THE BENEFITS OF PMOs
IN ICELANDIC ORGANIZATIONS
AND WHY SOME HAVE BEEN SHUT DOWN

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THE BENEFITS OF PMOs IN ICELANDIC ORGANIZATIONS AND WHY SOME HAVE BEEN SHUT DOWN.

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Abstract – Since the millennium a few Project Management Offices (PMOs) have been established in organizations in Iceland. A research was conducted in the year 2007 on the features of all known PMOs in Iceland. Since then Icelandic organizations have been going through the filtering effects of the financial crisis that „struck" the Icelandic economy. Through this turmoil, what happened to the PMOs, and why? The key findings of this paper are that PMOs have more realistic expectations about their effort than 5 years ago. Many of the PMOs were shut down because of the effect of the economic situation. The PMOs have also proven to be more selling-orientated now than they were 5 years ago, opposed to be working on a strategic level.

Keywords – Organizational structure, Project Management Offices (PMOs), Icelandic organizations, benefits, termination.

1   INTRODUCTION

At the very beginning of the great global financial crisis in 2008 the economy in Iceland shook harder than in most countries. It was in fact believed that Iceland's banking collapse was the biggest, relative to the size of an economy, that any country had ever suffered ("Iceland," 2008). It can be of interest to follow what happens to organizations, people's value systems, organizational structure, etc., when that kind of crisis hits. This might reveal the real core values of any organization. This urge led to the interest of looking at what happened to organizations in Iceland through the pressure of this economic crisis. The interest of the author in project management offices narrowed the question further down to what happened to their PMOs through these critical times.

In the year 2007 a study was conducted on the features of all known PMOs in Iceland (Björnsdóttir, 2007). This unpublished paper which was written in Icelandic describes to some extend the status of Icelandic PMOs, the reasons for their establishment and how well they fulfilled the organization's expectations. Part of that paper gives a needed basis for the continued research performed here.

The first objective of this research is to get a deeper understanding of the present status of PMOs in Icelandic organizations, and will therefore serve as an up-to-date overview. The second objective is to try to find a pattern of why some of them have closed down. These thoughts can be put into two following research questions: What, if any, have been the benefits of Project Management Offices in Iceland? Why have some of them been shut down?

This paper is in four parts. The first part is a literature review, then follows the research methodology used, the research results, and finally discussion.

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2 LITERATURE REVIEW

2.1 From Project to Project Management Office

To be able to discuss Project Management Offices, some basic definitions must be introduced. What is a project? According to the PMBOK Guide a **project** is a "temporary endeavour undertaken to create a unique product, service, or result" (*PMBOK*, 2008, p. 5). An emphasis is put on a definite beginning and end. The end is said to be reached "when the project's objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists." This definition is a counterbalance to the "on-going work effort which is generally a repetitive process because it follows an organization's existing procedures" (*PMBOK*, 2008, p. 5).

Program is a "group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually" (*PMBOK*, 2008, p. 9).

Portfolio is a "collection of projects or programs and other work that are grouped together to facilitate effective management of that work to meet strategic business objectives" (*PMBOK*, 2008, p. 8).

What is then Project Management (PM)? According to the PMBOK Guide **project management** is the "application of knowledge, skills, tools, and techniques to project activities to meet the project requirements" (*PMBOK*, 2008, pp. 6–7). The Guide suggests categorizing the various processes of project management into the five logical groups: initiating, planning, executing, monitoring and controlling, and closing.

As there can be project management, there is also something called program management and portfolio management. Sometimes when spoken of project management, it is actually closer to the definition of program management or portfolio management.

Project Management Office (PMO) is "an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing project management support functions to actually being responsible for the direct management of a project" (*PMBOK*, 2008, p. 11). For the scope of this research we will accept this definition with one exception, that we will only discuss PMOs with mandates that cover many projects or multi-project PMOs. This is done to be in line with the extensive series of researches conducted by Hobbs and Aubry in 2003-2010 (Hobbs & Aubry, 2010, pp. 1–2).

A PMO can hold various names and still have the same definition and responsibilities. These names include: project office (PO), centre of excellence (COE), project support office (Kerzner, 2009, pp. 955–957; Meredith & Mantel, 2009, p. 210). In some literature though there is a difference between the definitions of these idioms.

2.2 The various forms of PMOs

The emergence of and need of PMOs was due to increased number and complexity of projects throughout the business world which led to a certain form of centralization (Aubry, Hobbs, & Thuillier, 2007, p. 331). The answer to that need was PMOs, which had various forms depending on the specific need of the organization.

Many models have been built around the topology and functions of PMOs to gain a better understanding of them, to try to simplify the complex reality.

Hobbs and Aubry provide an overview on the different typologies of PMOs which come from different researchers over the last two decades or so, only identified by their names. The overview can be seen in Table 1. In addition the author found three more to add to that list.

Table 1. Typologies of PMOs in the literature (Hobbs & Aubry, 2010, p. 6)*, (Desouza & Evaristo, 2006, pp. 416–417; Gignac, 2010; Tucker & Agopian, 2006, pp. 3–7).

