



**CONTINUOUS IMPROVEMENT PROJECTS
IN CERTIFIED ORGANIZATIONS IN ICELAND:
TRADITIONAL PROJECTS OR NOT?**

Sigríður Jónsdóttir

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Supervisor:

Dr. Helgi Þór Ingason.
Associate Professor, Reykjavík University, Iceland

CONTINUOUS IMPROVEMENT PROJECTS IN CERTIFIED ORGANIZATIONS IN ICELAND: TRADITIONAL PROJECTS OR NOT?

Sigríður Jónsdóttir¹
University of Reykjavík²

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ABSTRACT

Globalization, new technology and competition make today's surroundings ever changing for organizations and customers' needs and wants change rapidly making customer retention and market shares an uphill battle. Benchmarking organizations place importance on continuous improvement and systematic approach to projects. There is an interest amongst Icelandic organizations to become certified according to the ISO 9001 standard. The standard is based on quality management principles, such as a customer focus, process approach, and continual improvement. In order for actions taken to continually improve the organization there has to be some kind of objectives and performance measures in place. This paper analyses how certified organizations support continuous improvement by studying what kind of process is in place to support continuous improvement; whether continuous improvement is handled like a formal project; who is responsible for carrying out continuous improvement projects; and which project management tools are mainly used for these projects.

Keywords: Continuous Improvement, Iceland, ISO 9001, Performance Measures, Project Management Tools, Quality Management Systems.

¹ Sigríður Jónsdóttir

² University of Reykjavík, Graduate School of Science and Engineering, Reykjavík Iceland, siggaiceland@gmail.com

1. INTRODUCTION

Globalization, new technology and competition make today's surroundings ever changing for organizations. Customers' needs and wants change rapidly making customer retention and market shares an uphill battle.

Organizations have realized that improving the quality of their products and/or services is important as customers standards of satisfaction are ever increasing (Reid, 2006).

A trait of benchmarking organizations is that they emphasize the importance of continuous improvement (CI) projects and a systematic approach of projects is put in place to achieve this (Gunnarsdóttir & Ingason, 2007). There is an increased interest amongst organizations in Iceland to become certified according to the ISO 9001 standard. "The standard is based on a number of quality management principles, such as a strong customer focus, the motivation and implication of top management, the process approach and continual improvement" (ISO, 2008).

As a Head of Quality Control in a certified company for the past 5 years, the author of this paper found it interesting to examine certified companies in Iceland. The subject of this research is to study what kind of process is in place to support CI in ISO9001 certified companies and who is responsible for implementing CI projects.

Classification of CI projects in this study is based on the ISO 9001 standard which asserts that projects related to the organization's way of continuously improving are related to the quality policy, quality objectives, outcome of audits, data analysis, preventive and corrective actions, and management review. Other general projects are described as any other internal projects such as software-, innovative-, and development projects.

The main research questions in this study are:

- Are actions supporting CI of certified organizations handled as projects?
- If so, in what way?

It will be interesting to discover if objectives are defined and performance measures are employed for CI projects within Icelandic organizations. A research into which project management tools certified organizations in Iceland use for their CI has not been done before. There will be a comparison of whether the same tools are used for CI projects and other general projects of the respondents' organizations.

2. LITERATURE REVIEW

“Total quality management (TQM) is the integration of all functions and processes within an organization in order to achieve continuous improvement of the quality of goods and services. The ultimate goal is customer satisfaction” (Ross, 1994).

Continuous improvement philosophy is that whatever success an organization may previously have had regarding customer satisfaction, it has not reached its desired state as customer’s needs and wants are constantly changing. What drives the organization’s constant search for improvement is competition and ever increasing standards of customer satisfaction (Reid, 2006).

