Compass: A Canvas for Changing Capabilities

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Abstract

The dynamic business environments pose a challenge that is commonly addressed by performing changes to the capabilities of the organizations. Enterprise Modeling provides the necessary methods and tools to support the organizations that are facing ongoing changes or need to, however, the complexity of the procedures and models are often leading to limited understanding and usability for individuals without a modeling expertise. This paper introduces Compass, a canvas-based approach aimed to support the management of changing capabilities in organizations. The areas of Compass, which address the motivation to change, the decision alternatives, the capability components, the transition, the impact, and the attributes of change, are described and applied on an illustrative case study in the arts and culture domain of a public municipality.

Keywords

Capability, Change, Canvas, Enterprise Modeling, KYKLOS, Transition, Adaptation, Transformation, Intention, Context, Decision, Impact

1. Introduction

Modern society is progressively undergoing a digital transformation that results in a high level of environmental dynamism [1]. Changes in modern organizations are motivated by the dynamic environments they operate in, and, the pace of change in modern organizational environments has surpassed the pace of change in organizations [2], therefore, it is quite safe to assume that change is no more an exception, on the contrary, it is becoming the new constant in organizational standards. Modern organizations are considered as dynamic systems [3], and a common way to express their dynamism is by demonstrating flexibility and adaptability of what they are capable of, concerning both the value that they provide to their stakeholders, and the way that this value is being produced. As a result, capability thinking [4] is gaining ground in organizational research [5], and additionally, organizational capabilities naturally inherit a strong association with organizational change and strategy [6].

One discipline that traditionally facilitates the analysis of organizational phenomena is Enterprise Modeling (EM), which enables capturing knowledge and provides the required input and motivation for the design of Information Systems that support the needs of an organization [7]. The significance of EM and IS lies in the fact that they facilitate a simplification of the activities of the organizations, thus, an ongoing integration between ISs and all the aspects of an

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organization is being observed [8]. Change is no exception, therefore, EM needs to address this challenging organizational aspect, especially concerning changing organizational capabilities, their transitions, the motivation, and the attributes of the change.

The understandability and applicability of the model is a challenge existing during the application of EM, derived from the fact that the provided models and analyses are not genuinely understood by business leaders [9]. This fact leads to a strong need to provide improved support related to changing capabilities to public or private organizations, taking into consideration the business actors and casual modelers that can potentially benefit from using EM, yet, they encounter difficulties understanding and applying it. This can be achieved by providing method components or alternatives that produce more abstract models, or models that can hide the details and complexity of a modeling language, as, for example, with the canvas approach [10].

The KYKLOS method [11], is a capability modeling method, specifically designed to address the previously mentioned phenomenon of capability change. During the last steps of the KYKLOS project, an evaluation took place that aimed to assess the method [12], but also provide an improved understanding on how different groups of stakeholders responded to the method. On the one hand, the results indicated that the method is well-received and understood by individuals with modeling expertise. On the other hand, the business stakeholders encountered difficulties regarding the understanding and application of KYKLOS.

For this reason, the aim of this paper is *to introduce Compass, a canvas-based approach that can support handling the phenomenon of changing capabilities in organizations.* Regarding the usability of the canvas, the aim is the canvas to be used either as a standalone tool, or as a complementary component of KYKLOS.

The rest of the paper is structured as follows. Section 2 provides a brief overview of the related literature. Section 3 presents the methodological decisions that have driven this project. Section 4 presents the Compass and its components, section 5 presents an illustrative application of Compass, and sections 6 and 7 consist of a discussion and concluding remarks.

2. Background

This section will provide a brief introduction to the two research paths that converge in this study, the canvas approach, and the KYKLOS method.

2.1. The Canvas Approach

Conceptual modeling in general can be considered as a procedure of enrichment or elaboration. This is a fact since the user of a modeling approach begins by developing simple and high level models, with a high degree of abstraction, and in an evolutionary fashion, moves towards models which are more complex and capture more details, reducing the level of abstraction, thus, capturing more of the involved complexity [13].