Author	Single-project entities	Multi-project entities			
Dinsmore (1999)*	Autonomous Project Team	Project Support Office	Project Management Center of Excellence	Program Management Office	
Gartner Research Group*		Project Repository	Coach	Enterprise	
Crawford (2002)*	Level 1: Project Control Office	Level 2: Business Unit Project Office	Level 3: Strategic Project Office		
Englund, Graham & Dinsmore (2003)*		Project Support Office	Project Management Center of Excellence	Program Management Office	
Kendall & Rollins (2003)		Project Repository	Coach	Enterprise	"Deliver Now"
Garfein (2005)*	Project Office	Basic PMO	Mature PMO	Enterprise PMO	
Desouza & Evaristo (2006)		Operational PMO	Tactical PMO	Strategic PMO	
Tucker & Agopian (2006)	Project Management	Program Management	Portfolio Management		
Gignac (2010)				Strategic Project Office	

As can be seen in the table above there are various models, and many of them have similarities. These different types of PMOs can differ very much in approach to organizational structure, authority, responsibility and role.

The incentive for the start of the most thorough study on PMOs until this day is that students in a project management program in Canada in the year 2002 couldn't get a consensus on the right description on the structure and functions of a PMO whereas most of them were practitioners in the field. The reason was that the PMO were so different in structure and functions. The challenge was to see if it also was the case for a larger sample. One of the primary results that came from that research is that most PMOs change every few years and are therefore more of a temporary arrangements in an organization (Hobbs & Aubry, 2010, pp. 7–10).

It is also important to recognize that the PMO "is not an isolated entity; rather, it is embedded in a socioeconomic context" (Hobbs & Aubry, 2010, p. 3).

2.3 Roles of PMOs

As can be expected from the literature discussion above about different forms of PMOs, so many different opinions are about the role of PMOs.

Crawford lists nine primary components to any PMO, and says that they grow in capability and complexity as they take on more strategic responsibilities. The components are: project support, documentation, change control, project repository, tracking and reporting, risk management, resource repository and cost tracking and software support (Crawford, 2002, pp. 70–74).

Englund, Graham and Dinsmore divide PMOs into three types (see Table 1). The first one, project support office, includes various operational support functions to projects. The second one, project management center of excellence (PMCOE), includes functions more aimed at getting up-to-date methodologies and competencies in place. They claim that it is difficult to put these two concepts (support and excellence) under the same roof. It would distract one from the other. The functions of the last type, Program Management Office, include a more complete authority over the projects and the functions that can be seen there assimilate much to a unit manager's functions in his own unit (Englund, Graham, & Dinsmore, 2003, pp. 83–87).

Kendall and Rollins emphasize that for a PMO to become a prized organizational unit, it must take on the following functions: drive project cycle times down, facilitate choosing the right project mix, develop and maintain en executive cockpit, through key portfolios, track and report progress (high level), mentoring, tools, help desk, methodology, corrective action, facilitate the governance board, prioritization of project portfolio, help projects in trouble, project management training, marketing and communication, and archives (Kendall, 2003, pp. 45–48). This is quite a long list of functions that they condition for a prized PMO.

Kerzner accepts that there are different types of PMOs with different amount of authority. He lists up a few functions needed in PMOs: Project management information systems (including earned value, risk management, performance failure and post-mortem analysis), dissemination of information, mentoring, development of standards and templates, project management benchmarking, business case development, customized training (related to project management), stakeholder management, continuous improvement, capacity planning (Kerzner, 2009, pp. 958–968).

Meredith and Mantel discuss PMOs inside their book chapter "The project in the organizational structure" which says much about their view on PMOs. They emphasize the PMO as an enabler/facilitator of projects, not a doer of projects. But they admit that sometimes the PMO needs to get involved in some project management tasks, but then it should be "to facilitate liaison with top management…" They list up a few tasks of PMOs that they commonly perform and say, like many other authors, that the tasks develop over time, and that each PMO will not do all of these things, but should do some of them. (Meredith & Mantel, 2009, pp. 210–213).

All of the authors above except for Kendall and Rollins, when discussing the various roles of the PMO, accept that each PMO has different roles connected to their reporting level and maturity, even though not all use the word maturity. It seems that Kendall and Rollins don't take the effort to discuss the less mature forms of PMOs, and concentrate instead on the PMOs that want to be "prized organizational unit".

This view is supported by some of the results from a benchmarking research where it reads that the phases of PMO roles typically evolve to more advanced responsibilities from support to individual projects, to support to project owners

to support to project portfolio owners and senior management (Andersen, Henriksen, & Aarseth, 2007, p. 103).

The researcher T. R. Block, as cited by Meredith and Mantel, asked representatives of PMOs for the reasons for initiating a PMO. "Almost two-thirds of the respondents indicated a need for establishing consistent project management standards and methods, and that the PMO was initiated by senior management direction. About half the respondents also indicated a need to eliminate project delays and correct poor project planning. A bit less than 40 percent wanted to improve project performance and eliminate cost overruns. Last, about a quarter of the respondents indicated they wished to reduce costumer dissatisfaction" (Meredith & Mantel, 2009, p. 211).

According to the Icelandic research conducted by Anna Margrét Björnsdóttir the reasons for establishing a PMO were generally more connected to the company as a whole in comparison to support for the project management itself. One exception must be mentioned that didn't score high: To ensure that the projects are in line with the organization's policy (Björnsdóttir, 2007, pp. 8–9).

