilling project management

discipline in an organization is changing the behaviour and habits of the people doing the work” (Crawford, 2006) emphasising the importance of professional development and support of the organisation to its employees.

According to Besner and Hobbs “maturity is associated with a common organization-wide understanding and the use of project management processes; a fully mature organization focuses on continuous improvement of these processes with the aim of improving project management effectiveness” also that “for the purpose of identifying best practice, performing-maturity can be regard as an approximate measure of ‘successful, mature and supportive organization’” (2011).

They identify as well as Crawford the need for competent personnel and define the performing-maturity construct as being composed of project management maturity, organisational support for the use of project management tools and techniques, the availability of competent project personnel and project success. They categorise the public sector with functional structure and mostly internal projects (which is the Municipality of Reykjavik in a nutshell) and mention that these public organisations are generally perceived as less mature in project management, are poor project performers and that is linked to the “bureaucratic culture of public bodies that seek to reduce ambiguity” (Besner & Hobbs, 2011).

They say that it “takes an extra effort in the public sector to implement a strong matrix or projectized structure” but also point out that when it is done it scores higher in performing-maturity. On the lines of the political aspect of project management Pinto says that “effective managers are often those who are willing and able to employ appropriate political tactics to further their project goals” (2000). The problem with working in a highly political environment is the lack of power. Project managers working in such an environment need to learn to “cultivate other methods of influence in order to secure the resources from other departments necessary to attain project success” (Pinto, 2000).

Pinto also mentions that in order to establish “sustained influence” it is important to “develop a network of other experts or resource persons who can be called upon for assistance” and to “influence with sensitivity, flexibility and solid *communication*” which is where a PMO would come in. “Successful project managers are usually those who intuitively understand that their job consists of more than simply being technically and managerially competent” (Pinto, 2000).

Shi recognises two important factors in maximising the value of project management. Firstly the approach of implanting project management has to be right and secondly that the organisational environment must be suitable for the implementation. “The maturity of project management will undoubtedly affect the value which an organization can gain through the implementation...it is necessary to make every employee recognise that project management contributes to the success of the organization and the PMO is an important department of the organization” (Shi, 2011).

Project management maturity models “are designed to provide the framework that an organization needs to purposefully and progressively develop its capabilities to deliver projects successfully project after project” (Pennypacker & Grant, 2003). For an organisation such as the Municipality of Reykjavik this is important as possible problem is the highly political environment.

2.3 Knowledge Management

“All of this information is intellectual property and must be captured for future use.” (Kerzner, 2009)

There are two kinds of knowledge regularly recognised, tacit knowledge which is informal and hard to reach in an easy and quick way and explicit knowledge that is formal and easy and quick to access. Tacit knowledge is for instance knowledge reciting within an employee, his way of working which only he has access to as he has not documented it. While explicit knowledge is knowledge registered into information systems, human resource systems, operations manuals, including processes and strategic documents, financial systems, file systems and so on (Smith, 2001).

It is widely agreed that intellectual capital, knowledge, is of high importance to organisations, Jegdev and Thomas have examined “the intellectual capital (knowledge, skills and know-how) that stems from complex human interactions and involves tacit knowledge that is rooted in action” (2002). Donk and Riezebos recognise that “knowledge is a vital resource in project-based industries and that managing this resource is a new and challenging process” with the current situation in the job market where “people tend to work shorter for individual organisations...and [managers] need help in finding experienced people in their new organisation” (2005). According to this mapping of knowledge in organisations is of even more importance than before, yet again underlining the need for a PMO to manage the knowledge and expertise within the organisation, a “knowledge inventory” according to Donk and Riezebos. The PMO would be highly effective in restructuring the organisation and combining “good human resource management practices together with appropriate information and communication technology” (Donk & Riezebos, 2005).

3 Method

To begin with journal databases were searched to find out if similar studies had been done in other European municipalities. The search did not turn up any results however it does not prove none have been done.