The degree of experience of a modeler is associated to the complexity that can be captured in a model. Individuals with modeling experience demonstrate a better understanding and ability to apply complex methods to complex cases and produce efficient modeling results. However, modeling experts are not the only target group of modeling method developers. As far as casual modelers are concerned, there are different specific types of approaches employed that reduce

the risk of encountering problems derived from the previously mentioned complexity. Such approaches often employ graphical means that involve using post-its or text notes, like the canvas approach [10], which aims to capture and depict all the required elements without the complexity derived from associations between them.

The most well-known canvas is the Business Model Canvas [14], which provides an overview of an Enterprise. The BMC has been the inspiration for several approaches in the Business Informatics area. A few examples are the Operating Model Canvas, specialized for the operational level of businesses [15], the Business Process Canvas [16], which is specialized for business processes, and the Co-creation canvas [17], which specializes in capturing co-creation activities. Applications of the canvas approach exist in other areas as well, like for example the Design Science canvas in [18] which is developed for capturing and guiding the essentials of a Design Science Research (DSR) project.

2.2. The KYKLOS Method

KYKLOS, as a domain-specific modeling method [11], has been developed to tackle the phenomenon of capability change in organizations, providing both methodological and tool support. An extensive presentation of the KYKLOS method, including, its previously published syntax, semantics, notation, and ADOxx tool, is beyond the scope of this paper, however, the requirements and procedure is relevant to Compass. KYKLOS's development has been based on a set of requirements [19] that can be summarized in the following areas, (i) Intentions, (ii) Context, (iii) Decision-making, (iv) Capability configuration components, (v) Transitions between capability configurations, (vi) Ownership of capability and components, and (vii) Associations among capabilities.

Four phases comprise the modeling procedure of KYKLOS. Initially, the Foundation phase takes place, which establishes the base of the analysis. It is followed by the Observation phase, which facilitates identifying not only the need to change, but also the motivation behind it. The next phase that occurs, namely Decision alternatives, concerns the formulation and analysis of several alternative configurations of the capability, also handling component allocation and ownership status. Finally, the Delivery phase is about capturing the change as a transition between configurations, its properties, and its impact. The properties are captured in a set of attributes, in particular (i) control, (ii) scope, (iii) frequency, (iv) stride, (v) time, (vi) tempo, (vii) desire, and (viii) intention. The change is captured when the state of a configuration changes from enabled to disabled and/or vice versa. The procedure is iterative because the impact of a change updates the measured motivation factors and the capability's performance is assessed again. In this way the need for additional changes is identified.

3. Methodology

The development of Compass follows the DSR [20] approach, and, in particular, the framework suggested in [18]. DSR's purpose is to guide researchers towards new solutions for already known or even unknown existing problems [21]. The specific framework consists of five steps, in particular, (i) Problem explication, (ii) Requirements specification, (iii) Design and development, (iv) Demonstration, and (v) Evaluation of the artifact.

Compass is a special case of a DSR project, because it is a project conducted within another project. It did not need to go through the two first steps of the framework, since they are shared with the KYKLOS project. They address the same problem, which has been explicated in earlier publications [22, 23], and its requirements have been specified in [19, 24]. The only additional requirement elicited for Compass is the simplification of the artifact, which can be achieved by hiding most of the details of the modeling language of KYKLOS.

The Canvas approach has been selected for this purpose, which means that the suggested artifact is a new alternative solution to model the phenomenon of capability change, which is the problem previously addressed by KYKLOS. The goal of Compass is to capture all the essentials parts of the phenomenon, while in parallel avoiding to complicate the model with all the details. The artifact is designed as a set of concepts that are structured with a specific layout and allow the user to document information in natural language. The concepts are associated not only to the captured phenomenon, but also with each other. Since the artifact is addressed to users without modeling expertise, the associations are explained but not expressed with a formal notation, for example using any visual containers or types of connecting lines and arrows as in the formal notations of many modeling approaches. For the selection and inclusion of the specific concepts, the knowledge base was derived from the KYKLOS research, including its concept set, in the form of a meta-model, and its modeling procedure. [11]

For the demonstration of Compass, an illustrative example has been used. The case study is real and has been conducted within the KYKLOS project [11], however, the canvas has not been used during the actual study, so its application here remains illustrative.