When discussing the role of the PMO, it is necessary to keep in mind that it exists to "answer to a need in the organization and which will be missed should it be closed" (Andersen et al., 2007, p. 101). This means that responsibilities and tasks for the PMO need to be chosen accordingly. Therefore conducting a stakeholder analysis prior to establishing a PMO is a wise step to take. This is confirmed by the results of the research done by Desouza and Evaristo. They highlight critical success factors and one of them is the importance of establishing the background that led to the PMO being initiated. They claim you need to understand what trigger identified the need, which events impacted the need, if it was through unsuccessful projects then what were the major influences that led to failure. They also reflect on that if recommended by an external consultant then why did he recommend it, if the PMO is being established to give a strategic focal point, then what are these critical factors that will determine success. By bearing these drivers in mind, one can identify the factors of greatest concern to stakeholders (Desouza & Evaristo, 2006, p. 419).

2.4 PMO Maturity Model

It is important that the value of the PMO is known to those working in the PMO, those that need its service, and those that legitimate its existence. By using a maturity model that evaluates the performance and encourages evolution, the value shows. The researchers Aubrey, Hobbs and Thuillier came to a conclusion that the better the PMO delivers its services, and only the ones related to the needed functions, the more the PMO is perceived delivering value to its organization (Pinto, Cota, & Levin, 2010, p. 1).

Last few years renowned authors and institutions have developed their organizational maturity models. However this does not describe well enough the maturity of the PMO within an organization, and there could be different levels of maturity between these two. For this reason a new maturity model for PMOs was formed: The PMO Maturity Cube (Pinto et al., 2010) which can be seen graphically in Figure 1.

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Figure 1. The three dimensions of the PMO Maturity Cube (Pinto et al., 2010, p. 11).

"The three dimensions that comprise the cube are scope (enterprise, departmental, or program-project), approach (strategic, tactical, or operational) and finally the maturity level (basic, intermediate, or advanced)" (Pinto et al., 2010, p. 11). PMO's maturity can be assessed with a questionnaire which is a part of that model.

2.5   The environment of the PMO

PMOs have various forms, roles and methods to describe them which have been discussed in chapters 2.2-2.4. With different forms and roles come different kinds and amount of authority. A PMO can be located near the top management in the organizational chart or as a part of division lower in the organizational chart.

Like the project manager who gets his support from the sponsor, the PMO gets its authority and existence from the senior management of the organization in which they are embedded. This is the political sphere of PMOs that cannot be ignored. A PMO exists primarily to serve its organization and to fulfil a real need in the organization, and should thus not be established without clear reasons and objectives. A benchmarking research on PMOs supports these views where it says that in order to succeed as a PMO, among other things, you have to do these:

- "Ensure top management support
- Cover true needs in the organization to ensure that the users see benefits of the services of the PMO, based on conducting a stakeholder analysis prior to designing the PMO" (Andersen et al., 2007, p. 102).

2.6   Characteristic features of organizations with PMOs

What type of organizations has a PMO? How big are the organizations that have them? How many people work in the PMOs? And how old is the average PMO? These questions are a good start to obtain a better understanding of the organizations that the PMOs are inhabited in.

Researchers have identified in which industry sectors PMOs can be found. The researcher Hobbs noticed in his research that about 29% of the PMOs were in tangible products and 24% were in other intangible products or services. The rest was in IT, telecommunication, financial services and other uncategorized

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industries (Hobbs & Aubry, 2010, p. 23). This will be discussed to more detail in chapter 4.1.

According to Hobbs about 53% of PMOs are 2 years old or younger, and only 16% are older than 5 years old (Hobbs & Aubry, 2010, p. 35).

About 64% of the organizations with PMO had more staff members than 1000 (Hobbs & Aubry, 2010, p. 23).

In 49% of the active PMOs the staff number of the PMO, excluding project managers, were 3 or less. Even in 72% of the PMOs it was 7 or less (Hobbs & Aubry, 2010, p. 32).

2.7 Benefits of implementing a PMO in the organization

The benefits in question here are the benefits for the whole organization. The first question that arises is: How can you define, assess and measure these benefits? Are these benefits only about economic value or Return on Investment or do they have a wider impact scope? Of course the bottom line is of critical value to senior management as they often have to report to owners or shareholders.

According to Kerzner there are other ways for executives to measure the ROI of implementing a PMO. The measurement could be described in both qualitative and quantitative terms. Qualitatively it is possible to measure the number of conflicts coming up to the executive levels for resolution. The PMO would work as a filter of conflicts to the executive level. Quantitatively the executives could look at the following:

- With the standardization that comes from the PMO, Progress Reviews would be in unified format and would be more meaningful
- Decision making doesn't have to be delayed, and is more meaningful with a PMO
- Without a PMO executives can spend a great deal of time attending too many and very costly meetings. With a PMO they can concentrate more on strategic issues rather than operational issues
- Quantity of information on projects will be of the right amount though a PMO so the executives can take timely decisions and rather spend time on strategic planning (Kerzner, 2009, p. 969)

The benefits of the PMO towards the organization are always connected to the impact on the organization as a whole. The more the PMO is operational and supportive for individual projects, the more the impact can be measured on individual projects or the projects effected before and after the implementation of the PMO. The most accurate way to assess the impact would be to measure the impact on many levels and issues, but assessment of the felt impact from the staff involved in the PMO could also be done.