There are many Quality Management Systems (QMS) the organizations can choose to implement: Benchmarking; Just-In-Time; Lean Six Sigma; Balanced Scorecard; and ISO 9001, just to name a few. What really matters is that the top-level managers believe that the QMS chosen is the best fit for their organization. Organizations that consider their quality program as successful say that their organizational culture supports both continuous improvement and learning (Oliver, 2009). A trait of benchmarking organizations is that they emphasize the importance of CI projects and a systematic approach of projects is put in place to achieve this (Gunnarsdóttir & Ingason, 2007). Organizations tend to view quality as a continuously improving process rather than a static product and, therefore, develop quality improvement processes. ISO 9000 is a never-ending cycle of planning, controlling, and documentation (Kerzner, 2009).

More than one million organizations use the ISO 9001 QMS (Ollila, 2012). This QMS is based on quality management principles such as a customer focus and continual improvement (ISO, 2008). ISO 9001 QMS encourages organizations to take on management responsibility, resource management, product realization, and measurements, analysis and improvements, as an on-going continuous improvement process where customer requirements and satisfaction is the focus. Figure 1 shows a continuous improvement process of QMS.

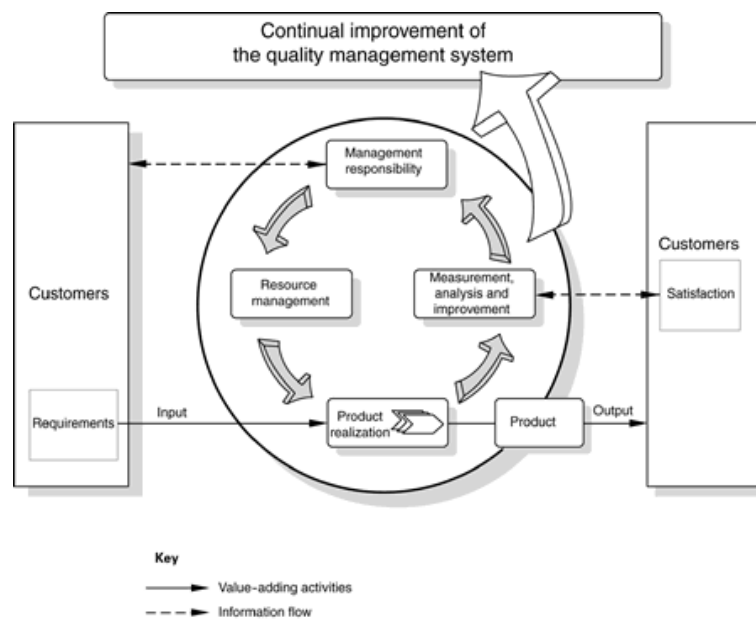


Figure 1 – ISO 9001: Model of a process based quality management system

In Iceland there are two organizations that are internationally accredited bodies; Vottun hf and BSI á Íslandi. By March 2012 they had certified 59

organizations operating in Iceland compared to 53 organizations in 2011 (Hróbjartsson, 2012). The increase of certified organizations in Iceland from 2011 to 2012 is 10%.

Research shows that the main drive of organizations regarding certification is both customer requirements and the organizations' own interest in improving their competitiveness (Gunnlaugsdóttir, 2010). It is tempting to say that an organization with a QMS is more likely to control operating cost and, therefore, do better financially than organizations without an effective QMS. An Icelandic study shows that organizations with ISO 9001 certification have higher gross profit margin than companies without certification within the same sector and within the same category, both smaller or larger companies (Hróbjartsson, 2012). However, another study shows that this is not the case. Dick, Heras, & Casadesús (2008) concluded that certified organizations were already showing more profitability than their competitors within the same sector before certification. On the other hand, standardization of processes has a positive and significant effect on operational performance as shown by Feng and colleagues (Feng, Terziovski, & Samson, 2008) and certified organizations operate with more standardized processes than non-certified organizations (Hallgrímsdóttir & Karlsdóttir, 2007).