4. The Structure of Compass

This section will present the concepts of the Compass canvas, categorized according to the functionality that they serve. The layout of Compass is presented in Fig.1. Apart from the area titles, colors are also used to make them easily distinguishable. Directed arrows have been included between the areas to facilitate and guide the modeling procedure, as simplified visual guidance that reflects on the modeling procedure of KYKLOS.

4.1. Capability

Depicted with the light orange color, this area of the canvas captures the changing capability, its Outcomes, and the capabilities that are related to the one that is changing. In other words, it answers the question "*What is being changed?*". In accordance with KYKLOS, a capability in this project is defined as "A set of resources and behaviors, whose configuration bears the ability and capacity to enable the potential to create value by fulfilling a goal within a context." [23]. The canvas area that concerns the capability is located in the center of the canvas, in order to reflect on the capability as the focal concept of the canvas. This is also the part where the analysis begins. Once completed, it leads to Motivation. It corresponds to the Foundation phase of KYKLOS.

Changing capability In the canvas element named "Changing capability", the user documents the capability being analyzed, and it is also the starting point of the analysis. It

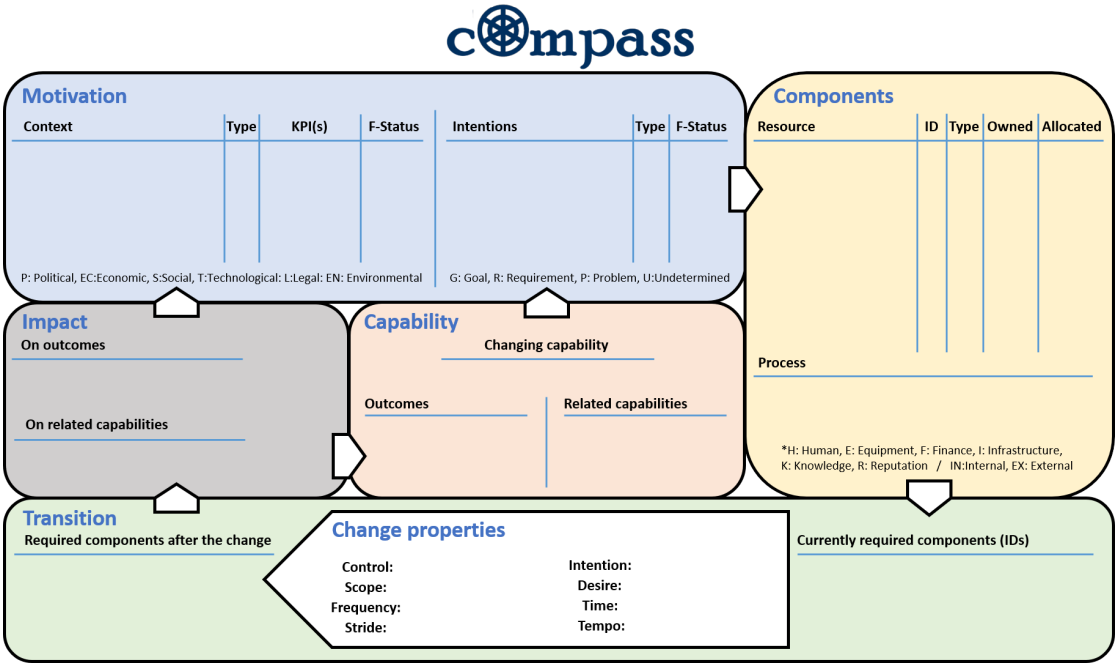

Figure 1: The layout of Compass.

corresponds to the Capability element of KYKLOS. One important difference is that the canvas is designed so that there can be only one capability per canvas.

