Business Model Canvas as an Option for Co-Creation of Strategic Themes of SAFe Portfolio

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Abstract—**This article discusses the use of the Business Model Canvas (BMC) technique as a co-creative option for the elaboration of strategic themes of the Scaled Agile Framework (SAFe). The proposed model is different from SAFe, although it quotes the technique as an alternative, and establishes a process for using BMC in conjunction with formulating strategic themes. It is work-in-progress which exploits a visual way of thinking about strategy and the SAFe approach to corporate management. Evaluation of the proposal will use focus group techniques and the opinions of specialists will be surveyed.**

Keywords—Business Model Generation; SAFe; Agile Methods; Strategic Planning.

I.   INTRODUCTION

In the mid-60s, strategic planning established itself as "the best way" to design and implement strategies. Early strategic systems are currently viewed as instruments that guarantee that strategic decisions will be developed without errors at tactical and operational levels. However, planning does not exactly occur in this way [1].

Mintzberg [1] dedicates four chapters to analyzing typically related problems and defines the fallacies of strategic planning as follows: **a)** The fallacy of prediction - attempting to design the future based on predetermined steps, **b)** The fallacy of detachment, - an erroneous understanding that functional units of a company have the autonomy to define and implement strategies, **c)** The fallacy of formalization which sees to it that strategic planning is "written in stone," rigid, inflexible, and follows a fixed pattern.

Parallel to the context presented so far in this paper, software engineering gained experience of agile management models. Melo [2] in his study which had 466 participants, presented a series of benefits when agile practices were adapted. VersionOne reported in its ninth and tenth annual report on agility status, [3][4], that interest had grown in frameworks such as Large-Scale-Scrum (LeSS), Disciplined Agile Delivery (DAD), Scrum of Scrums and Agile Portfolio Management (APM), and set out to scale best practices of agile management, especially the SAFe model.

Of these models, SAFe is the only one to present, within its structure, an explicit openness to strategic management and does so by defining strategic themes and the project portfolio backlog, these being options which, respectively, are analogous to objective strategy concepts [5], and portfolio projects [6].

Having historically dealt with similar complexities while at a tactical level, the management area/project planning has sought to simplify its processes as a result of the emergence of agile models based on design thinking and co-creation [7]. The role that the BMC plays in this is to be regarded as a collaborative technique for innovation in business models and strategic planning.

Given these correlations, this paper presents a process option for using the BMC technique, suggested but not sketched out by Leffingwell [8], to co-create SAFe strategic themes, thereby introducing agile practices of software engineering into corporate strategic management.

The structure of this paper is as follows. Section II presents the research method and Section III presents the theoretical basis of research on strategic planning, SAFe, BMC, and Blue Ocean Strategy. Section IV discusses the proposal, and puts forward a roadmap for using BMC with SAFe. Lastly in Section V, some conclusions are drawn and suggestions for future studies are made.

II.   RESEARCH METHOD

Initially, a theoretical study was conducted on the SAFe model and a detailed understanding was formed on how the process of setting strategic themes at the portfolio level occurs. This concept was the starting point for introducing the BMC technique which had already been suggested by Leffingwell [8] as an option for formulating strategic themes. Next, a Table of equivalence between processes for formulating strategic themes and good strategic planning practices was compiled in order to determine analogies. Fig. 1 illustrates this process as a whole.
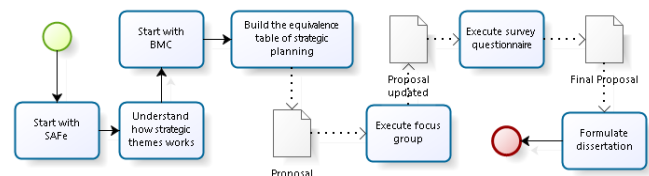

Figure 1. Research method.

For conceptual support of the equivalence between the methods when the research was being undertaken, the literature was reviewed with a view to seeking references in the fields of project management, portfolio management, strategic planning, and agile operations.

