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COBIT 5 for the non-profit sector -- Examining the contextual suitability

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COBIT 5 for the non-profit sector – Examining the contextual suitability

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This paper is an exploratory case study, that attempts to partially answer, to what degree is the COBIT 5 framework suitable for a non-profit organisation (NPO) while providing a number of tools, usable by the organisation in making the decision of the frameworks compatibility with the organisation's inner workings. The management and governance is becoming one of the most essential activities for Non Profit Organisations. On the other hand the governance and management in NPOs tend to be more complex due to the nature of the sector. The usage of a framework can provide the organisations with guidance and help their boards or other strategical bodies to understand the organisation's current heading, what to expect from it and what needs to be done.

This study is focused on the main mechanism that COBIT employs in order to transform the different organisational stakeholder needs into its thirty-seven enabling processes – the Goals Cascade. The work is based on a generic NPO model created based on a number of evaluated secondary sources and an evaluation and design based on a representative of the sector and a partner of this project – the Czech National Film Archive (NFA). As part of the project a number of tools was created including the Goals Cascade interactive tool, the dictionary of concepts and a list of prerequisites and their specificities for the NPO.

This study found-out that even though the examined COBIT 5 framework is not primarily targeted at the third sector, it is to a large degree compatible with the NPO context. The Goals Cascade is then relatively easily adaptable to the NPO frame of reference, the concepts used by the framework are used or usable by the NPO and while a number of contextual modifiers can make the implementation more challenging for a NPO, its flexible and localised nature of autonomy and management could facilitate a smaller scale, and therefore a less demanding implementation of COBIT 5.

Keywords: IT Governance, IT Management, NPO, Non-Profit, Nonprofit, Not-for-profit, Third Sector, COBIT 5

1 Introduction

The management and governance is becoming one of the most essential activities for Non Profit Organisations (NPOs alias Third sector). Currently, there are numerous challenges that NPOs face such as the diminished funding from traditional sources, increased need and requirements for accountability or the bigger focus on NPOs in the public eye, and effective governance is critical in order to face these issues (Deloitte CA, 2013, p. 5).

On the other hand, the governance and management in NPOs tend to be more complex due to the nature of the sector and the organisation can find itself in a state of hidden failure. In fact, as explained by Anheier (2005), the different and oftentimes contradictory organisational pieces can find themselves in a standoff situation without either part realising. Anheier (2005, p. 254) further notes that "truly successful nonprofit organisations require proactive management models".

The IT sector of many NPO organisations is more important than ever for their activities. In fact, Maseko and Marx (2016, p. 20) explain that IT is becoming critical for all aspects of the

organisational processes including the operation, support and organisational expansion, making IT governance and management a crucial strategic asset.

At the same time governance is challenging for organisations and especially for NPOs given their environ mental complexity. Anheier (2005) explains that NPOs are very complex, ambiguous and oftentimes semi unstructured organisations. They are composed of many interlocking sub-organisations or organisational components with a large amount of potentially conflicting stakeholders. This all without the external guidance by the market or the political system.

As explained by Maseko and Marx (2016), the usage of a framework can provide the organisations with guidance and help their boards or other strategical bodies to understand the organisation's current heading, what to expect from it and what needs to be done.

There are many endeavours to provide a framework that is meant to assist organisations in implementing effective governance and management mechanisms. COBIT is considered as the de facto framework for IT governance by the academics and the practitioners from its fourth iteration (Gerke and Ridley, 2006) well into its fifth and current iteration (Marnewick and Labuschagne, 2011).

Although this fact alone is not enough to reflect the quality of the framework, the high degree of COBIT's penetration in the industry brings the added benefits of facilitated interplay with external organisations, contractors and partners.

COBIT 5 aggregated multiple ISACA frameworks into one in 2012 (ISACA, 2012a). This transformed COBIT into something much larger than the sum of its parts. As Devos and Van de Ginste (2015, p. 96) explain: it would not do COBIT justice to just call it a framework. In fact, "COBIT analyses and describes the complete IS [Information Systems] function and offers normative support to manage, govern and audit IT in organizations" (Devos and Van de Ginste, 2015, p. 96).

However, COBIT 5 is still very much created with the focus on business and the driving of business objectives and needs. As the creators of COBIT themselves explain, the framework "builds on [. . .] practical usage and application of COBIT by many enterprises and users from business, IT, risk, security and assurance communities" (ISACA, 2012a, p. 15).