For any organization, which is certified according to the ISO 9001 quality standard, it is important that continuous improvement (CI) is a steady and on-going process because it is one of the fundamental approaches to an effective QMS. The head of quality control (HQC) of any certified company is usually the person appointed by top management to ensure there are effective processes in place for the QMS, i.e. that CI is a steady and ongoing process and the awareness of customer requirements is present throughout the organization. HQC reports to the top management regarding the QMS performance (Icelandic Standards, 2008). CI requires that the organizations measure customer satisfaction, carry out internal audits, measure processes and product(s), and identify and eliminate non-conformities. Organizations have to bear in mind that even if they are certified that certification does not automatically ensure CI of processes or products (Icelandic Standards, 2011). Therefore, certified organizations have to be aware that standardizing processes does not mean that there is a status quo: constant re-evaluation has to take place to meet customers' needs and wants.

The ISO 9001 standard states that the organization shall continually improve the effectiveness of the QMS through the use of quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review (Icelandic Standards, 2008). What the standard does not describe is how to manage the CI projects which are the output of the CI processes. The standard requires that an organization keeps records of the results of all preventive and corrective actions and review the effectiveness of the actions taken whilst continually improving the effectiveness of the QMS (Icelandic Standards, 2008) but the main problems internal auditors of certified organizations face are related to CI and measurements (Gunnlaugsdóttir, 2010). Ollila (2012) speculates that the problem lies with the auditors themselves. Internal auditors carry out very few audits annually which make them nearly incompetent. He also suggests that top and middle management lack the necessary skills for understanding and implementing results gathered from the QMS.

How can HQC ensure and facilitate CI within certified organizations? One way could be to ensure that all CI is carried out using formal project management (PM) practices. For a project to be efficient and effective a project manager must have defined the deliverables of the project and has to review and regulate how the project is progressing against the objectives of the project (Project Management Institute, 2009).

“A project is a time and cost-constrained operation to realize a set of defined deliverables that are up to the quality standards and requirements” (Caupin et al., 2006, p. 128). PM methods can differ as well as the tools used to manage it all depending on the type of project. Not all projects are of the same type and not all projects can be classified as such. Ingason and Jónasson (2011, p. 29) suggest using a model, based partly on an unpublished concept put forward by Morten Fangel in his lecture notes, to distinguish between a project and a routine task by discerning its features, see table 1. Each statement is given a grade from 1 to 10 and a total sum is calculated to discern if the subject is a project or not. If the total outcome is 60 or higher there is a strong possibility that this is a project and PM methods need to be used.

Table 1 – Model for distinguishing between projects and routine tasks

Limitations		
There is ample time		There are time constraints
Subject is repetitive		Subject is unique
Not all phases are within the timeframe from start to finish		All phases will happen within the timeframe from start to finish
Execution		
Organizations processes are sufficient for handling this		Specific and appropriate processes are required
Participants have a similar background		Participants have a different background
All necessary knowledge is in one place		Extensive co-operation needed
Environment		
There is a low risk and predictability is high		There are multiple types of risk and/or opportunities
Will lead to minimal changes		Will lead to extensive changes
Environment has little effect on the results		Results very much affected by the environment
Those involved will be few and known		Many will be involved and not all known
1	2	3
4	5	6
7	8	9
10		

A project plan must be developed to document the actions necessary to define, prepare, integrate and coordinate all subsidiary plans. This plan contains all necessary information as to how the project will be planned, executed, monitored, controlled, and closed. The project manager reviews the progress systematically to meet the objectives defined in the PM plan (Project Management Institute, 2009). Kerzner (2009) states that each project must have at least one objective which is known to all project personnel and managers. The objective is a goal, target, or a quota, that is to be achieved by a certain time. A study by Papke-Shields, Beise and Quan (2010) provides empirical support for the supposition that using formal PM practices will increase project success. However, not all organizations realize the benefits of formal PM practice. According to Meredith and Mantel (2009) some organizations find it far easier to focus on doing rather than planning and controlling because it appears to be more effective and that, as a result, many suffer a great expense and major losses as the planning process was insufficient. “Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements” (Project Management Institute, 2009, p. 6).