The aim was to find out the status of project management within the departments and offices of the municipality, whether they are using project management actively, and what the methods and tools are that are being used if any. Another goal was to “feel” the landscape, the views and interest within the human resource. Albertsson (2008) suggested in his paper in what way the municipality could implement a project management office into its organisational chart. He pointed out that the use of project management was not being implemented nor used the way it could be. Four years on, the question is: Has anything changed.

The complexity of the municipality gives limitations to getting a statistically accurate data, since the information being searched is much more qualitative than quantitative. The method decided on was sending out a “feeler” survey to those employees titled managers at all departments at Reykjavik Municipality. It is already known that the use of formal project management is minimal. Therefore, instead of asking many questions from each of the nine knowledge areas of PMBOK more general questions were asked.

It proved very difficult to get a hold of managers, one of the reasons turned out to be that work was in progress to change the centralised administration and to merge three departments. Other was that people lacked knowledge of project management and could not answer. Some managers such as the HR manager were interviewed especially to get more

detailed information about the operations of each department. The HR department has good overview of performance in each department.

The aim was to get as many to answer as possible or at least 2-3 answers from each department. These are the questions asked:

Questions asked	Information sought
Is project management used in your department and if so what method is used and what tools.	What sort of management processes, methodology such as Gantt, Prince2, Scrum, Kanban etc.
How are requests handled?	Is there a certain system used to handle requests or just email
Is there cooperation between departments?	Working on projects together, sharing PM practises and so on
How many project managers are working at your department/office?	Number of titled PM's
Do you know their education?	Level of degrees, management degrees, courses in PM outside the job
Have you attended seminars/courses in project management as part of your job?	Has the department/office held PM courses for its employees
How is knowledge/skills maintained?	Refreshers courses, final reports, continuous education
Would you like to further the use of project management in your department office?	Is their interest in project management and its use
If so, how?	How would you like to see project management used
How is knowledge and lessons-learned documented, is it managed in some way?	Is there a file management system in use, are there regulations on how to wrap up projects and document successes and failures for instance.

The answers were followed up with phone calls and emails.

To shed light on the imminent changes to both the centralised administration and the number of departments the general secretary and deputy mayor was interviewed to find out as well whether some of the recommendations in this paper are already being considered.

4 Results

Answers were received from 2-3 employees in each department. With more time more answers would have been pursued.

4.1 Educational level

The question on education was not easily answered however it is apparent that the level of education is high. In the departments and offices most if not all have some sort of university education, and many have studied management of some degree. MBA and MPA graduates are several; a few have finished a diploma and recently a master in project management. There are also a few with a D-certification in project management based on the IPMA (International Project Management Association) standard.

The total of employees with the job title project manager are 281 compared to around 100 in the year 2008 (Albertsson, 2008). However unfortunately that is not descriptive of the jobs performed by them.

As mentioned before Crawford identified three areas that significantly influence the adaptation of project management practices in organisations; project office (project integration), management oversight (quality management) and professional development (human resource management).

These significant areas are the main focus in the results.

4.2 Integration Management

There is no formal project management office at any level of the organisation. Each office and department is using their own practices and many of them are coming up with their own templates. Projects are both formal and informal; the most formal require a letter of mandate from the mayor's office, and working groups, steering groups and change management groups are often established via that channel. In case of very large projects and projects initiated by the mayor and his office the integration management is very formal and better followed through than in case of smaller projects where most commonly ad hoc approaches are used. Often a project starts with an idea and it is the project managers challenge to turn that idea into a project. The project management practices are both scarce and in most cases those working on projects use their own choice of system and do not know who to turn to in order to get assistance with their projects.

4.3 Human Resource Management

The head Human Resource Office assists in legal matters and hiring of employees and assesses job descriptions; evaluates the worth of each job and so on. Most of the departments have human resource managers as well that handle internal HR matters with the support of the head HR Office.