The proposal will be evaluated by applying two techniques: **a)** Focus groups [9], as this is a research method which has to be well-planned and structured in which, arising from group discussion. insights about diverse contexts are obtained, and **b)** a Survey of the opinions of specialists [10], which is a broad tool for gathering information from which comparisons, adjustments and explanations can be made.

III. BACKGROUND REVIEW

The background review presents the main concepts used in this work as follows.

A. Strategic Planning

For Drucker [11], strategic planning is a systematic continuous process of decision-making that involves controlled risks to achieve the strategic objectives.

In terms of processes for formulating a competitive strategy in one plan, Porter [12] has three main steps: **a)** What is the business currently achieving. This addresses the implicit and explicit identification of current strategies, **b)** What is happening in the environment? This aims to identify the capacity of competitors, industry, society and their strengths and weaknesses and, **c)** What should the business do? This relates to support for testing the strategic assumptions, making a survey of alternative strategies, and choosing the strategies for business that will add the greatest value to it.

One option for addressing the steps/questions a, b and c proposed by Porter [12] is to use SWOT analysis, an acronym for Strengths, Weaknesses, Opportunities, Threats. The technique is presented by Kotler and Keller [13] as a corporate overview, as an instrument to monitor the dimensions of the company internally consisting of its strengths and weaknesses, and externally, of mapping the opportunities and threats.

B. Scaled Agile Framework (SAFe)

Stettina and Hörz [14] introduce an alternative to the challenges placed in management with agile processes which they call the Scaled Agile Framework (SAFe). This adds an agile philosophy to managing the software of project portfolios and also, among other techniques, recursion processes and activities. The model is divided into four major thematic groups, namely, portfolio, value chain, programs, and staff. The model presents how to scale the agility of software engineering as an option that corporate management ought to consider.

The level of a Portfolio, Fig. 2, should be designed and monitored to ensure that the strategic view is maintained and that key resources are allocated to the value chain of the business. This is supported by strategic themes which act as connectors between the business strategy and the vision of the portfolio [8].
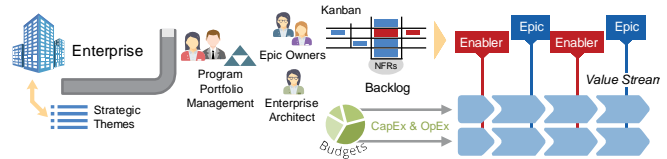

Figure 2. Portfolio level. Adapted from [8].

C. Business Model Canvas (BMC)

In general, the starting point of any discussion of a particular model of business should be that the business itself is thoroughly understood [15]. The BMC is a tool that provides a unified reading of business models which addresses four key areas: clients, supply, infrastructure and financial viability structured into nine thematic blocks as see in Fig 3.
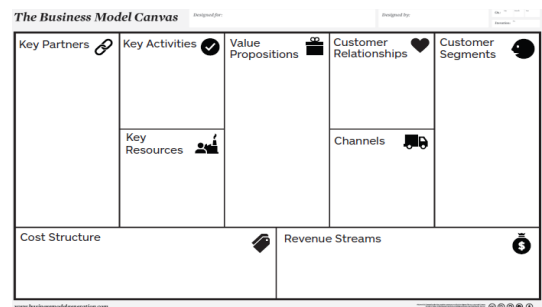

Figure 3. BMC. Adapted from [15].

The process of modeling business or a strategy which uses BMC is conducted in a single frame, preferably printed on an A1 sheet of paper using blocks of adhesive notes (post-its), during stakeholders' meetings. These post-its are used to fill the BMC until a thorough understanding of the process has been formed or the strategy reviewed.

D. Blue Ocean Strategy (BOS)

Designed for the purpose of formulating market differentiation strategies, BOS is presented by Kim and Mauborgne [16] as a technique for use by a company in a red ocean, where the business effort and formulation strategies are focused on competition, for a context where concurrence is irrelevant because the market is vast and has not yet been explored.