As Campbell, McDonald and Sethibe (2010) remark, "a one-size-fits-all approach is not appropriate when studying organizations from across sectors and a failure to address sector differences is a critical mistake when studying IT governance". The question that therefore arises is, to what degree is the COBIT framework usable by an organisation falling into the NPO context?

This article attempts to partially answer this question by performing an exploratory case study and an associate analysis of the COBIT framework against a NPO model built based on previous research by Anheier (2005), Powell and Steinberg (2006) and Deloitte CA (2013).

Additionally, the project attempts to define a set of elementary enablers and prerequisites for the introduction of COBIT 5 in the subject organisation and provide a facilitated overview of COBIT 5 for the target organisation.

The project includes a third party evaluation of its different components carried out in collaboration with the client organisation – the Czech National Film Archive (NFA).

By nature of this project, the research will wrestle with a number of limitations. The main limitation of this project originates in the case study using a single subject organisation. As described earlier in this paper, NPOs are very complicated organisations with a large degree of diversity across the sector. This means that inducing a general answer to this question would be extremely difficult and a low confidence effort. The focus is therefore put on the client organisation.

The second limitation faced by this project is the extent and nature of COBIT examination. In fact,

COBIT 5 is a very broad framework with numerous purposes of implementation. Additionally the fifth iteration of the framework is something that ISACA calls a “living document” (ISACA, 2012a, p. 15) meaning that COBIT 5 will evolve over time from the main knowledge base. These aspects of COBIT 5 mean that only the current version and specific subsection of the framework can and will be respectively examined.

Finally, the NPO model that is based on secondary research — even though throughly evaluated — and the use of a single organisation for evaluation may introduce a specific view of the sector or skew it in a specific direction.

This paper is structured as follows: section two describes the research methodology. The section three elaborates the results and suggestions resulting from the study. In the fourth section, the evaluation is discussed and the limits of the project elaborated. Finally, in the fifth section the conclusion is given and some further avenues of examinations on the topic at hand are proposed.

2 Research Methodology

The development of this project was a complex work involving the creation of a number of different final products while attempting to answer a complex question. These products have very different aims, forms and audiences. Part of the project outcomes is targeted at the scientific community other at the professional community and finally at the client organisation. This required a varying range of techniques of different nature across the project, from the big picture project strategy methodologies, across design methodologies to data gathering and evaluation techniques.

By nature of this research project, the overall project development involved a non-linear employment of research techniques with multiple semi independent project threads running in parallel. The conventional structuring of research methodology would therefore result in an unclear and nebulous image for the reader. For this reason, this section was structured by starting with an overview of the methodologies used in this project, alongside with accompanying descriptions.

The table 1 presents the overview of the different techniques, their type and place in the project.

Table 1: Methodology Overview

Technique Name	Technique Type	Project Area
Exploratory case study	Strategy	Global, Design, Evaluation
Organisational modelling	Investigation	Global, Exploration
Literature validation	Evaluation	Evaluation
Analysis against model	Investigation	Global, Analysis
Unstructured interviewing	Investigation	Exploration, Analysis
Organisational charting	Investigation	Analysis, Evaluation
Organisational document analysis	Investigation	Analysis, Evaluation
Scenario analysis	Investigation	Analysis, Design, Evaluation
Mock-up implementation	Investigation	Design, Evaluation
Prototyping	Design	Design

Technique Name Technique Type Project Area

Workshopping	Investigation	Investigation, Design, Evaluation

The main technique used was the exploratory case study. As (Yin, 1998) explains, an exploratory

study is usually a qualitative research strategy with the goal of developing pertinent hypotheses and propositions. It is especially helpful in the exploration of the “what” type of questions. This technique was used as the underlying project methodology and was accompanied by various other techniques to achieve the goal of analysing the framework suitability in the context of a NPO.

The case study of the client organisation had too many limitations related to generalisation and an organisational modelling based on existing research was therefore used to construct a NPO model. The research used for this model was validated by using the literature validation technique. In fact, various relevant papers and an academic review of the literature were found, that validated the model basis.

The COBIT framework was then qualitatively analysed against the model and the identified criteria from the NPO model. The relevant area of focus – the Goals Cascade mechanism was also identified.