Outcomes The Outcomes of the capability refer to the results produced by realizing the capability. Outcomes may be, for example, material goods, knowledge, revenue, or any other type of result. An outcome may even be undesirable, yet, existing.

Related capabilities This concept refers to other identified capabilities in the organization that are directly or indirectly related to the given capability that is being analyzed using the canvas. A relation can take many forms, for example, dependency, component sharing, etc.

4.2. Motivation

The Motivation area of Compass consists of two main parts. The Context part and the Intentions part. The elements in this area are the reason and justification for the capability's existence, and if these are not fulfilled, a need to change has been identified. A complete set of context and intention elements that are fulfilled by the capability, indicate that there is no need to change. The area is depicted in the canvas with a light blue color and corresponds to the Observation phase of KYKLOS. Its purpose is to respond to the question "*Why is the change happening?*". When it is complete, it leads to the Components area.

Context Context is the part where the external factors that are affecting or affected by the capability are being documented. These factors belong to six predefined categories, inspired by PESTLE analysis [25]. The acronym is derived from the factor types, which are also the available types of factors in this area of Compass. The types are (i) Political, (ii) Economic, (iii) Social, (iv) Technological, (v) Legal, and (vi) Environmental. Each documented factor is also the source of at least one KPI, which allows its measurement and assessment. The user documents the fulfillment status of each KPI as *F-Status* in the canvas, in other words, whether, the capability achieves the predefined KPI. This part of the canvas corresponds to the Context, Monitored factor, and KPI modeling elements of KYKLOS.

Intentions Intentions is the area where the internal context and desires of the organization is captured, provided that they are relevant to the capability that is being modeled. In other words, any business goals, requirements, problems or other internal drivers of change that do not belong to any of the three other categories, are documented in this part of the canvas. Additionally, the user documents if each documented Intention element is fulfilled (*F-status*) by the realization of the capability. This reflects on KYKLOS's Intention elements, and their types, Goal, Requirement, and Problem.

4.3. Components

This area concerns the resources and behavior elements, i.e. processes that are available to the organization, and are relevant to the capability. It partially corresponds to the Decision alternatives phase of KYKLOS and is depicted with a light yellow color in the canvas. Its aim to respond to the task of *exploring available potentials and alternatives for change*. Completing it leads to the Transition and Change properties areas.

Resource The Resource concept includes a variety of resource types, which are also documented in the canvas. The available types are (i) Human, (ii) Finance, (iii) Equipment, (iv) Infrastructure, (v) Reputation, and (vi) Knowledge. Another aspect that is taken into consideration is the ownership of the resource. It may be internally or externally owned, which means that it is owned by the organization or an external collaborator. Finally, it is also important to document whether the resource is already allocated to a capability, in order to confirm its availability, while exploring alternative configurations for the changing capability. Finally, IDs are used when documenting the resources as a way to avoid repetition of data in the Transition area. It corresponds to the Resource and Resource pool elements of KYKLOS.

Process One or more processes may also be required for the realization of the capability. The lower part of the Components area's purpose is to document any process that describes the behavioral aspect of the capability. Corresponds to the Process element of KYKLOS.

4.4. Transition

The transition area's purpose is to capture the transition from one configuration of the capability to another, in terms of the different set of resources and behaviors used for the realization of

the capability. It is depicted using a light green color and complements the Components area, since it also corresponds to the Decision alternatives phase of KYKLOS. When both Transition and Change properties are complete, the Impact area follows. Its purpose is to respond to the question "*What is the change?*".

Currently required components The Currently required components part requires a documentation of the resources that are currently allocated and employed for the realization of the capability. The are meant to depict the currently used "recipe". The IDs of the resources documented in the Components area are used for formulating the set of required components. Corresponds to the configuration's notebook in KYKLOS.

Required components after the change This area is meant to document the new "recipe", that is, the new configuration of the components that comprise the new version of the capability that is replacing the current one. The component IDs are used here as well.