PM tools are different, depending on the stage of the project, planning stage, execution, monitoring, and controlling, or closing. PM tools are numerous and the list of tools is continually expanding. Pétursdóttir (2012) asked project managers within Icelandic organizations which PM tools they mainly used. The top five tools were: start-up meeting, closing of a project, SharePoint website, definition of scope, and Gantt for the WBS.

3. RESEARCH PROJECT

3.1 Project description and objectives

The aim of this study is to discover what kind of processes are in place to support CI in ISO9001 certified organizations, in which way their quality vision is attained, and who is responsible for implementing CI projects. The objective is to investigate if organizations take on CI as any other project within the company and if they use the PM tools Icelandic companies have chosen as the most popular ones to attain their set of objectives and goals to evaluate CI projects. To see how seriously companies facilitate CI, questions are asked, such as whether the company's yearly budget includes cost regarding the CI projects, or if this kind of project is meant to be dealt with without any cost other than cost of staff involved. The objective is also to look at what training Heads of Quality have with regard to PM.

3.2 Research methodology

When preparing for this study the first step was to gather a list of all ISO 9001 certified organizations operating in Iceland. As stated previously there are only two Icelandic organizations: Vottun hf and BSI in Iceland that are internationally accredited bodies. Information was used from the website of Vottun hf and BSI in Iceland kindly provided in an email a list of their customers. A total of 59 organizations, which operate in Iceland, have been certified according to the ISO 9001 quality standard. Three organizations were excluded from this study as their operations were not registered in the Business Directory of the Directorate of Internal Revenue (2013). A list of organizations that received the web survey and the organizations excluded from this study can be found in an appendix A.

The method chosen to study the CI processes and how companies attain their CI was a web survey. The information sought could also have been gathered with quantitative interviews but the results would have been based on a sample of a few organizations and only given an indication of the information sought. The benefits of doing a web survey for this study is that it's an easy way of reaching the participants as almost all of the organizations' websites supplied the email of the Heads of Quality and those who didn't, supplied the email with one phone call to them. The questionnaire took a few minutes to answer and this method offers quick results. An important reason for choosing this method was also that the survey reached all certified companies and the results, if reaching a sufficient ratio of responses, would, therefore, represent the whole population. The questionnaire was reviewed by Dr. Helgi Þór Ingason who gave helpful hints to make the survey more approachable for the respondents.

A web survey with 19 questions was sent to the organization's quality representative, usually the HQM of these 59 organizations, and a reminder was sent twice to increase the response ratio. A copy of the questionnaire is in appendix B. The survey's timespan was March 27th to April 12th with both dates inclusive. A number of 44 organizations responded in total but 43 respondents answered the questionnaire giving the total of a 73% response rate.

More than half of the questions in the survey required yes or no answers; some required an affirmation if a selection of PM tools were being used; and others required the respondent to give a detailed answer. The selection of PM tools was based on the most popular tools chosen by project managers of Icelandic organizations (Pétursdóttir, 2012). A total of six questions were asked with regard to the background of the respondent.

4. RESEARCH RESULTS

The research results are based on 43 answers from the respondents of organizations with ISO 9001 certification.

4.1 Descriptive statistics of the respondents

A classification of the economic activities in the European community was used in the questionnaire (Eurostat, 2008). A comparison was made to see if the results were skewed by too many respondents answering from one sector compared to the ratio of certified organizations that received the questionnaire in total from the same sector. The ratio of the respondents seems similar.

Table 2 - Classification of economic activities of participants in the survey

NACE; Statistical classification of economic activities in the European Community	Population	Respondents
Administrative and support service activities	1	1
Construction	4	3
Education	3	2
Electricity, gas, steam and air conditioning supply	3	2
Human health and social work activities	1	1
Information and communication	3	3
Manufacturing	11	7
Professional, scientific and technical activities	20	14
Public administration and defense: compulsory social security	2	2
Transportation and storage	5	4
Water supply: sewerage, waste management and remediation activities	2	1
Wholesale and retail trade: repair of motor vehicles and motorcycles	4	3
Total	59	43

Almost half of the respondents' organizations have been certified for six years or longer.