2.8 Project Management Offices in Iceland

Not much has been written on PMOs in Iceland, only a few unpublished papers, most of them are master theses in Project Management. Perhaps that is understandable due to how few PMOs are in Iceland.

The first two papers are dated in 2007. One is about PMOs in Icelandic companies and gives an overview of their characteristic features and if PMOs are a feasible setting in all kinds of organizations (Björnsdóttir, 2007). The results from that paper are compared with the results of this paper. At the time of the earlier research only 8 PMOs were found in Iceland. The other paper is about how training staff members is one of the key elements in a successful implementation of a PMO and how assessing the knowledge and experience of the staff member

can help for further work. A case study of a company in the technical field is provided (Sigurðardóttir, 2007).

In 2008 three theses emerged. The first one was about the benefits of initiating a PMO in the Major office of the city of Reykjavik. The suggestion was that it would lead to more transparency, organization and success and thus increase efficacy and quality in the work of the Major office and a better handling of public funds (Albertsson, 2008). The second paper was a thesis and a case study of a PMO in an IT company called "Skýrr". This paper describes the PMO of the company and does a benchmarking study (Arnarson, 2008). The third paper looks into the PMO as a dynamic, maturing and ever-changing phenomenon that adjusts to the operational need and core culture of the organization. A case is presented on how this knowledge can be applied for a successful implementation of a PMO in a company that specializes in financial services (Baldursdóttir, 2008).

One master thesis from 2009 deals with how the National Hospital of Iceland has opportunities of efficiency and quality of service through operating a PMO (Gunnarsdóttir & Berentsdóttir, 2009).

In 2010 a master thesis was delivered on the use of Scrum and Kanban in PMO in a phone service company called "Síminn" (Gestsson, 2010).

2.9 Discontinuity of PMOs

To be able to run a PMO successfully one has to be knowledgeable about the risks included in running them. It has to be clear what can cause a malfunction in them or in the organization as a whole. One also has to know how and why they fail if they do. This malfunction or failure often causes the termination of the PMOs. But how do you provide for this knowledge? To some extent one could argue that it is done by adhering to various suggestions by best practice literature and professional advice, like from Andersen and his colleges (Andersen et al., 2007, p. 103). Here we will however focus on a narrower view to be more precise about hindering PMO failure. To obtain a better view on this we have to look at what literature says about PMO failure and risk.

Below is a list of a few key reasons of PMO failure according to researchers and practitioners. Colours represent the author's view of similarities.

Table 2. Key reasons for PMO failure according to researchers and practitioners.

	Tennant (T)	Kendall & Rollins (KR)	Kerzner (K)	Duggal (D)
1	PMO looked on as a temporary fixture	No definition of value proposition	Addition of personnel to the successful PMO doesn't guarantee success	Unclear purpose
2	Executives fail to understand what PM is about and how it helps them	PMO not perceived as impacting project delivery abilities	Burnout because of strain between line managers and project managers	No buy-in
3	Methodologies too academic	PMO seen as threat, mostly as too authoritative	Excessive paperwork	Perception of more red tape bureaucracy and overhead
4	The organization has history of little accountability and lack of discipline for project managers…	PMO too low in the management reporting structure	Organizational restructuring. Could be power struggle for control in the PMO	Quick-fix to deep rooted problems
5	Some PMOs in IT org. created after Y2K. Still as crisis support.	PMO has no buy-in from senior functional managers	Trying to service everyone in the organization. Forgetting to establish criteria for involving PMO	PM policing
6	Missed opportunity when PMO is not used as a change agent for transforming organization's culture	Project Management Overhead – the bad acronym		Too academic and far from reality – professionalism and quality for its own sake
7		PMO is micromanaging		Veneer of participation and hidden agendas
8				Politics and power struggles
9				High expectations and fuzzy focus
10				Hard to prove value

David Tennant offered an observation on what he thinks are key reasons for PMO failure and made a list of six (Tennant, 2001). Kendall and Rollins say that to put it simple, "PMOs fail because they do not set out their mission as providing measurable value to their universe of costumers". The more detailed view is in the list above (Kendall, 2003, pp. 33–36). Kerzner gives five top reasons for PMO

failure (Kerzner, 2009, pp. 968–969). Duggal bases his list on a worldwide survey and listed 10 reasons for PMO failure (Duggal, 2006, p. 1).

Interesting is, that Aubrey and her colleges talk about the possible effect of economic downturn on PMOs when they say: "But when it comes to survival, cost control becomes a priority. This result is aligned with Pattigrew (2003) where structuring goes along with strategizing. In this sense, the present economic downturn could have possible impacts on business strategy and the number of projects undertaken by organizations and consequently, on project management structures such as PMOs (Aubry, Müller, Hobbs, & Blomquist, 2010, p. 775)."