4.5. Change properties

This area co-exists with Transition and has been visualized to be contained by it, and also uses a white color. It includes all the identified properties of change and aims to respond to the question *How is the change performed?* The properties of change that are used are:

- Control: Refers to the control over the change. Can be Emergent or Planned
- Scope: Refers to the scale of the change. Can be Adaptation, when it is an adjustment or a Transformation, when it a big change or a new capability.
- Frequency: Refers to how often a similar change needs to be performed. Can be Continuous, like, for example, following consumer trends, or Discontinuous, meaning that it does not need to be repeated.
- Stride: It can be Incremental, meaning that it occurs in small steps, or Revolutionary, meaning that a big change is happening in one step.
- Desire: Refers to whether the change is welcome in the organization or not. It can be Desired or Undesired.
- Intention: Can be intentional when the change is consciously and deliberately performed by the organization, or Unintentional, when it is not.
- Tempo: Refers to the speed of change regarding the pace at which the change activities are performed. Can be Slow, Fast, or any value in between.
- Time: Captures the duration of change, as starting and ending points.

4.6. Impact

This area of Compass is designed to capture the impact of the performed change to the outcomes of the capability and to the related capabilities, focusing and pointing to the parts of the Capability and Motivation areas that are affected by the change. It is depicted with a light grey color, and once complete, it leads both to the Capability and Motivation areas, as a way to update the information, and assess whether the new version of the capability fulfills its purpose. In this

way, it reflects on the iterative nature of change, similarly to KYKLOS, and also corresponds to its Delivery phase, in particular, the analysis that follows.

On outcomes One of the most common ways that a capability is affected by changes is through the results that it produces. In other words, the produced outcomes may be different or even new, and naturally, this is affecting the assessment of the capability's performance. If, after the assessment of change, there are no more negative F-statuses in the canvas, there is currently no need to change. If, on the contrary, there are still negative fulfillment statuses, the change process needs to start another iteration.

On related capabilities In a similar way, a changed capability may affect the capabilities that it relates to. In this case, performing a change requires to assess whether these related capabilities' performance has been affected, and whether the performed change has triggered the need to change other capabilities as well.

5. Demonstration of Compass

This section will present an illustrative example, derived from an older case study, conducted with KYKLOS.

5.1. Case Overview

The case study has been conducted in a public organization, the Veria Arts Center, which is responsible for planning and implementing the cultural policies of the Municipality of Veria, a city in northern Greece. The Center is a public legal entity governed by private law, a situation that complicates its operations, since it functions as a private organization, while it also has to comply with the official regulations about public agencies. This means that it does not rely on the municipality alone for its funding but it also has to earn its own resources. In practice, it is the responsible unit for providing a variety of cultural activities for the residents of the municipality and it also earns from these activities. This includes art festivals, for example film, music, and dance festivals, art courses, like music, dance and jewel crafting, and the management of museums and libraries, for example a Museum of Education.

The case study involved capturing several capabilities, like the production and organization of art festivals, the provision of art courses and the management of cultural institutions. The main capability that has been analyzed is the organization of art festivals, which has been affected by external factors more than the rest, taking into consideration that it had to be changed several times, especially because of the Greek economic crisis on an earlier level, and even more during the pandemic crisis, because of the strict regulations applied regarding the social distancing. The same capability is the focal point of the Compass demonstration as well.