Table 3 – Years as a certified organization

	Results in %
2 years or less	27%
3 to 5 years	24%
6 to 10 years	30%
11 years or more	19%
Total	100%

75% of respondents have been in their present position within the organization for six years or longer.

Table 4 - Years in present position within the organization

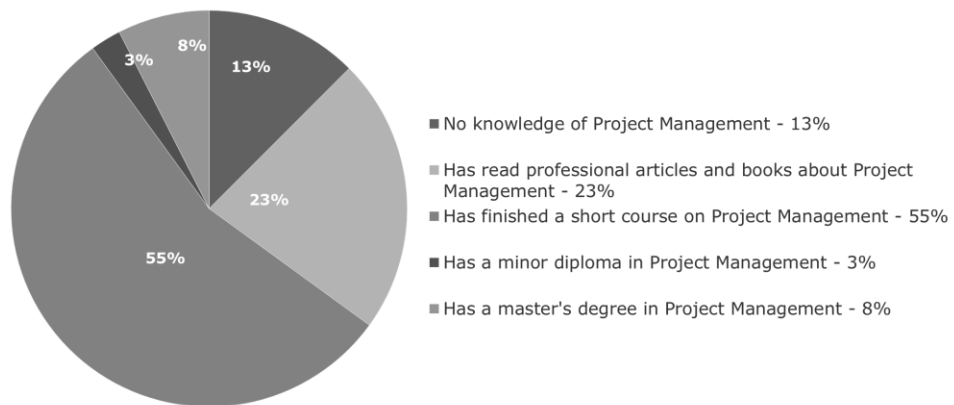
	Results in %
5 years or less	25%
6 - 10 years	35%
11 - 15 years	23%
16 years or longer	17%
Total	100%

More than 90% of the respondents had finished a university degree.

Table 5 - Education of respondents

	Results in %
Matriculation exam	7%
BA/BS degree	37%
MA/MS degree	53%
Ph.D. degree	3%
Total	100%

More than half had finished a short course in PM but 13% responded that they had no knowledge of PM.



Picture 1 - Respondents knowledge of Project Management

4.2 Responsibility, process description, financing, and objectives regarding CI

Responsibility

When asked if their role is to ensure the implementation of all CI projects, 83% of respondents answered yes. The rest answered no and stated it was the project managers' or heads of departments' role and one respondent answered that it was a shared responsibility between him and the company's director's.

Processes

Questions were asked regarding the process description of projects, both CI and other general projects. The intention was to see if there was a formal process in place regarding general PM and if CI projects were handled through the general PM processes. Almost all respondents or 95% have a formal PM process written in the

organization's Quality Manual. More than half, or 60% of respondents, do not use the formal general PM process for CI projects.

Financing

The intention was to see how seriously organizations take the CI projects and a question was asked regarding the financing of these projects. Respondents were able to choose more than one possibility. Results show that just over half of the organizations do not expect CI projects to carry any cost additional to the time and effort of the staff involved.

Table 6 - How are CI projects financed?

	Results in %
They are on the organization's annual budget	37%
They are financed with additional funding if needed	40%
They shouldn't cost more than time and effort of staff involved	51%
They are financed by other means	5%

Objectives of CI projects

Just over half of the respondents, or 54%, say that the organization requires the definition of objectives for CI projects.

Respondents were asked to choose which of the following performance measures were in place: time related, cost related, quality of the defined product/output, or any other type of measurements. A possibility was given to answer if more than one objective was used. Very few respondents used other kinds of objectives, but those who did, mentioned using subjective ones, the assessment of an independent auditor or requirements of contractors.

Table 7 - Which performance measures are used for CI projects?

	For CI projects: Number of responses
Time related	21
Cost related	14
Quality of defined product/output	17
Other types of objectives	0

Only 26% of those who do use performance measures say they use the same for CI projects and other general projects. Respondents were asked what kind of performance measures they used if they were different than the ones used for CI projects.