3 RESEARCH PROJECT

3.1 Project description and objectives

The first objective of this research is to shed light on the status of PMOs in Icelandic organizations. For that purpose a closer look will be taken at the reasons for the establishment of all known PMOs in Iceland and what have been the benefits for their organizations, if any. The second objective is to discover the reasons for the shutdown of some PMOs in these Icelandic companies.

3.2 Research methodology

To be able to fulfil both objectives of the research one first has to find all PMOs in Icelandic companies. It was decided to run two lines of searches simultaneously.

The first line of search was to use the author's personal network in the Reykjavik University and to ask all the 60-70 MPM Program students for assistance. They were asked through an active social network site about possible names of companies with active or previously active PMOs which the author would then confirm by asking those companies. When some of the names started to come up again this resource was considered to be used up.

The second line of search of PMOs was done through web search. A few keywords were used, mostly in Icelandic, whereas most homepages of Icelandic companies are in Icelandic as well as a number of them presents themselves also in English to some extent. These keywords were: "verkefnastofa" which is Icelandic for PMO, "verkefnastofu" which is another declension of the first search word, "verkefnasvið" which is still another way some companies might present their PMO, "PMO & Reykjavik", "PMO & Iceland". For each of those searches 200 search items were looked through. Many of the same PMOs came up from these two methods, which gave the idea that these searches were covering most PMOs in Icelandic organizations.

Additionally, some of the interviewees were asked to point to PMOs they knew about. Only one more PMO was added to the list. In hindsight this method of populating the list of all active and non-active PMOs in Icelandic organizations was considered adequate to get a comprehensive list of Icelandic PMOs.

The first objective of the research was to shed light on the status of PMOs in Icelandic organizations and give answer to what have been the benefits of Project Management Offices in Iceland, if any? Therefore questionnaires were sent out to some key personnel of the existing PMOs. Some of the personnel of these PMOs were also interviewed to gain better understanding of their PMOs. The questionnaire was mainly built upon a previously done questionnaire from Anna M. Björnsdóttir's research about PMOs in Iceland which was done in 2007 (Björnsdóttir, 2007). Ideas of additional questions were taken from the reading of some of the papers cited in this paper. Five questions were about some of the PMOs' characteristics and status, the size of the organization, how many are working in the PMO, when established, where in organizational chart, and if it was founded on extensive stakeholder analysis in the beginning. These questions had a few options to answer and some of them had the option of not answering or claiming not to know the answer. One question was on the status of the person answering towards the PMO. Five questions were about how the person answering felt about certain issues answered on the scale 1 to 5 (Likert scale). These questions were about the support of the CEO and the head of a possible department in which the PMO was located, authority of the PMO, assessing the success of the PMO last 12 months. Two questions could also be answered on the scale from 1 to 5, about reasons for the establishment of the PMO and how they felt these reasons were realised. These 13 possible reasons were taken from the previously mentioned research on PMOs in Iceland (Björnsdóttir, 2007). In these

pair of questions it was also possible to deny to answer or to claim to not know the answer.

The second objective was to find out why some of the PMOs had been shut down. The same questionnaire was sent to the key personnel of the non-active PMOs as a basis. That was possible by editing the questionnaire so that it could be answered in both cases. In addition to sending the questionnaire, it was decided to interview 1-3 persons from each organization to get a better understanding of the characteristics of the PMO and try to find out why it was shut down. A more extensive questionnaire could have been used to attain more information on still more characteristics of the PMO to be able to answer the question why some are shut down, but they lack the intimacy and personal closeness that open interviews can have. Interviews were chosen as a method to deepen the understanding of each shut down PMO. The interviews were quite open with a loose structure. The reason for this was to better be able to grab the essence of the experience of the interviewees, what they felt was important in the history of the PMO, what was their feeling on why it was shut down.

The information from questionnaires and interviews were gathered in March and April 2012. A total of 29 questionnaires were sent out, and 25 of them (86%) were answered. Some of the participants answered when the author was in the same room but most were alone. The participants with the author present did almost never ask for assistance. To get a more detailed view on the fallen PMOs, 18 representatives were interviewed. Participation in the survey and interviews was anonymous.

4   RESEARCH RESULTS

4.1   Organizations with PMOs

In this research 13 active PMOs were identified in Icelandic organizations. Additionally 8 PMOs were identified, which had been shut down for some reasons. One organization had more than one PMO, but only one of them was followed up in this research. This means that 38% of the PMOs that had been established in Icelandic oraganizations had been shut down for some reasons. Then 12 of those 13 organizations gave their feedback in due time and are therefore included in the statistics.