Various information gathering techniques were used during the project. The majority of investigation and evidence gathering from the client organisation required for this project was qualitative data, such as organisational structures, internal services and activities or the nature of operation. The limited possibility of direct subject engagement caused by factors external to the project meant, that time consuming techniques such as extensive interviewing, organisational observations and extensive implementation testings were constrained. The need for these techniques was partially superseded by the use of the NPO modelling technique described earlier in this paper.

The information that was still required from the subject organisation was gathered by the use of investigation techniques that are less resource consuming for the subject organisation. In fact, a range of such investigation techniques was identified and consequently used:

- Organisational document analysis
- Unstructured interviewing
- Scenario analysis
- Mock-up implementation

The analysis of organisational documents was the main technique used to gather data from the subject organisation. These documents span from internal documentation obtained from the organisation such as definition of services, org-charts or control areas. In addition to this information gathered directly from the organisation, the non-profit nature that compels the organisation to make a substantial of its actions public was made use of. In fact, the investigation of public materials such as the annual report, enabled the collection of a substantial part of the needed data.

As part of this project a small number of tools were designed and developed based on the observations. The design of these tools was done through an iterative prototyping technique with periodical feedback on the state of the tool. The design was both informed and evaluated by using a workshopping and interviewing methodologies. The client was presented and the tool during the workshop and feedback for potential improvements was gathered.

3 COBIT 5 Primer

This section explains the research context of this project and enables the reader to familiarise themselves with the examined Governance of Enterprise IT (GEIT) framework.

COBIT 5, a framework originally created in 1996 as a financial IT auditing framework, was radically reshaped in 2012 with the purpose of consolidating ISACA’s own existing frameworks such as Risk IT or Val IT (Stroud, 2012) and aligning with existing industry standards and frameworks such as

ISO/IEC 38500 or *ITIL* including the borrowing of principles and mechanisms such as the Evaluate, Direct and Monitor process from *ISO/IEC 38500*.

COBIT 5 is a fairly high level GEIT framework for governance and management created by practitioners and focused on large for business organisations but the creators claim that "COBIT 5 is generic and useful for enterprises of all sizes, whether commercial, not-for-profit or in the public sector" (ISACA, 2012a).

The framework made by practitioners for practitioners and even though parts of the framework are based work and mechanisms previously suggested by the academic community such as the Balanced Scorecard (Anheier, 2005) or the Goals Cascade (De Haes and Van Grembergen, 2010; Van Grembergen and De Haes, 2012), the framework itself is not an academic work. Additionally, a subsequent study show that academic theories are present in COBIT (Devos and Van de Ginste, 2015).

Figure 1: COBIT 5 Principles

COBIT 5 aims to provide more stakeholder value and control while addressing increased organisational dependency on IT (ISACA, 2012a, p. 15). COBIT 5 is top-down framework based

on five overarching principles that COBIT 5 is based upon.

Figure 1 gives an overview of the principles along with their purpose in the framework.

Some of these principles are practical mechanisms employed by the framework (e.g. Principle 1: Meeting Stakeholder Needs) while others serve as an “ideology” for the framework groundwork (e.g. Principle 5: Separating Governance from Management).

At the bottom of the framework sit the 37 COBIT governance and management enabling processes divided into governance and management processes according to the COBIT definition of governance and management key areas. The division of governance and management into domains can be found in the figure 2 while the number of processes for the respective domains is presented in the table 2.

Figure 2: COBIT 5 Governance and Management Domain Division

Table 2: COBIT Processes by Respective Domains

Domain	Domain Code	Number of processes
Evaluate, Direct and Monitor	EDM	5
Align, Plan and Organise	APO	13
Build, Acquire and Implement	BAI	10
Deliver, Service and Support	DSS	6
Monitor, Evaluate and Assess	MEA	3

The creators stress that the framework is not prescriptive and that an organisation does not have to implement all of the COBIT processes. In fact, they suggest that the amount of processes implemented will likely be proportional to the size of the organisation (ISACA, 2012a, p. 32).

COBIT suggests the Goals Cascade, described in the first principle as the main mechanism used by the organisation in order to select the desired enabling processes. The Goals Cascade consists of four distinct steps and the use of thee COBIT defined mapping matrices. The overview of the Goals Cascade and the matrices it uses can be found in the figure 3.

The Goals Cascade describes the rough steps and their purpose. The steps explain which matrix is to be used at each point of the Goals Cascade but it remains ambiguous on the exact way of use of the matrices. The framework urges that the mechanism is not prescriptive and that "users should not attempt to use it in a purely mechanistic way, but rather as a guideline" (ISACA, 2012b, p. 16).