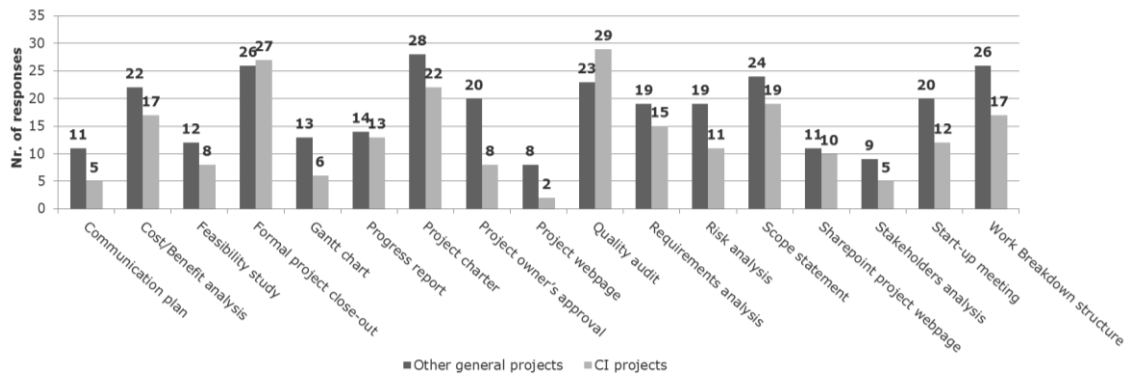
Table 8 - Which performance measures are used for other general projects?

	For other general projects: Number of responses
Time related	8
Cost related	11
Quality of defined product/output	9
Other types of objectives	6

The results show that for CI projects the time related performance measures are most often used but in other general projects, cost related ones are most often used.

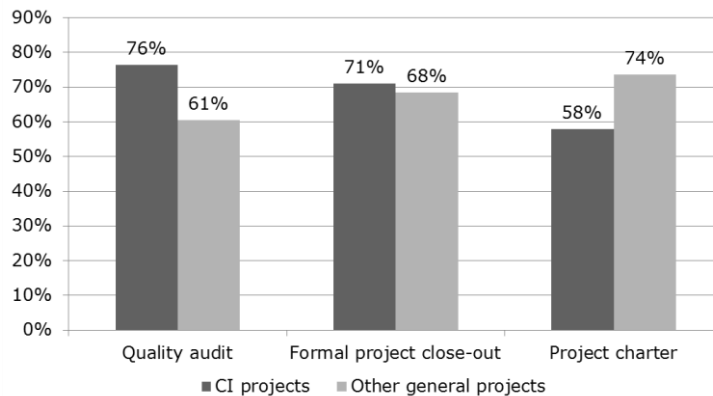
4.3 Project management tools

Respondents were asked to respond to which tools they used regarding PM of CI projects and other general projects. A selection of 17 tools was used in the survey based on the most popular PM tools of organizations in Iceland (Pétursdóttir, 2012). Participants' responses (38 responded in total to this question) regarding the tools used are as follows:



Picture 2 – Project management tools used for CI projects and other general projects

The three most popular PM tools for the CI projects, based on the responses to the question above, with comparison to other general projects, are:



Picture 3 - Top three PM tools used in CI projects

5. DISCUSSION

There is still an interest amongst Icelandic organizations to use the certified ISO 9001 standard as a basis for their QMS. Reasons for this interest may vary but the main one seems to be the organizations' interest in CI to strengthen their position in regard to customers and competition. Certification leads to the standardizations of processes, which is an effective method of trying to ensure the same quality regardless of who is performing the described task, or action, within the organization. Almost all of the respondents, or 95%, have a process description in the organization's Quality Manual that describes how to choose, prepare, and carry out projects. This leads to a speculation regarding the remaining 5% or 2 organizations. If the process of formal projects is not described in the Quality Manual the results must depend each and every time on the person acting as project manager.