Half of the organizations (or 6) with active PMOs were either in "Information Technology / Information Systems" or in "Other intangible products or services". Figure 2 shows how the organizations with PMOs are divided among the industries according to the research of A. M. Björnsdóttir on Icelandic organizations and Hobbs in his international study on PMOs (Björnsdóttir, 2007, p. 5; Hobbs & Aubry, 2010, p. 23). Only 2, or 17%, of the organizations with PMOs can be considered in the public sector; established in 2009 and 2010. The rest is private. This can be compared with Hobbs' research where 36% were public, 61% private and 3% Not-for-profit. No PMOs in the non-profit sector in Iceland have been established yet. But if we follow the international trend for PMOs, some more public and non-profit PMOs will be added to the scene in the future.
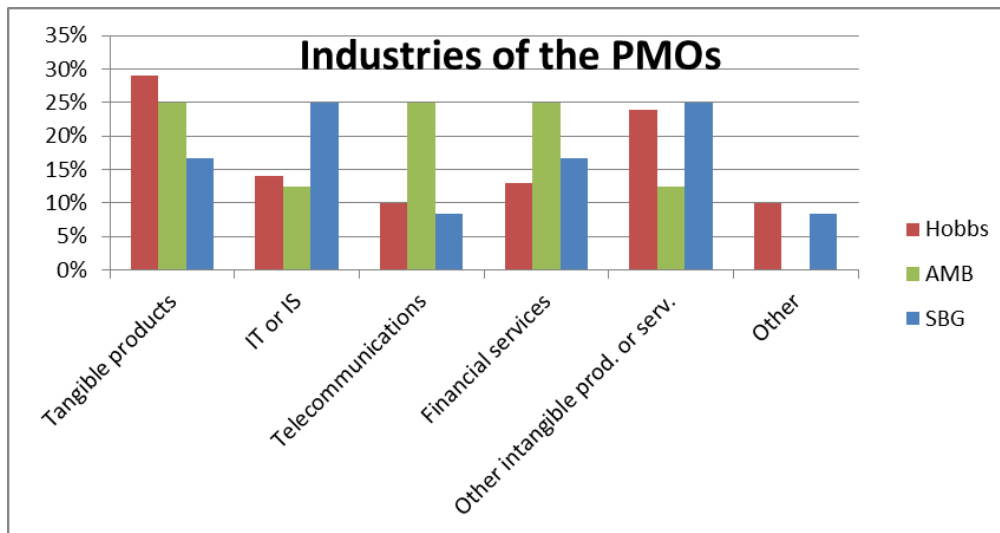
Figure 2. Industry sectors of the PMOs. Numbers from the research of Hobbs, Anna María Björnsdóttir and Sigurður Bjarni Gíslason (this research).

All but one organization, with active PMO had more than 100 staff members and only 17% had more than 1000 staff members compared to 64% internationally (Hobbs & Aubry, 2010, p. 23). Official numbers from 2005 tell us that around 2% of companies in Iceland have more than 100 staff members, so in Iceland the companies are generally small ("Number of wage payers by number of employees, regions and business sector 1998-2005," n.d.).

The staff number of the PMOs is not high; 8 PMOs (67%) had 5 or less in their PMO, 3 PMOs (25%) had 6-10 and 1 (8%) had 16-20.

Half of the active PMOs were older than 5 years old with the average age of around 5.5 years. The comparison research from 2007 showed a considerably younger age, or around 2 years judging from the context of the results text (Björnsdóttir, 2007, p. 4). Hobbs cites two independent researches from 2002 and 2005 that say that the average age of a PMO is 2 years (Hobbs & Aubry, 2010, p. 34). In Figure 3 the results of Hobbs' research and from this research is compared.
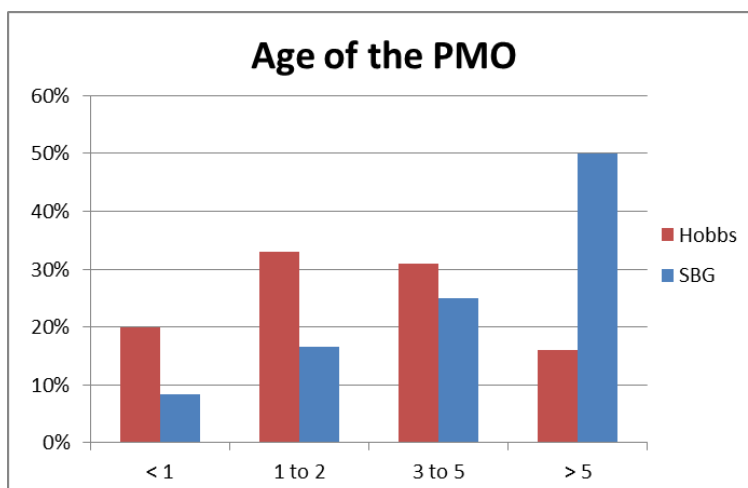

Figure 3. Age of the PMOs according to research of Hobbs, and the author of this paper, Sigurður Bjarni Gíslason (SBG)

Half of the active PMOs reported straight to the CEO of the organization and half report to a divisional manager, only one reported to lower levels.

4.2 Reasons for the establishment of PMOs in Iceland

Figure 4 displays results on why organizations with PMOs established them. On next page there are word explanations to the categories in the figures.

Figure 4. Results from expectations vs. experience from the 2012-research.

Figure 5. Comparison of expectations 2007 & 2012.