4 Project Outcomes

This section presents the different tangible outcomes and products of this project and their purpose and methodology alongside the findings resulting from this study.

The project and its outcomes are targeted mainly at the organisations pertaining to the non-profit or in other terms third sector. They are based on a generic NPO model discussed in the Research Methodology and Discussion & Evaluation sections. The individual outcomes were then evaluated and tested on the subject aforementioned sector representative – the Czech National Film Archive. The intended purpose is to facilitate the decision process of the NPOs in terms of the framework's compatibility with the organisations inner governance and management. The extended professional and academic community can then benefit from the findings and processes executed in this study.

This project resulted in three main artefacts:

- Goals Cascade Toolkit
- Contextual Dictionary (Lexicon) of COBIT 5 Concepts
- Contextual Prerequisites for COBIT 5 Adoption

Each of these artefacts was developed in english but was also localised into Czech for easier use by the organisation. In fact, during the early framework analysis it was discovered that the framework is officially available in more than fifteen languages but Czech was not one of them. This provides additional value to the organisation for early decision making, even though the final use of the framework will require the use of an english version of the COBIT 5 publications, for the detailed process description.

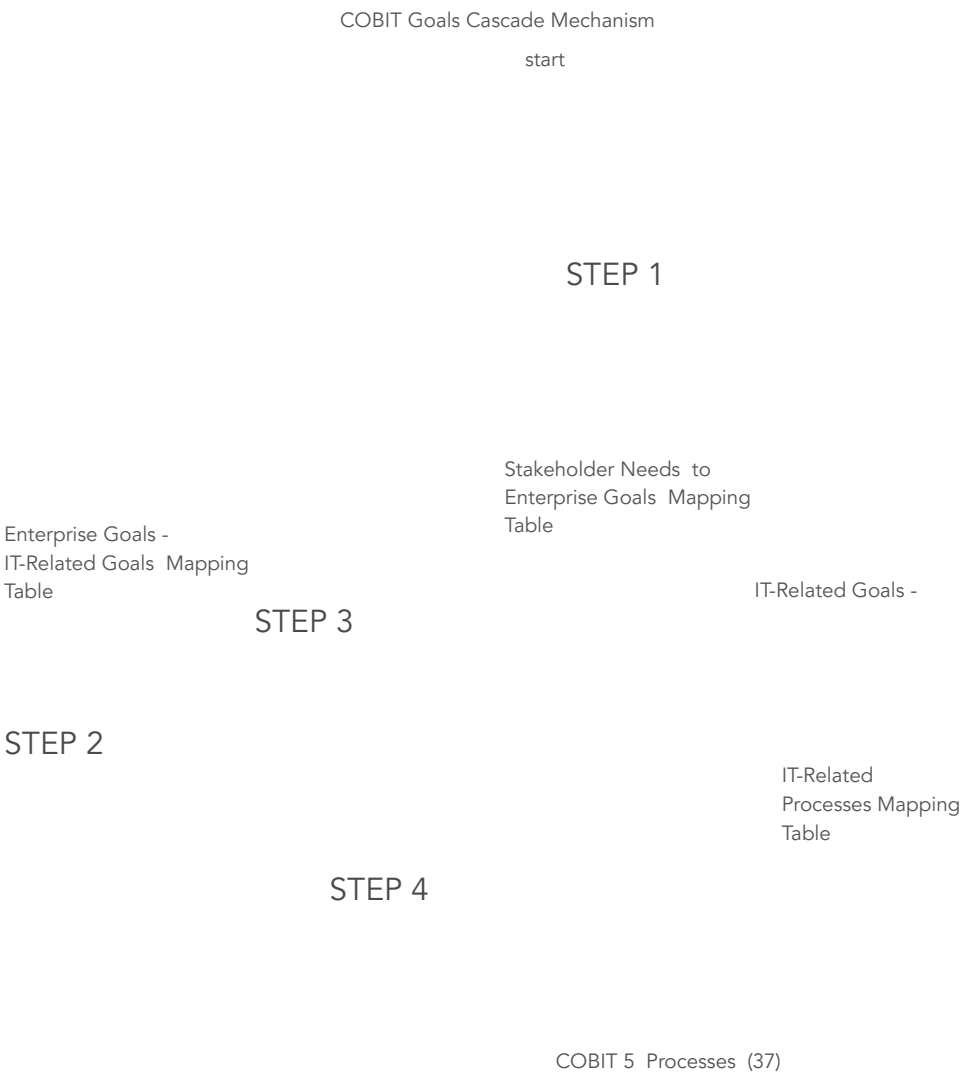
COBIT Goals Cascade Mechanism
start
STEP 1
Stakeholder Needs to
Enterprise Goals Mapping
Table
Enterprise Goals -
IT-Related Goals Mapping
Table
IT-Related Goals -
STEP 3
STEP 2
IT-Related
Processes Mapping
Table
STEP 4
COBIT 5 Processes (37)