Certain actions are required to ensure CI within the organization and HQC is normally appointed as the person responsible by top management. Internal audits are one of the many actions required to review the effectiveness of the ISO 9001 QMS and the outcome can result in CI projects. Echoing the previous discussion of internal auditors' competencies, or lack thereof, it could also be a contributing factor that some of the CI identified through internal audits isn't necessarily best practice and it's possible that it is the HQC decision not to carry these out. This could be the reason that 60% of respondents do not use a formal PM process for CI projects.

However, it could also be the case that the HQMs do not realize the benefits of formal PM practice, as they might not have sufficient knowledge or understanding of PM methods. More than 80% of respondents are responsible for their organization's CI projects and a third of respondents have little or no knowledge of PM. It is possible that a HQM finds it far easier to focus on doing rather than planning for the project, as it may seem more effective in the short run.

The reason could also be that not all activities identified as the outcome of an organization's CI process should be classified as projects that need formal PM methods. They might be just-do-it actions, which could explain responses regarding the financing of CI projects where just over half of the respondents said that the expected cost is mainly the time and effort of staff involved. A simple tool for HQC to discern if a CI action should be handled as a project with formal PM methods, or a routine task, is Ingason's and Jónasson's model. See table 1 (Ingason & Jónasson, 2011).

When asked to give a detailed description of the PM tools used for CI projects the respondents most commonly use the following: quality audit, formal project close-out, and project charter. There is much more emphasis on the quality audit than, for example, stakeholders' analysis and communication plan, as seen in picture 2. This might suggest a lack of knowledge regarding PM amongst HQC since there is not much emphasis on identifying who is affected by the performance or completion of the project (stakeholders' analysis) and how information should flow between the stakeholders of the project (communication plan).

It is puzzling why only just over half of the respondents say they define some kind of objectives and establish performance measurements for CI projects. If a project or an action has been approved as beneficial for the CI of the organization, one would expect there to be some kind of review of the objective against the performance and results. It is possible that the respondents interpreted the answer to the question regarding objectives as being one that required a numerical metric instead of a qualitative measure, e.g. "completed/not completed".

6. CONCLUSIONS

Actions supporting CI of certified organizations are not all handled as formal projects. Most CI projects are not expected to cost anything more than the time and labor of the employees who manage these projects and carry them out. Most popular PM tools used for CI projects are quality audit, formal project close-out, and project charter. It is possible that the types of CI projects are such that external resources are not needed. Part of the CI projects could be "just do it" actions and no need to use formal PM. It would be interesting to investigate further why a formal process and PM tool for general projects is not used for all CI projects. A further study could research more systematically what are the definitions of CI projects within certified organizations. It might also be interesting to explore how the respondents measure the success of a project if an objective is not defined. In

this context it could have been pertinent to ask if the organizations used any other QMS such as Lean Six Sigma, Balanced Scorecard, or EFQM to see if there was any correlation to respondents that employ performance measures and supplement their ISO 9001 QMS with another type of QMS.

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APPENDIX A

List of certified organizations that received the web survey:

Advania hf.
Almenna verkfræðistofan hf.
Ask Arkitektar ehf.
Batterið-arkitektar ehf.
BM Vallá ehf.
Borgarplast hf.
Brimborg ehf.
Capacent ehf.
Distica hf.
Efla hf
Framkvæmdasýsla ríkisins
Frumherji hf. – Orkusvið
Gagnaveita Reykjavíkur ehf.
Geislavarnir ríkisins
GT Tækni ehf
Hamar
Héðinn hf.
Hnit hf
Höldur ehf. Bílaleiga Akureyrar
HRV ehf
ÍAV hf
IGS ehf.
ISAVIA ohf. Flugleiðsögusvið
Íslandspóstur hf
Íslenska Gámafélagið ehf
Jarðboranir hf
Kópavogsbær, Stjórnsýslusvið
Landsnet hf.
Landspítalinn v/Blóðbankinn
Landsvirkjun
Lýsi hf
Malbikunarstöðin Höfði
Mannvit hf
Menntaskólinn í Kópavogi
Mjólkursamsalan ehf. Akureyri
Norðurál Grundartangi
Norðurorka hf.
Olíudreifing hf.
Össur hf
Parlogis ehf.
Plastprent ehf.
Póstmiðstöðin ehf
Raftákn ehf.
Reykjavík Geothermal ehf
Samey hf
Set ehf.
Siglingastofnun Íslands
Slysavarnarskóli sjómanna, Skólaskipið Sæbjörg
Sorpa bs.
Stiki ehf
Strendingur ehf.
Tækniskólinn ehf.
Teiknistofan Tröð ehf.