4.4 Procurement Management

Procurement Office handles strategies while each department is responsible to purchase according to the procurement strategy and procurement regulations (Innkaupaskrifstofa, 2012). Each department and office has its finance budget for each year and has to keep costs within that budget. Internal Auditing ensures that the municipality's finances are used in accordance with the municipality's authorities' budget and that the operations of the municipality are in accordance with laws and regulations.

4.5 Quality Management

Many of the departments use some sort of quality management, but none of them uses the same method. Many have written or are in the process of writing manuals; qualities, operations and information security manuals each based on the operation of the department.

4.6 Departments

4.6.1 Public Works

Emphasis on project management within the Public Works department is extensive, a very clear operations and resolution process is in practice with Deming's Quality Circle included. Change management and improvement groups/teams are active in the department, emphasis on cost awareness, and this year increased emphasis on effective project management has been introduced by holding seminars on project management and the founding of a knowledge group which meets regularly. Public Works department has Operations Manual and an Information Security Manual in place for employees to work by. Despite this according to some employees project management is not being used in the way it could be.

4.6.2 Environment and Traffic

Answers included that project management is not being used effectively although continually working on projects. It is seldom to find thorough preparation and planning, clear communication channels, good information flow to stakeholders and status reports all in one and the same project. Exception to this is the environmental management that is similar to quality management. In it is the use of custom made operation manual and documentation according to it. Others mention the use of checklists in MS Word and Excel for managing projects. Email is used for handling requests. Many of the projects have stakeholders from all departments. Some have attended courses in project management both as part of their degrees and also as continual education. Use of project management practises could be used in more effective way and some sort of a project management tool would be appreciated. It is seen to be able to serve as a powerful tool in project management, to save cost and time at the same time as building up knowledge and skills in organisations. Too much time is used in general management largely because the department does not use project management practises. Documentation is not believed to be done in a concise manner, although some is filed in GoPro the file system used by the municipality. The Health and Safety Division within the Environment and Traffic department is a certified user of ISO 14001 standard (Anon., 2012).

4.6.3 Sports and Leisure

Recent merger of departments moved many project managers over to School and Youth department. The department handles big yearly projects that are documented and managed in a very decisive way, start-up meetings, documentation and final reports are there for new employees to build on and use as support. Mind Manager is used quite a lot as a project tool. A lot of projects are smaller and are just-in-time projects, with unclear sponsors, vague processes and often not clear who is supposed to do what. Some of them are across departments and in those projects it is often also not quite clear who finances the project. Too often projects are not completed. It is thought that processes could be more formal and clearer especially with the smaller projects. Reports are given to the executive board of the department.

4.6.4 Culture and Tourism

The Culture and Tourism department is very marketing focused and many of their projects are based on spur of the moment ideas. Bigger projects are often started by a letter of mandate. There is not a specific process that goes into motion once a project is decided however there is

project management involved, steering groups, documentation and filing in GoPro. Within the department an event office is in place and they are much more particular in project management processes. Still there is no one method in doing things and new employees need to learn the hard way as one answered. Many of the projects end up being worked on by only one person, lack of support, knowledge and tools in project management was mentioned. Project management sometimes ends up being just one person and not a team work. Many who work on projects are also involved in operations of completed projects, giving them less time to focus on the projects at hand.

4.6.5 Education and Youth

It does not seem that project management practices are being used actively across the department however many projects are worked on in an organised manner and reports are presented to the executive committee at the end of each project. Many projects fail or are never materialised and there is lack of them being followed through in a purposeful way with operations. Quality management is in place and the quality management system Focal is used and its organisation followed; quality manager, quality committee, resolution process for processes and internal assessment. Most of the employees have university degrees. Courses in project management have not been on offer for the employees but some answered that by offering basic project management courses it would increase the use of project management practices and not just in the largest projects but smaller ones as well. Project management is believed to be important both in general and in for the department. The way knowledge management and documentation is handled in the department is both by filling out a document at the end of project and filing it in a file management system.