Expectations
Reasons for establishing PMO:

1 = Not a reason
2 = Little importance
3 = Medium importance
4 = Important reason
5 = Very important reason

Experience
Experience according to expectations

1 = Expectations not met at all
2 = Expectations not met
3 = Medium fulfilment of expectations
4 = Expectations met
5 = Expectations exceeded

Word explanation of roles of PMOs in the figures:

Costs: *Increasing the likelihood that cost plan in projects holds*
Time: *Increasing the likelihood that time plan in projects holds*
Quality: *Increasing the likelihood that quality requirements in projects hold*
Satisfaction: *Increase customer satisfaction*
Methodology: *Bank of knowledge of PM methodology*
Tools: *Bank of PM tool kit*
Lessons learned: *Bank of knowledge of lessons learned from projects*
Support: *Network of support for project managers*
Training: *Facilitate training environment for project managers*
Strategy: *Ensure consistency of projects with organization strategy*
Prioritize: *Prioritizing and choosing projects for execution*
Overview: *Provide an overview of on-going projects*
Profit: *Catalyst for increased performance and profit*

The reasons for establishing PMOs are listed in Table 3 in a falling order according to the self-assessment of those asked, along with the average score. The values can also be seen in Figure 4 (the blue dots):

Table 3. Reasons for establishing PMOs.

Quality (4.6)	Overview (4.3)	Lessons learned (3.6)	Support (3.2)
Time (4.5)	Profit (4.3)	Prioritize (3.5)	Assistance (3.1)
Satisfaction (4.3)	Costs (3.8)	Methodology and policy (3.3)	Training (2.8)

The PMO is expected to provide quality, time control and overview of the projects and project managers as well as satisfying customers and give the organizations profit. On the bottom part of the list are items that equip the project managers with on-going tools and methods of project management that can provide assistance on the long run. One respondent commented that the "lessons learned" role of the PMO was overrated in an unstable environment. This research indicates that this is held true for more people as can be seen in Figure 4.

In Figure 5 above a comparison with the 2007-research on expectations is shown. It is interesting to see that expectations towards the "iron triangle" of costs, time and quality in Figure 5 do not change much between the two researches. The same applies for customer satisfaction and the PMO's role of maintaining the tools of assistance for the projects. On the other hand; participants in the 2007 research expected much more from the PMO on being a support for the project managers and helping with prioritizing projects, as well as providing training for the project managers than they do now. More expectations to the PMO were also shown in 2007 to being a place for learning lessons from former projects and giving an overview of on-going projects.

4.3 Experience with PMOs in Iceland

Here a reflective question was asked about how the experience had been with these 13 items that first stated the reasons for establishment of the PMO. The average score for the experience of those items is listed in Table 4:

Table 4. Experience with earlier reasons for establishing PMOs.

Overview (4.2)	Time (3.9)	Support (3.6)	Methodology (3.5)
Quality (4.1)	Prioritize (3.7)	Training (3.6)	Assistance (3.4)
Satisfaction (4.0)	Profit (3.7)	Costs (3.5)	Lessons learned & Policy (3.2)

The experience with the PMOs is slightly worse now (average score: 3.7) than it was in earlier research (average score: 3.9), or with other words: did not fulfil expectations as much. Figure 7 shows this difference item by item.

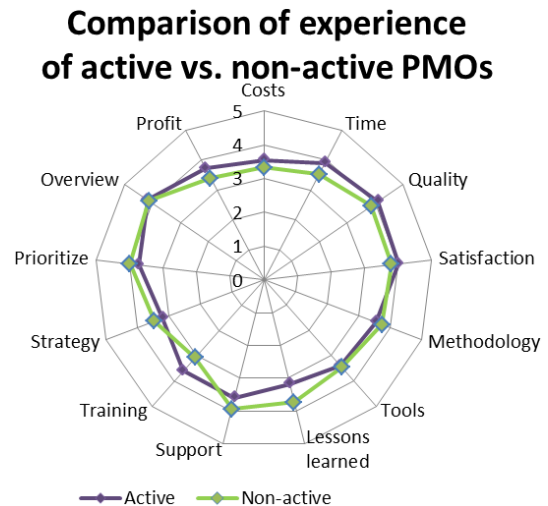**Figure 6. Comparison of experience 2007 & 2012.**

Figure 7. Comparison of experience of active and non-active PMOs.

Even though expectations were lower in 2012 (average score: 3.7) than in 2007 (average score: 4.1), experience is also scoring lower in 2012.

4.4 Reasons for shutting down some PMOs

In Figure 7 the results of comparing active and non-active PMOs can be seen. The sharpest difference seems to be in "lessons learned" where non-active PMO representatives generally had better experience with it than active PMO representatives. The second most difference seems to be in training where non-active PMO representatives generally had worse experience with it than active PMO representatives. Other than that, the difference seems to be ignorable.

Multiple interviews were taken with representatives from the PMOs that were shut down, as well as using the same questionnaire as earlier. Below are some excerpts of interest where the author has bolded the most important parts in his opinion.

One of the organizations in production **had shut down their PMO due to their need for specialization**. The PMO was mainly running the projects before that and not just providing support and service for those running them in the departments. The project managers inside the office were divided among the few product departments. The projects were mostly buyer based; the projects were started if the buyer wanted to start. Project prioritizing, and picking projects according to the organization's policy was never the PMO's responsibility.

A financial service provider's representative was asked how they **demonstrated the worth of the PMO** to the upper management? „When the sponsor was satisfied with what he was getting, then no need was for justifying the existence of the PMO, you just had the support. The only way to run the organization was with standardized methodology, which the PMO offered." The financial crisis broke the organization eventually. When asked for other reasons than the financial crisis, for the termination for the PMO, the following answer came: "**Money flow to the PMO was considerably lowered in January 2008**. The projects shrank at warp speed because the needs changed. Then everything turned around holding the organization alive.