Figure 3: Goals Cascade Overview

4.1 Goals Cascade Toolkit

This is the primary tangible product of the project that is primarily targeted at the non-profit organisation. This product's purpose is to provide a facilitated way for the organisation to deal with the COBIT Goals Cascade mechanism. While the toolkit itself is primarily focused on the NFA and other representatives of the NPO sector, the lessons learned from its development and evaluation are a valuable source for the resolution of the study's main goal.

This toolkit is an interactive tool that represents the four steps of the Goals Cascade. It is based on the three mapping tables that the Goals Cascade uses to represent the different relations and links; from the desired stakeholder needs to the organisational goals, through specific IT goals and finally the suggestion of COBIT processes. It guides the user through each step of the Goals Cascade while displaying the suggested items by the use of a gradient: the higher the suggestion is on the importance the more saturated the highlighting of the item is enabling the user to identify the relative importance without the use of numerical scoring. This was an important requirement for the final solution as the framework requires the analysis of each of the suggested items separately against the organisational context. The use of numerical grading of the suggestions presented a danger of bias in terms of the prioritisation of suggested items.

The Goals Cascade mechanism was to be adapted to the non-profit context. The process was first examined and analysed against the created NPO model in order to determine the relevant parts and potential problems for the adaptation. The tool was developed using an iterative process with multilevel evaluation. First by analysis agains the NPO model, then by case study of the application of the Goals Cascade mechanism and toolkit for a sample NFA service and finally a third party evaluation by the organisation itself.

At each step some decisions and potential modifications needed to be executed. For example, some of the COBIT mapping tables contain two levels of relationships; primary and secondary. The final NPO targeted tool that was constructed for the Goals Cascade mechanism is a simplified version that employs only one degree of relationship. This decision was informed by an prototype of the tool and its evaluation by testing it for a sample service from the client organisation. This

revealed that resulting outcomes of the Goals Cascade possess a high degree of complexity. The number of suggested processes was too high and the difference in priority between them too small to be used as a jumping point of implementation and analysis by the organisation. The tool was therefore simplified and the possibility of adaptation ensured while assuring the primary benefit for the implementation goals.

This interactive tool therefore brings a number of advantages:

- Shows the relative importance of the suggested items
- Provides a dynamic and immediate feedback for the selected initial conditions • Provides an intuitive but fuzzy way to identify suggestion importance by employing a sequential single-hue colour scale instead of discrete numeric values

With these features, it streamlines the Goals Cascade process by providing a fast and dynamic way to show the Goals Cascade suggestions at each step of the process. This is done without instigating the user to follow the process purely mechanically, even though it is impossible to ensure that the user thoroughly examines the suggestions even when using the original publications. This is why the importance of examinations assessment of the suggestions is stressed in the toolkit guidance.

4.2 Contextual Dictionary of COBIT 5 Concepts

The Contextual Dictionary of COBIT 5 Concepts (also called Codex) was initially targeted mainly at the non-profit organisation. In fact, it was originally speculated that COBIT 5 will require significant shifts in

terminology and concept explanation in order to be relevant and adaptable to the third sector context. However, early investigation and NPO modelling suggested that the framework may be much closer to the context than originally thought.

This was further confirmed by client evaluation of the Codex. In fact, the evaluation exposed two pieces of information suggesting that COBIT is to a high degree compatible with the concepts used in the organisation. Firstly, the majority of concepts were known and understandable to the organisation representatives. On the other hand, the concepts that were either not known to the test group by name or definition proved to be intuitively understood and for some concepts even used in the organisation.

The scope and purpose of the Codex was therefore modified. The primary audience is therefore dependant on the conclusions that can be induced from this tool and its evaluation. In fact, the first iteration of the dictionary was meant to evaluate the definitions provided by the authors of the COBIT framework where applicable. The small number of concepts assumed to be directly known to the users were given a definition in accordance with the COBIT framework by the author of this study. Finally the, potential deficiencies in the codex were completed during a workshop with the client organisation.