4.6.6 Planning and Construction

Project management is being used to some extent, mostly general project management. The planning and construction department is the only department using a different file management system from the rest of the municipality, called Erindreki. It is used to file formal applications and enquiries. All formal cases are booked into meetings where they are handled. Less formal enquiries are replied to via email, telephone or consultation hours. The department cooperates with other departments but not in the use of project management. Foreseeable merger of departments might assist with the use of project management practices. Knowledge of project management practices ranges from none to extensive. Using a better system than Erindreki would help and there is a need for a system to handle the less formal enquiries that are a large part of the job. There is need to integrate project management practices and specialist knowledge better than now. Documentation is very individualistic and some document more than others. Work is being done on the compilation of a quality manual, that will include processes all should follow today more ad hoc approaches are being used. Some know the processes better than others. There is need for a few project managers so the specialists could focus on the more “professional” aspects. Secretaries take care of most of the file management, register cases and processes but the specialists need to follow through.

4.6.7 Welfare

There is use of project management within the department office, mostly ad hoc practice, use of the quality management system Focal, Gantt charts are used when working on larger projects especially etc. Bigger projects are well defined some with a letter of mandate, team leaders and or project managers hand them over to managers who are responsible for follow through and documentation. Many have attended courses but not all. They would like an inventory for project managers somewhere to find information, systems, templates and someone to consult with. The use of basic management is in use but not project management as such. Nursing subdivision: One of those who answered the survey works as a project

manager now (the title was changed recently) but used to be a department manager. She also works as a quality manager as 20% of her time. The importance of project management is considered important especially with regards to time management. Quality manual for the nursing employees is used.

4.7 Offices

In the case of the City Hall Offices focus on The Information and Technology Centre (UTM), Service Centre, File Management Office and Human Resource Management (HRM) office was taken.

4.7.1 Information and Technology Centre

The Information and Technology Centre services all departments and offices with all computer related matters, runs systems and helps implement new technological solutions. The centre uses project management on regular basis and is a certified user of the ISO 27001 standard. Nothing is approved into operation without going through change management first, weekly meetings where changes are reviewed are part of this. Projects are diverse and there are no certain tools used, in larger projects PID documents are filed where tools and methods are decided on. The centre services around 25.000 requests every year and work in cohort with most departments and offices with established steering groups. Besides that special steering groups are formed around ad hoc and large projects. There is no formal project manager employed however project management is part of most job descriptions. Most of them are computer specialists and continuous education on current trends in project management practises in the field of computing such as Agile is promoted. Currently they are looking for a project manager as part of increasing the use of project management, the importance of the use of project management is considered to be a 10 on the scale of 1-10 especially with regards to larger projects but disciplined processes for the smaller projects is important too.

4.7.2 Information and Web Department

A small team of web personnel is situated within the Information and Web Department and use of project management is practiced there. Most of it is ad hoc although all employees have attended Prince2 course. An overview of on-going projects is gained by a Kanban wall. The web team works with all offices and departments and meets with them on required basis. Most requests are handled via email and no other system is used. All of the employees are titled project managers and work with projects, the all have a university degree and three at least have some sort of managerial education. The tasks include everything from very large projects to only minor alterations to content. Some of the employees believe the focus of the web section of the department could be more on consulting and assistance with needs analysis and solutions to problems instead of doing almost everything on each project themselves. The departments, offices and other sub organisations of the municipality the web team assists vary in skills and competence in working on their web sections/sites which in turn adds on to the tasks the web team needs to handle.