Veðurstofa Íslands
Verkfræðistofa Jóhanns Indriðasonar ehf. VJI Consulting
Verkís hf
Vífílfell
VSB verkfræðistofa ehf.
VSÓ ráðgjöf ehf.

List of excluded organizations:

Landsvirkjun Power ehf.
Malbikunarstöð Hlaðbær-Colas
Set Pipes GmbH (Germany)

APPENDIX B

List of questions asked in the survey

Q1: Is there a process description on how to choose, prepare and carry out projects in the organizations Quality Manual?

- Yes
- No

Q2: Does the same process apply for CI projects?

- Yes
- No

Q3: How are CI projects financed?

- They are on the organization's annual budget
- They are financed with additional funding if needed
- They shouldn't cost more than time and effort of staff involved
- They are financed by other means. If so please elaborate

Q4: Does the organization require the definition of objectives for CI projects?

- Yes
- No

Q5: If the answer to Question 4 was yes, please choose the performance measures used

- Time related
- Cost related
- Quality of defined product/output
- Other types of objectives, please elaborate

Q6: Does the organization use the same types of performance measures for CI projects and other general projects?

- Yes
- No
- Sometimes
- Don't know

Q7: If the answer to Question 6 was no, please choose the performance measures used

- Time related
- Cost related
- Quality of defined product/output
- Other types of objectives, please elaborate

Q8: My role is to ensure that CI projects are carried out

- Yes
- No

Q9: Does the organizations Project Portfolio or a similar list contain an overview of all CI projects?

Q10: Below is a selection of PM tools. Please select which tools are used for CI projects and which tools are used for other general projects.

- Communication plan
- Cost/Benefit analysis
- Feasibility study
- Formal project close-out

- Gantt chart
- Progress report
- Project charter
- Project owner's approval
- Project webpage
- Quality audit
- Requirements analysis
- Risk analysis
- Scope statement
- Sharepoint project webpage
- Stakeholders
- Start-up meeting
- Work Breakdown structure

Q11: Which year was your organization certified?

Q12: Is there any other information regarding CI projects you would like to offer?

- Yes, if so please elaborate
- No

Q13: Please indicate your age

- 35 years or younger
- 36 – 59 years old
- 60 years or older

Q14: Are you male or female?

- Male
- Female

Q15: Please indicate your level of education

- A level
- BA/BS degree
- MA/MS degree
- Ph.D. degree

Q16: Please indicate your knowledge regarding project management

- No knowledge of Project Management
- Have read professional articles and books about Project Management
- Have finished a short course on Project Management
- Have a minor diploma in Project Management
- Have a master's degree in Project Management (MPM)

Q17: How many years have you been in the present position within the organization?

- 5 years or less
- 6 - 10 years
- 11 - 15 years
- 16 years or longer

Q18: How many are employed at your organization?

- Fewer than 10 people
- 10 – 50 people
- 51 – 100 people
- 101 – 200 people
- 201 – 500 people
- More than 500 people

Q19: Please indicate the organization's classification of the economic activities

- Administrative and support service activities
- Construction
- Education
- Electricity, gas, steam and air conditioning supply
- Human health and social work activities
- Information and communication
- Manufacturing
- Professional, scientific and technical activities
- Public administration and defence: compulsory social security
- Transportation and storage
- Water supply: sewerage, waste management and remediation activities
- Wholesale and retail trade: repair of motor vehicles and motorcycles