The dictionary therefore brings important conclusions on the concepts used in the examined framework and their compatibility with the NPO context through the evaluation of the dictionary. This compatibility evaluation was done with the help of the client by analysing the concepts, their intuitive understanding, comparison with the framework's provided definitions and their usage in the organisation.

4.3 Contextual Prerequisites for COBIT 5 Adoption

The aim of the prerequisites is to characterise the adoption of the examined systems and comparatively analyse the suitability of the framework in the context of the nonprofit organisation. These prerequisites represents the pain-points that could potentially prove problematic for the organisation. These should be carefully considered against the internal organisational context before deciding to adopt the framework.

During the research process five principal prerequisites were discovered:

- The need to be able to define stakeholder internal and external stakeholder groups • Need for efficient communication between the organisation and its stakeholders • Resource Dedication
- Definition of RACI
- Governance Separation

The prerequisites are valid for any type of organisation that would like to implement the framework, but a number of specific contextual modifiers (table 3) may prove these items to be more taxing for the organisation than for a standard for-profit organisation.

The failure to address these prerequisites during the implementation of the framework may result in implementation difficulties or in an erroneous implementation that does not appropriately reflect the organisational needs.

Table 3: Most Relevant NPO Specific Contextual Modifiers by Impact

Relative Impact	Contextual Modifier Name
1	High job mobility
2	Chronic resource insufficiency
3	High degree of localised autonomy
4	Flexible and changing organisational structures
5	Large and numerous closed-off stakeholder groups

The initial list of candidate prerequisites was identified during the mock-up application of the Goals Cascade for a sample NFA service. The list was then sorted through using the NPO model and a comparative analysis. Each candidate was analysed against the NPO model and individual contextual specificities that could affect the significance of the prerequisite noted. This includes aspects of the NPO that could make these prerequisites more demanding but also those aspects that could make make them more advantageous compared to a for-profit organisation.

5 Findings

This section presents the findings and conclusions that emerged from the research process and the development of the outcomes outlined in the previous section.

There are three main lessons learned from this project and its related products. The development of the Goals Cascade adaptation and interactive tool along with the accompanied third party testing and evaluation demonstrated that the main mechanism of COBIT process implementation can be relatively easily adapted to the subject NPO organisation.

Additionally, in conjunction with the concept dictionary, the Goals Cascade evaluation showed that COBIT is to a high degree compatible with the NPO context. In fact, it was found that the majority of concepts were known to the organisation and an intuitive understanding and in some cases even

internal usage of concepts was detected for concepts that were formally identified as unknown by the organisation. For example, the concept of balanced scorecard strategy was identified as a unfamiliar concept, but further examination of the concept against the organisational management uncovered that the management actively uses a form of this strategical mindset.

Finally a comparative analysis of the established COBIT implementation enablers shows that a number of identified contextual attributes such as high job mobility, stakeholder complexity or chronic resource insufficiency could pose a higher challenge for the framework implementation than in a for-profit organisation. However, a specificity was also identified that could make a specific case of implementation more favourable in the nonprofit context. In fact, even though the primary ambition of COBIT involves a vertical implementation, but it also suggests that the framework can be applied on a more localised level. ISACA (2012a, p. 24) mentions that COBIT "can be applied to the entire enterprise, an entity, a tangible or intangible asset, etc".

6 Discussion & Evaluation

This section contains the discussion about the final product and associated research findings along with the evaluation of the overall project and its limits. Additionally, recommendations and further avenues of future inquiry are examined.

6.1 Project Evaluation and Limits

While the project realised its initiated inquiry into the suitability of the framework for the NPO context, it also needs to confront a number of limitations which should be considered along with the findings.

First of all, this exploratory case study examines only the initial implementation characteristics of COBIT in a NPO. As COBIT is an iterative and cyclical framework (ISACA, 2012c, pp. 18, 20 & 74), a long term study involving a multiple iteration of COBIT implementation would need to be undertaken in order

to give a complete answer about the framework. This study therefore limits its reflections on the initial implementation of COBIT through the Goals Cascade mechanism.