4.7.3 Human Resource Management Office

According to the HRM office all managers and many specialists working for the municipality are involved in project management and change management of some sort. The use of project management practices such as Prince2 depends on managers and most of them use ad hoc methods. Many of the specialists and managers employed have some knowledge and skills in project management either from their education or from working on projects where project management practises have been applied. However, no documentation exists on the number of employees with this knowledge and skills but intention to implement such documentation into the HRIS system is on schedule for the latter part of the year. The system includes a

training & development / competence & talent section. The intention is to have self-service for employees and managers with possibilities to register and manage in an organised manner all skills, knowledge and experience that matters be it formal or informal.

4.7.4 The Service Centre

The Service Centre consists of both call centre and service to customers face to face. Processes are available for most services but checking they are up-to-date and changes to them is not properly implemented because of lack of time, resources and information from those departments and offices that own the processes. Updates to regulations and price catalogues are not always delivered to the service centre and that is vital to give the customers best service. Employees feel more competent and secure when processes are available in clear and concise manner and they feel that departments and offices could improve their practices. Their way to manage knowledge and share information is by using MSN and Microsoft Office's OneNote. The amount of information however is becoming monstrous and because of same reasons given above the maintenance of information saved in OneNote is lacking. In order to coordinate better frontline services review of processes on regular basis is highly important.

4.7.5 Case and Record Management Office

GoPro is the official case and record management system for the municipality, courses in its use are held for new employees (not compulsory) and refresher courses are regularly on offer too. As a public organisation filing of cases is legally compulsory. Each department and the city hall offices have their own database within the system however they do not have access across departments. The only department with its own file management system is the Planning and Construction Department. The documentation is lacking however and reason given was lack of time and also lack of pressure from management to file and document.

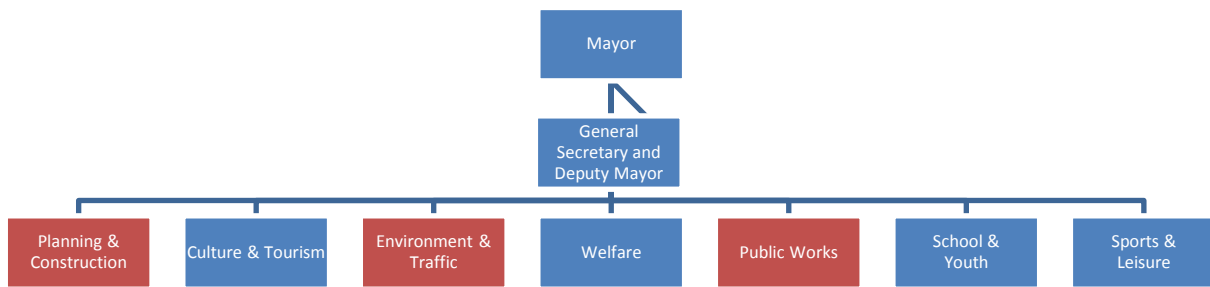
5 Discussion

5.1 Overall conclusion based on the result

The results show that there are many projects being worked on in the municipality and projects are becoming more and more prominent in both the offices and departments. In addition there is general consensus from those who replied that the use of project management should be increased and that support and guidance is needed. The complexity and size of the organisation is, as has been demonstrated, along with no formal project management office a big factor in why there is little co-ordination between project management methods and processes within the municipality.

None of the departments exceed level two on the PMMM despite them being aware of project management in many ways and in some knowledge areas the score is on a higher level. Even so the only way to reach a level on the PMMM is by fulfilling all aspects of each level.

Figure 1 current organisational chart (in Icelandic)



All of the departments can be estimated to be on level two however the departments in red are those departments that are more mature. These are also the three departments who will be merged according to the new organisation proposal.

Despite the dispute on whether project management can be generalised all projects share certain commonalities such as start-up and finish, also they need to be managed in concern to scope, cost, time and quality. Therefore all projects no matter what kind can follow the PMBOK guidelines and standardisation. Tools and methods are there in many variations and if project managers have the knowledge and skill they will know what method to choose. That's were a centralised PMO would be helpful in the municipality and the HRM office could be instrumental in setting up a PMO within their office or beside it and in close cooperation. PMO's do not have to consist of many people, its main function is to give project support, give consult and/or mentoring to project managers, aid in processes and standards, train, give guidance and recommend software tools. The more mature the organisation is the more extensive support it gives.