As an option to create business strategies to gain access to this unexplored and vast market, Kim and Mauborgne [16] present a framework with four actions to create value which minimizes the impact on costs, namely, a) Which of the factors that the industry takes for granted should be eliminated? b) Which factors should be reduced well below the industry's standard? c) Which factors should be raised well above the industry's standard? and d) Which factors should be created that the industry has never offered?

The first question causes a company to reflect on the possibility of eliminating the points over which it has been competing in its segment for a long time but which offer no

noticeable differences. The second leads the company to think about the products and services that have been oversized in their cost structure, thus adversely affecting its competitive position in the market. The third reflects on the relationship with the client, the need for rediscovery, and to improve the services and products the company offers and provides. And finally, the fourth question prompts a company to discover new sources of value for customers, thereby generating new market demands.

IV. PROPOSAL: BMC AS AN OPTION FOR SAFE

Leffingwell [8] considers that strategic themes may represent points of connection, see Table 1, between the corporate strategic objectives presented by Olsen [5] and the backlog portfolio of projects, and that formulating both of them requires a large collaborative effort and many hours of teamwork.

TABLE I.   STRATEGIC PLANNING AND STRATEGIC THEMES

Strategic Planning	Strategic Themes
Where are we now?	Mission, Principles, Skills and Environment
How do we get there?	Financial Goals and Budget
Where are we going?	Vision and Business Direction

Fig. 4 is adapted from [8] to represent the BMC entry point in the flow of SAFe and this is used to formulate the strategic themes by mapping how they are supported.
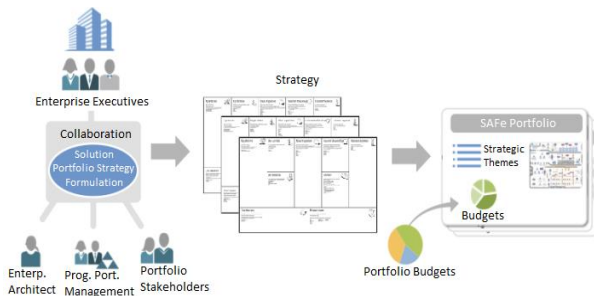

Figure 4. BMC in strategic themes flow. Adapted from [8].

Steps for deriving strategies with the BMC were organized into four groups of processes, see Fig. 5: a) Identify the current model, b) Analyze the internal scenario, c) Analyze the external environment and, d) Formulate the strategic themes.
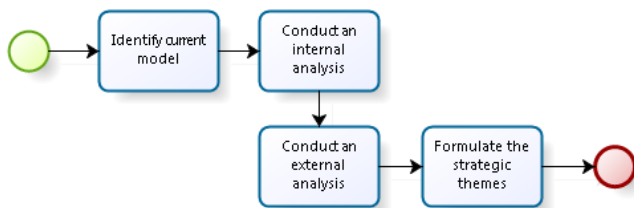

Figure 5. Derivation of strategies using the BMC.

The following paragraphs discuss how to deploy the four groups of processes to fill the BMC and formulate strategic themes.

A. Identify current model

With the help of a moderator, stakeholders must record the actual situation of the company on the BMC, current strategies or their proposals for current values. Each thematic group should reflect its context.

Finally, the BMC must be 100% completed which will result in the model giving a picture of the company´s current business model or its strategies. There are no restrictions on using more than one BMC framework to reflect all the company's value propositions.