Secondly, the use of a NPO model based on secondary research enables the study to deliver higher value due to better sector coverage and applicability that would not be possible with the initial intent of basing the study solely on the client organisation. On the other hand, the NPO model by nature describes the general nature and frequently encountered problems in the sector. This means that it will necessarily miss some characteristics of specific NPO organisations. The NPO model is based on secondary research and mainly on the research by Anheier (2005). This means that the model is based on a specific view of the NPO sector. Additionally the methodology is limited in the fact that it mainly uses a comparative approach against the for-profit context.

Furthermore, the model is based on comparative descriptive modelling and the suggested concepts and language may not be entirely compatible with the nonprofits. In fact, the literature makes use of various business concepts and lexicon, traditionally used to describe the for-profit sector, in description of the NPO. The concern is that even though accurate, this may not be the way that NPO organisations describe these concepts internally. This was partially disproven as a large number of evaluated concepts were directly known by the organisation and others showed an intuitive understanding. In fact, Maier, Meyer and Steinbereithner (2016) suggest that for better or worse the NPOs are becoming more business-like in many aspects such as organisational structure,

processes and even activities.

Additionally, the study uses a small testbed. The evaluations and tool designs are based on the single subject organisation as they are mainly targeted at them. This limits the generalisability of the tools as there are some potential specificities of the organisation that may not apply at the whole sector. In fact, Powell and Steinberg (2006, p. 66) explain that “the sector is extremely diverse” and different organisation in them could have different needs than the NFA. However, the basis of the work on the general model should make the tools applicable the a large portion of the sector.

6.2 Further Work Recommendations and Implications

As the project presented in this paper is an exploratory study, there are by nature hypotheses that should be expanded upon in future research. Additionally, this project uncovered a number of hypothetically viable avenues for further work on the subject.

Firstly, the highest priority of future examination should be an analysis of the COBIT process definition in terms of implementation and NPO suitability. This should start by the examination and evaluation of the hypothesis formulated in this project, concerning the conclusion/conjecture that the COBIT processes are defined and structured in a way that is directly usable by the organisation. This could be either done using a surveying of non-profit organisations that started using the framework or by creating a full implementation case study.

The second aspect, that may be worth investigating is the suitability and relative importance of the individual COBIT process and their importance on the effective management of a NPO. A potential methodology for this endeavour was identified during this project. In fact, Kerr and Murthy (2013) conducted an analogous investigation for previous version of COBIT – the COBIT 4. Furthermore, this survey is focused on the certified practitioners of COBIT that do not necessarily represent the needs of the organisations and especially of the nonprofit sector. The radical changes in COBIT 5 and the lack of focus on the nonprofit sector will necessitate a new perspective and examination. However, this does not mean that this study cannot bring any utility. On the contrary, the survey suggests a number of COBIT processes ordered by their perceived importance for effective internal control. This list, along with the mapping tables from the COBIT 5 *Enabling Processes* publication (ISACA, 2012b) could be effectively used to reduce the project complexity while adding value to the original survey.

Conclusions

This project set out to investigate the question; to what degree the COBIT 5 framework is suitable by an organisation pertaining to the non-profit sector, while providing some tools and guidance that the subject organisation could use for the framework implementation.

This paper started by presenting the project background and objectives in the introductions section. The next section explained the general methodology used to develop the different parts of this project. Next an extended introduction into the inner workings of the examined framework was given, in order to give enough context for the understanding of the research executed. In the fourth section, the author set out to describe the different project outcomes into detail along with their purpose, intended audience and methodology. The subsequent section presented the three main findings of this study. First of all, the project demonstrated that the main mechanism of COBIT 5 for the process of choosing the processes for implementation – the Goal Cascade is relatively easy to adapt for a NPO. Additionally, the

analysis of concepts through the Goals Cascade and Contextual Dictionary evaluation showed that the framework is in some places directly reflecting the concepts and practices used by the subject organisation. In other places where the organisation was at first unfamiliar with the concepts, an intuitive understanding was identified with sometimes even intuitive utilisation of the explored concepts in the organisation's management and operation.

The sixth and final section of this paper contains a discussion about the final products, their and the projects potential limits. The main limitations of this project include the study nature. In fact, the project being an exploratory study means that additional will be needed in order to examine some of the hypotheses. In fact, this study examined the way that the organisation will choose and implement the different COBIT processes. For a complete answer an examination and study of the actual implementation of the processes and their effect on the organisation will need to be performed in the future. In fact, even though the research process showed that the COBIT enabling processes are structured in a way that is understandable to the subject organisation and they are described into such depth that would enable the organisation to implement them, it would be very difficult to predict the effects of the individual processes in such a complex environment. The other major limitation of this project is the evaluation based on a small testbed. In fact, the third party evaluation was executed with the assistance of a single subject organisation. This means that there will be specificities of the organisation that will be reflected in the evaluation. On the other hand, initial hypotheses were based on a general model of the non-profit sector based on secondary comparative research and literature. This means that the findings come from a sector-wide relevant frame of reference.