5.2 Politics

The diversity of the municipality's projects and operations makes it a complex organisation. Its recent emphasis on e-government has been taken aback lately by the lack of fund while the importance has never been greater. "Government projects have now become the start-to-finish transformation of all the activities performed to design, market, sell, produce, deliver, and support a set of related products and services, to deliver business value from the government to its citizens/enterprises" (Sarantis, et al., 2011). They suggest as well as Donk and Riezebos that "knowledge re-uses" is of importance and that it "could serve as the backbone of knowledge management", a need for one central place to access the information needed. "Bureaucratic projects involve multiple processes in a political environment and can be stifled by some traditional project management techniques" (Crawford & Pollack, 2007) and it is clear to us based on the information above that no one method can be integrated as the projects are as diverse as they are many.

5.3 The importance of long term thinking

PMO regardless of politics needs to function all the time no matter who is in charge. The municipality needs to ensure quality of service for its users/clients/citizens. Dalcher (2009) speaks of several different views of quality: quality as a product-based quantity, quality as a user-based view, quality as specification, quality as a value-based approach, quality as a transcendent property and quality as a continuous property. Although Dalcher focuses on software these can be applied to all project management running it all together making sure all offices and departments are working on the same concept. As noted by Johansson et al "projects, however, cannot be understood as separate entities; they are always embedded in

their technical and institutional environment” (2007). Managing the knowledge gained from projects in the past, lessons-learned, is an important part of project management.

Every aspect of project management has two dimensions – a technical dimension and a human dimension. The human dimension includes not only the people who are operating the processes, but their expertise. Cross-departmental employee use, if the HR department/office had a list of employees’ expertise it could use that list to find the right employees for the project (Cooke-Davies & Arzymanow, 2003).

Within the municipality of Reykjavik transfer between departments is possible and often employees are “loaned” temporarily in order to make use of their knowledge and skills. By mapping the knowledge and skills of the employees working for the municipality it would make using their expertise even more successful along with allowing for the employees to tackle more challenging and diverse projects. Donk and Riezebos’s article is good to use as a base for the recommendations on how to further the maturity level of Reykjavik Municipality.

Within a dynamic organisation such as the municipality of Reykjavik the importance of maintaining knowledge is high because “tacit knowledge, in particular, is lost through outsourcing, downsizing, mergers and terminations. Reportedly, 90 per cent of the knowledge in any organization is embedded and synthesized in peoples’ heads” (Smith, 2001), exactly the scenario currently in the municipality. Inventorying the knowledge is not only important to maintain it within the organisation even though employees leave but also inventorying the knowledge and experience of employees project leaders/managers would be able to use the reports in it to find the experts needed to consult with on specific problems and moreover it would be “easier to combine experienced and knowledgeable employees into new projects” (Donk & Riezebos, 2005). Trust is extremely important and this knowledge would have to be used in the intended purpose. According to answers from the human resource management office it intends to implement the knowledge mapping part of their HRM system in the fall. There both employees and managers will have the chance to put into their files information on previous achievements, education, skills and experience. We believe that might serve the purpose of knowledge inventory suggested by Donk and Riezebos, at least in some way.

5.4 Reykjavik’s PMO

After surveying the skills, knowledge and practices used in the departments and offices it is our finding that the municipality would benefit from the implementation of a project management “office”. Establishing a PMO alongside the HRM and their knowledge inventory base would mean better access to PM tools, methods and practices, access to consultants within the municipality who could assist in start-up of projects, brainstorming sessions, change management and so on. Along with this employing someone with coaching experience would be a great deal of help to managers and at some times employees. Important factor is sharing of knowledge and therefore the PMO would need a sort of a steering group including PMs from all departments while implementing the PMO which would then become a platform for quarterly consulting group.