5.2. Application of Compass

The Compass for Veria Arts Center's capability to organize art festivals is depicted in Fig. 2. The included elements are listed and described in this section. It is worth mentioning that not

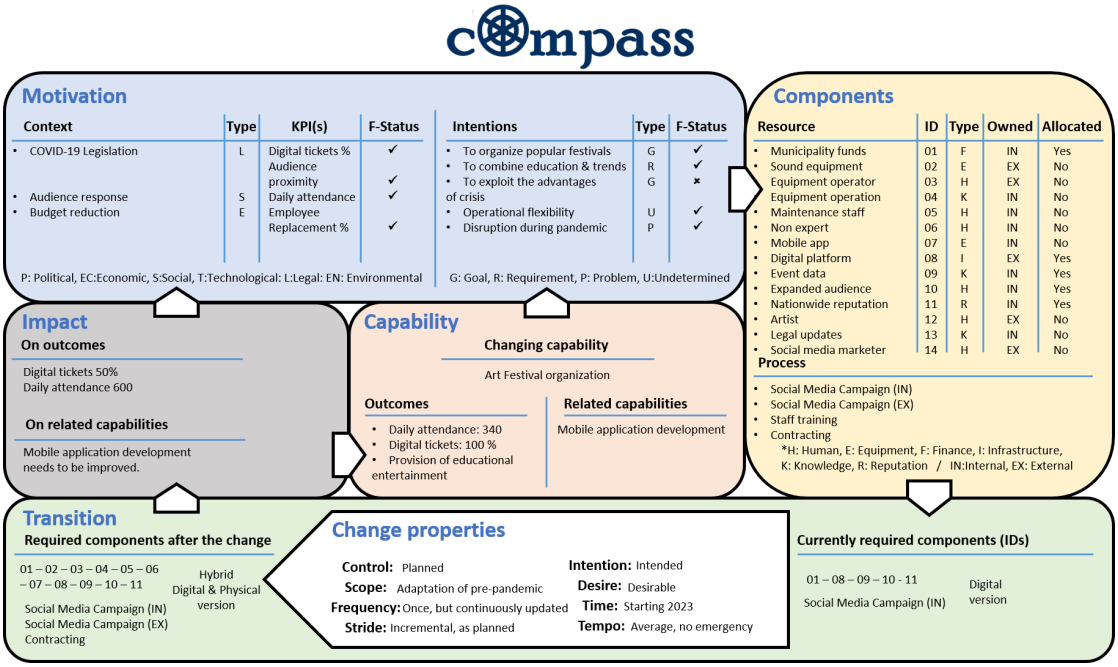

Figure 2: The Compass for Veria Arts Center's changing capability.

all aspects of the capability have been included, there could have been additional elements in the canvas, especially, in the Capability and Motivation areas. However, the focal point of this illustrative example is to present elements that are affecting or are being affected by the given change, while the rest can be omitted. The analysis focuses on designing the future state of the capability, which means that the Compass is used to facilitate the identification of a suitable configuration of components that will make the change feasible. In particular, the captured planned transition concerns the change from the digital version of the capability, which was forced during the pandemic crisis and disrupted all the traditionally physical events, to a hybrid version that exploits the advantages of both the physical and digital version. The analysis focuses on preparing for the future moment when all the conditions will enable the change.

5.2.1. Capability

The Changing capability is the organization of art festivals. It has been affected over the years by the economic crisis, resulting in a significant reduction of its budget. In its current version it is limited to organizing digital events, using streaming services, which naturally means that all participation is digital. The Outcomes of the current version are an average of 340 attendees per festival day, while the participation is 100% digital, both for free and paid events. In addition, all the events are a combination of entertainment and education, as a result of the policies of the Center. A related capability to this one is the Mobile application development, which concerns an internally developed application for the organized festivals and events, so that the event data

are properly gathered and analyzed. The development is ongoing for a long time.

5.2.2. Motivation

In the Motivation area, initially the exploration focuses on the external Context factors that affect the capability. The factor that led to the current digital version is the COVID-19 regulation, which is a legal factor and included a demand for exclusively digital tickets, and the audience proximity being no less than 2 meters, both as KPIs, canceling in this way every physical event. The regulations are milder at the moment, however, they still need to be taken into consideration. The capability's version that organizes digital events fulfill both KPIs. In addition, the social factor Audience response is relevant, and the KPI is set to an average of 300 attendees per festival day, which is also fulfilled by the digital version. So, regarding the context, there was no identified need to change the capability.