B. Conduct an internal analysis

After the current scenario has been mapped, the next step is to analyze the internal environment. The assessments suggested by Osterwalder and Pigneur [15] can be used to map the strengths and weaknesses. New post-its can be used to record findings on the canvas and marked (S) for the strengths and (W) for the weak points, as illustrated in the example in Fig. 6.
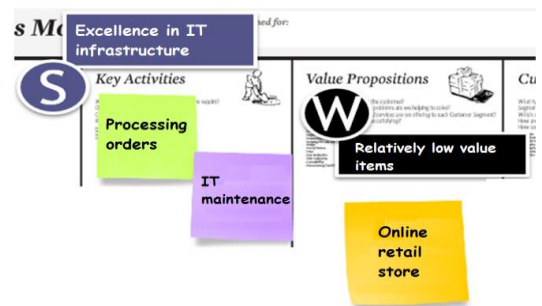

Figure 6. Strengths and weaknesses.

C. Conduct an external analysis

After having identified the strengths and weaknesses of the current model, the next step is to look at the opportunities and resident threats of the external scenario. The assessment of opportunities and threats may occur according to Kotler and Keller [13]. The record of these points requires the inclusion of new post-its with descriptions which should be marked with (T) for threats and (O) for opportunities. Fig. 7 illustrates an example.
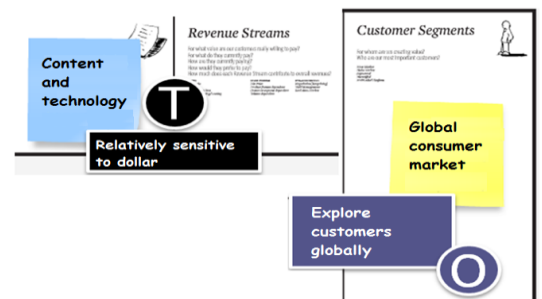

Figure 7. Opportunities and threats.

At the end of this phase, it is expected that the BMC will show the current model and highlight the strengths, weaknesses, opportunities and threats. This will reflect two situations discussed by Osterwalder and Pigneur [15], namely: a) A picture of where the company is and, b) Suggestions for future actions.

D. Formulate the strategic themes

The strategic themes can now be formulated, bearing in mind that, as they are strategic objectives as defined by Kotler and Keller [13], they should be specific and limited in time. To establish these correlations, Osterwalder and Pigneur [15] make use of BOS [16] so as to demonstrate that the BMC is a natural extension of BOS and that together they help in understanding the cause and effect relationship between these two techniques.

The BMC can then be factored into regions as shown in Fig. 8 and be used to tap into the strategic themes as follows: a) Can costs be reduced by eliminating or reducing canvas components? b) What new values can be created or improved for clients without significantly impacting costs?
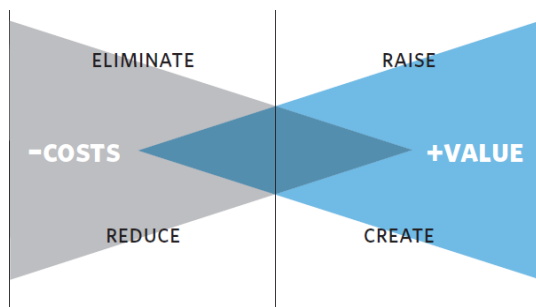

Figure 8. BOS and BMC. Adapted from [15].

Since the corporate strategic themes were derived, they can follow the SAFe flow to the phase of mapping its influence.

V. FINAL COMMENTS AND NEXT STEPS

This work in progress discussed a proposal for how to use the BMC, as a visual co-creative option, to create the strategic themes on SAFe portfolio level.

In terms of future actions, the strategy presented will be evaluated in a focus group and survey with experts. Evaluations need to be made of other models and techniques such as Lean Canvas [17], Strategy Model Canvas [18], and Lean Startup [19], so as to ensure that they have the same capability as BMC in formulating strategies.

As a continuation of the research, the following matters will be investigated: a) The influence of corporate strategic themes on results, b) The Project Model Canvas [20], as an option for preparing the portfolio backlog, c) The evolution of the research by identifying details of equivalence between the models and, d) Evaluating the final proposal by using focus group techniques and conducting a survey on the views of specialists.

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