This last section of the paper also suggests some further avenues for research and recommendations for anyone attempting to continue with the research in the same field. The author suggests that the adequacy of the COBIT process structure should be examined by implementation case study. In fact, even though the third party evaluation showed that the processes are adequately defined for proper implementation, this evaluation was based on professional expertise of the subject organisation and not on actual implementation analysis.

The second avenue of research that would be beneficial for the discussed topic is the suitability of the individual COIBIT 5 processes and their relative importance on effective management of a NPO. For this research avenue, an approach based on a study (Kerr and Murthy, 2013) for COBIT 4 with similar goals was recommended.

The project therefore showed that even though the examined COBIT 5 framework is not primarily targeted at the third sector, it is to a large degree compatible with the NPO context. The concepts and language used in this framework are compatible with the organisation as shown by the concept dictionary.

The Goals Cascade is then relatively easily adaptable to the NPO frame of reference as was

enabler and Goals Cascade toolkit evaluation.

The dictionary and enablers can also be used by a NPO to get a quick overview of the framework's compatibility with their management and workflows when deciding if COBIT 5 is the right framework for the organisation.

There is a number sector specificities discovered through the enabler discovery and evaluation process, that could make certain aspects of the framework implementation and usage more

challenging for the NPO in comparison to the for-profit sector, such as high job mobility, chronic resource insufficiency or the complex situation of stakeholder group internal culture. However, COBIT 5 enables a more localised approach in terms of implementation. In fact, COBBIT 5 can be used as an organisation wide governance and management framework but it “can [also] be applied to [. . .] an entity, a tangible or intangible asset, etc” (ISACA, 2012a, p. 24). In this case, the NPO organisation may actually be in the advantaged position due to their high degree of localised autonomy, meaning that smaller scale implementation may be easier for a NPO than for a for-profit organisation.

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Appendices

Appendix A: Journal Requirements

This section summarises the requirements for the content and format of the academic paper created as part of the project for the potential submission to the EJISE journal.

The Masters Project Handbook states that the research paper should be formatted “in the required format of the conference or journal for which you have prepared your paper” (Julie Turnell, 2018, p. 12) and that it should be submitted in the style of a named academic journal (Julie Turnell, 2018, p. 6). This poses one limitation for selected publication. The selected publication requires the submission of a script that is meant for the editing purpose. The required format of the journal for submission is therefore different than the actual style of the published journal. After a consultation with the project supervisor it was decided that for the purpose of the submission of this project for grading the style of the published journal should be followed as closely as possible. The formatting requirements described in this section are therefore based on the journal’s original script submission requirements slightly modified to better reflect the style of the published work.

Content

The selected publication EJISE defines general content guidelines that are appropriate to be addressed by articles submitted for publication. This section summarise these guidelines presented on the submission guidelines webpage (Academic Conferences Limited, 2018) of the journal.

Acceptable Research Strategies:

- Survey
- Case study
- Experiment
- Archival analysis
- History analysis
- Etc.

In general the content of the papers should be “aimed at advancing current theory or adapting theory to local conditions. [Additionaly] it may arise from theoretical studies aimed at reviewing and/or synthesizing existing theory” (Academic Conferences Limited, 2018).

The publication also emphasises that the research should be presented with degree of background information sufficient for the understanding of the paper by readers that are not specialists in the specific area of research.

Script Format Guidelines

General:

Include at least six keywords specific to the topic of research.

End notes are not accepted and footnotes are discouraged.

Length:

Total length should be limited to 8 000 words maximum including potential references and appendices. The abstract is limited to 300 words ± 10%.

Page format:

A4 sized page with 2cm margins and 1 line spacing.

Typography:

Use Times Roman or Arial typeface with numbered headings of maximum 3 level depth. Author names:

Paper includes author full names, affiliation, email address.

Referencing:

Reference using the Harvard citation style

Tables and Figures:

Diagrams need to be submitted as images and all figures need to fit within the margins. Figures can use colours.