Regarding the Intentions, the high level goal of the organization is to organize popular festivals, complemented by the requirement to combine education and trends in the festival content. Operational flexibility is another high-level intention, and the problem that physical events have been completely disrupted during the pandemic is also relevant and needs to be documented, especially if the fact that this problem was the main factor that resulted in the development of the digital version of the capability is taken into consideration. Finally, the organization has set the goal to exploit the advantages of the pandemic crisis, in other words, the Center intends to implement the lessons learned from the pandemic in the post-pandemic version of the capability. This last goal is not fulfilled at the moment and motivates a change.

5.2.3. Components

Initially, the Veria Arts Center requires funds from the municipality for the organization and promotion of festivals. This is a Financial resource, which is allocated to the organization of digital festivals at the moment. The post-pandemic era of festivals aims to combine the traditional physical events with streaming services, so the requirements of the physical events will return. In particular, the Center owns its own stages and theaters, but these require specialized equipment and operators, for example sound and light operators, which are provided by external collaborators, along with maintenance staff and non-expert workers for the casual tasks. The latter are available internally, along with the knowledge to operate the equipment, which also exists among employees if the Center. They are available to the organization, as human resources, since they are not allocated to any tasks during the digital festivals. Regarding the digital aspect of the hybrid events, a digital platform, for example social media, is available for streaming the event, even if it is an externally owned infrastructure resource. A mobile application is being developed to handle the valuable event data. An identified issue is that this application is developed internally and is lacking the functionality to collect data for assessing the success of a festival, a fact indicating that the application can be a weak spot for any future digital endeavor. What can also be used is the expanded audience human resource, gained during the pandemic, because of the fact that the digital events are not restricted to the local population like the physical ones. This resulted in a nationwide reputation resource for the Center, which is another valuable resource, since it facilitates not only external collaborations, but also the

success of promotional campaigns. Other available resources that are not allocated to any capability at the moment are the collaborating artists and social media marketers, as human resources, and the legal updates as a knowledge resource. Regarding the processes involved in the realization of the capability, these are the social media campaigning, performed internally in the organization or externally via outsourcing, the training of the staff, and contracting artists.

5.2.4. Transition

Initially, in the Currently required components, it has identified that the current version of organizing art festivals in a digital way requires few resources, in particular, the municipality funds, the digital platform and event data, the nationwide reputation, and expanded audience, the latter two being used for promotional reasons. Campaigning on social media is performed internally by the Center's employees, so no outsourcing is required.

Exploring which are the required components for the hybrid version results in the fact that all the components of the digital version are required in the hybrid as well, with the addition of several that are associated to the physical aspect of a hybrid festival. In particular, the additional components are the sound equipment, the operators, and the operation knowledge, the maintenance staff and the non-expert workers, along with the mobile app that is necessary to handle the event data during a hybrid event.

5.2.5. Change properties

Regarding the properties of the change, they have been identified as follows. The change is planned, it is considered an adaptation of the pre-pandemic physical version of the capability, it needs to occur once on a big scale, but it will require continuous monitoring and changing on a smaller scale, for example based on the audience's responses, and is also planned to be an incremental change. It is also intended and desirable by the organization, it is planned to start during 2023, since the required mobile app is under a major upgrade, and the tempo is slow to average, since the Center favors quality over speed and does not consider the hybridization of festivals an emergency, even if the value is expected to be high.

5.2.6. Impact

Regarding the Impact of change, initially, as far as the outcomes are concerned, the Center expects to have a significant increase to the attendees of the festivals, combining both the local audience that traditionally attends physically, and the expanded audience gained during the pandemic that can attend remotely. So, the expectation is to have not only a balance between physical and digital attendees, but also a higher quantity overall. Regarding the related capabilities, the development of the Center's mobile application, as long as it continues to be developed internally, needs to have the pace of development accelerated, since the change depends on it, and improved and new requirements have to be implemented in the application, to reflect on the updated demands of organizing a hybrid festival.