Setting up a knowledge and information section online on the intranet for easy access to templates and online tools along with regular introduction seminars to new employees (particularly those working on projects) is something that clearly came through from those who answered and is one of the first things to be implemented as part of setting up a PMO. “Organizations and their project managers must choose the sets of tools that comprise their toolbox” and they can “consider the underlying practical knowledge associated with a set of tools as a strategic asset” (Besner & Hobbs, 2006). In a research they did on what tools and

techniques working PM's use the most they found that lessons learned/post-mortem was rated at number two. It underlines the importance to register knowledge and how-to as has been suggested by several others. The intranet section could also include a discussion forum for project managers to share ideas and lessons learned.

It is also suggested by us that the municipality discontinues use of the job title project manager unless project management is actually part of the job to increase the value of project management within the municipality. As mentioned earlier there are 281 titled project managers employed by the municipality. The largest number belongs to School and Leisure Department and that can mostly be explained by the fact that employees working at the leisure centres for children are titled project managers for lack of a better job title. Many of them are university students working alongside their studies. In the other departments most of those titled project managers actually do work on projects.

6 Conclusions

The use of Reykjavik's project management practices does not score high on the maturity level scale. It does not mean that the municipality is not using project management to manage its projects it simply means that the way it is used is not co-ordinated and is not standard practice across offices and departments. With a centralised project management office managers and employees would have access to support, coaching, methods, tools and techniques given by specialists in project management. With more and more graduated specialists in project management, some of the current employees there amongst, it should be easy to find the personnel to start-up the project management office and help in implementing procedures and support in times of changes.

6.1 Further study/research

To properly map the maturity of the municipality a longer time would be needed to interview and meet the key personnel. At the time of the writing of this paper big changes were being made to the organisational chart of the municipality which made it more difficult to reach managers.

Once these changes, both administrative and the addition to the HRM system, will have gone through and been implemented it would be interesting to do a more in-depth survey. Some of the changes are supposed to increase both project and knowledge management and hopefully this paper will become a valuable input to these changes.

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Appendix A

Rannsóknarspurning:

Góðan dag,

ég er að vinna lokaverkefni í MPM náminu (master of project management) og er að kanna stöðu verkefnastjórnunar hjá sviðum borgarinnar.

Þessi póstur er sendur á sviðstjóra og þá sem titlaðir eru verkefnisstjórar, mannauðsstjórar, teymisstjórar og svo framvegis.

Mér þætti vænt um ef þú (þið) sæjuð ykkur fært að svara eftirfarandi spurningum. Einföld og skjót svör eru æskilegust og aðeins nauðsynlegt að svara þar sem þekking er til staðar.

1. Er verið að nota verkefnastjórnun á þínu sviði ?
 - a. Ef svo, hvaða aðferðarfræði er notast við?
 - i. Verkefnastjórnun almenn
 - ii. Gæðastjórnun
 - iii. Breytingastjórnun
 - b. Hvaða tól er verið að notast við?
 - c. Hvernig er unnið með beiðnir?
 - d. Er unnið í samvinnu við önnur svið/skrifstofur?
2. Hversu margir verkefnastjórar starfa á þínu sviði? skv. uppl. úr mannauðskerfi eru þeir 54!
 - a. Hvaða menntun eru þeir með?
 - b. Fjöldi námskeiða í verkefnastjórnunartengdu efni?
 - c. Viðhald þekkingar/færni?
3. Myndir þú vilja auka veg verkefnastjórnunar á þínu sviði?
 - a. Hvernig þá?
 - b. Hversu mikilvæga telur þú verkefnastjórnun vera? almennt og í þínu starfi.
4. Hvernig er þekking og reynsla af verkefnum skráð, er haldið utan um hana á einhvern hátt?