One CEO in a communication technology organization described how he opened the organization up with an effective PMO and demystified the running of projects which often had been strangely protected by the project managers, assuming the more information withheld from others, the more power they had. Everyone in the organization then had the right and opportunity to bring up a

project idea and get a hearing from the administrational board after help from the PMO to prepare the case. This CEO was clear on that the each organization with a PMO had to have 100% support from the upper management to continue to exist, and even more so if the PMO was in the highest rank in the organizational chart. **Shortly after his resign the organizational chart was changed and the PMO was shut down.** When a staff member of the PMO was asked what could have caused the shutting down of the PMO, she said that in order for the PMO to survive, the support of the upper management needed to be clear, and a common vision had to be on how it should be. This idea has to be "sold" and a joint understanding ensured.

"**Changes in the upper management of one financial service organization were frequent** and one had to hold the same "sale's speech" to each of them. Interest and support was never certain and sometimes little. After some time and some organizational mergers, this PMO, that didn't use the name of a PMO, became less and less a PMO, but more of an oversized marketing department, but then got the name of a PMO." On the same PMO a comment came from another staff member: "**Supervisor's understanding for the role of the PMO could have been more, it was there but could have been more holistic – it was getting there!** There could also have been more professional knowledge on project management among us."

One PMO in a financial service organization, by many assessed as being the most developed and mature PMO of them all at that time, was also shut down. It had a staff of about 20 when it was the biggest. Early in 2008 four people had to be resigned and in May the same year a total clearing had to be done. This was all because of shortage of funds. The head of the PMO said that this was perhaps the time when the organization needed most the PMO but did shut it down. **There was a new board that didn't see the worth of the PMO so they didn't spare it in the cuts that had to be done. Nothing in the survey pointed out that this PMO could not have survived for its own worth; 9 of 13 items asked about were according to or exceeding expectations.** The other 4 items scored slightly lower.

A CEO of an organization that provides software said that at a certain time **suddenly outdoor projects got smaller** and they started to concentrate more on selling products and body shopping to survive. **Then the PMO was shut down. He added that not many regretted it**. Roles that formerly were inside the PMO now were in various departments, e.g. Resource Manager.

Interestingly some of the respondents pointed out the sudden withdrawal of funds and the abrupt downsizing of projects as a major cause for the termination of the PMOs. This comes quite close to the citation of Aubry and her colleges on the possible effect of economic downturn in chapter 2.9 in this paper. They pointed out that organizations then go into survival mode and cost control becomes a priority.

More than once did the respondents mention the lacking support of the upper management when a supportive CEO left or when there was a dramatic change in the board, or when worth could not be proven. This is in line with Table 2 where the buy-in and support is underlined as a critical success factor for the thriving PMO. It also touches on the orange boxes in the same table; it is hard to show worth and as one of the blue boxes show – PMO can be looked at as the unnecessary overhead if not proven or shown otherwise.

The interviews didn't show any signs that the PMO was being established as a quick fix for problems (red boxes). Neither were the methodologies too academic (light green boxes), most of the time the respondents even mentioned that they had simplified methodologies at the start to better fulfil their needs.

5   CONCLUSIONS

To the knowledge of the author no other paper has been written in English on Icelandic PMOs. The author hopes it has been a medium of some value to uncover the scene of PMOs in Iceland and give insight into the catalytic effect of an economic downturn on the PMO as an organizational entity.

As elsewhere, there is much variety in the preferred form and roles of PMOs in Icelandic organizations. They are run in all major industry sectors.

The average age of a PMO in Iceland is 5.5 years, compared to 2 years in most other researches. A few PMOs that made it through the financial crisis make up for the high age, and not so many were started after that. The author believes that the average age will go down again by more PMOs starting off and continuous change of need in a volatile environment.

The best experienced benefits of having a PMO were providing quality, time control and overview for the projects as well as satisfying customers and make the organization profitable. These points all seem to be selling-orientated where value is proven quite fast with each successful project.

There is no obvious difference between the active and non-active PMO in terms of their experience with the 13 listed reasons on why they were established.

Expectations towards the positive effects of running a PMO in Iceland have become more realistic in the last 5 years. Perhaps this is understandable, whereas most of the PMOs in the earlier research were only about 1-2 years old and were established in a time of a "financial bubble" when most expectation indexes stayed high in the economy of Iceland.

The harsh economic downturn had a dramatic negative effect on the PMOs and played a catalytic role in shutting them down.

Support of upper management is crucial for the PMO to thrive. This may sound obvious, but often the representatives of PMOs fail to prove their worth to upper management, and need to be more aware of the political aspect of their existence.

This research has emphasized on gaining overview of Icelandic PMOs and uncovers expectations and experience with the different roles of PMOs and compares the results with earlier research. No emphasis has been put on mapping the maturity level of the PMOs in the Icelandic organizations by the PMO maturity model. This remains as a suggestion for further study.

Another recommendation of further research is to find a good way to measure the worth of the PMO and suggest a good way to convey that to upper management to support the PMO's existence.

6   ACKNOWLEDGEMENT

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