6. Discussion

This section will discuss Compass's diverse application areas and potentials for future research.

6.1. Application Areas

The diverse nature of Compass is initially reflected in its name. A compass is both an instrument that can navigate its user, and another homonym tool that enables the creation of a circle (Greek translation=κύκλος/kyklos). Therefore, by definition, a name has been selected to reflect on the fact that Compass is aimed to be used both as a standalone tool for guiding users encountering the phenomenon of capability change, and as a supporting artifact for the development of KYKLOS models. As a result, the application areas of Compass are equally diverse, as follows.

6.1.1. KYKLOS Pre-modeling

One of the main application areas of Compass, which has already been discussed in the previous sections, is the potential to use it as a component of the KYKLOS method, in particular, a pre-modeling step, optimized for users without modeling expertise. Specific decisions have resulted in significantly decreasing the complexity of the resulting models. Selecting the canvas approach omits the need to use a formal language and its notation, which usually include a variety of specific connecting lines, arrows and objects, which require prior knowledge. On the contrary, text in natural language is familiar to any user and a canvas only requires the user to be familiar with the business and domain-specific terms. Regarding the decision to allow only one analyzed capability per canvas, while KYKLOS has no such restriction, this is a difference that results in additional lower complexity of the results. This can potentially mean that the canvas approach is more attractive to casual users. In this way, the gap between casual modelers and complex domain-specific modeling languages can potentially be bridged by using canvases. The result of using a canvas as a pre-modeling step for a modeling method, like the example of Compass and KYKLOS, is a complete preliminary work for the modeling task. Most of the remaining modeling effort concerns transferring the already captured information structures and translating them to the specific modeling method or language.

6.1.2. Standalone Decision-making

A capability can be designed and analyzed using Compass as a standalone tool. Identifying the necessary components for a capability's realization, along with their availability and allocation status, is essential when analyzing an organization's potentials, and it facilitates decision-making regarding capabilities. As indicated in the illustrative demonstration, following the procedure indicated the need to change, in terms of the organization's unfulfilled intention to implement the lessons learned during the pandemic. This can be fulfilled by using a new version of its capability in order to provide value to its stakeholders in an improved way. Identifying why a change needs to be performed is essential in deciding to perform it. The modeling task also enabled checking the expected impact of performing the change, in terms of affected outcomes and related processes. The decision to accelerate the development of the mobile application, taking also into consideration the expected increased attendance, was the result

of the modeling activity as well. Additionally, capturing the outcomes of a capability and the factors that motivate its existence in an organization, is a means to decide whether a capability needs to remain active, or if it needs to be retired or replaced by another.

6.2. Future Research

The next step that should be taken during the Compass project is the evaluation of the artifact in real case studies. There can be two potential directions for these evaluations. On one hand, it can be tested as a standalone tool, used in naturalistic settings and assessing its usability, efficiency, effectiveness, understandability, usefulness, and intention to use, using a framework like the Method Evaluation Model (MEM) [26]. On the other hand, it can also be evaluated as a component of the KYKLOS method, to assess whether it improves the perceived ease of use of the method. It would also be interesting to explore and compare the results not only between the artifacts separately, but also to compare each artifact to the combined usage of the two. In practice, to check whether using the two artifacts together improves the results compared to separate usage, and if this applies to all cases. As a natural result of the motivation to develop Compass, the evaluation activities should also test the artifact taking into consideration different user groups, i.e. business experts and modeling experts [12].

7. Conclusions

This paper has introduced Compass, a canvas specifically designed for improving the management of the phenomenon of capability change in organizations. Its origins lie in the development of a domain-specific capability modeling method, namely KYKLOS. Compass can be considered as a light version of the KYKLOS method. The canvas can be used as an optional component of the method, providing an extra pre-modeling step that helps structure the information before using it in a KYKLOS model. This is particularly useful for users without modeling expertise. Additionally, Compass can be used as a standalone tool, facilitating not only decision-making regarding changing capabilities, but also the design and analysis of change.

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