



Value creation using the mission breakdown structure

Erling S. Andersen¹

BI Norwegian Business School, Oslo, Norway

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Abstract

The modern concept of project success includes the project contributing to the value creation of its base organization. We need tools to discuss what the project itself and the base organization should do to enhance this value creation. The Mission Breakdown Structure tool helps a company set up a project with a clearly defined mission and secures an effective interplay between the base organization and its project. This article presents the tool in principle and use an illustrative real-life case. The case looks like an IT project at the outset, but when using the Mission Breakdown Structure tool, we recognise that it is much more than that and that different stakeholders need to be involved to secure a successful project. Advice on how to use the Mission Breakdown Structure tool is also provided.

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1. Introduction

Traditionally, most project managers have their minds set on achieving project goals within a given time and budget. However, attention is shifting, and project success criteria are changing. The modern project manager should focus more on the future value creation of the company and the various ways in which projects can make their strongest contributions to this endeavour. The international research project “Rethinking Project Management” declared that one of the main directions for the field of project management would be to move from “product creation” to “value creation” (Winter et al., 2006b).

If we agree on this intention, project management needs tools that focus on how to create value. One alternative might be the Logical Framework Approach (Couillard et al., 2009). However, this paper deals with the Mission Breakdown Structure tool (MBS hereafter), which helps outline a precise picture of which contribution the project should make to the development of its parent organization (or base organization herein). At the same time,

the MBS shows what the base organization and other stakeholders must do to maximise value creation. It helps companies set up projects with the right mission and allow for well-informed discussions on how to secure an effective interplay between the project and all involved stakeholders.

The concept of the MBS was originally presented in English by Andersen et al. (1995), although they called it the Objective Breakdown Structure. It had some years earlier been presented in Norwegian. In later editions of their book (e.g., Andersen et al., 2009), the term was changed to how it is known today. To our knowledge, the tool has rarely been used. A Google search of the term shows few hits except for references to the inventors. Google Scholar (search June 2013) has two references to the term in addition to the publications by the inventors. Based on this, we felt the need to reinforce the use of the tool. We thus conducted a case study to observe its relevance and usefulness.

We start this paper by discussing the project success criteria and the implications of success criteria that are not related to time and costs. We look at breakdown structures in general as a way of gaining a better understanding of the tasks confronting us. We present guidelines for developing the MBS and show how it can support the discussion on what the project and its stakeholders should do to achieve project success. Finally, we

E-mail address: erling.s.andersen@bi.no.

¹ Tel.: +47 90281471.

present the case study to illustrate the use of the MBS and discuss the challenges attached to its use.

2. Project success criteria

Project success can be viewed narrowly as the achievement of intended outcomes in terms of time, costs and quality (design specifications). Although this was widely accepted as appropriate in early studies of project management, the project context has shifted (Jugdev and Müller, 2005). It is now recognised that a broader set of outcome measures is generally needed (Atkinson, 1999; Pinto and Slevin, 1988; Wateridge, 1998). Today, projects are less viewed as isolated endeavours aimed at short-term goals and more as long-term strategic interventions to achieve a business purpose and enhance the economic, social and environmental welfare of the various project stakeholders (Lim and Mohamed, 1999; Turner, 2002; Wateridge, 1998).

Munns and Bjeirmi (1996) make the distinction between project management success and project success. Project management success is the traditional view with a focus on the successful accomplishment of cost, time and quality objectives and the quality of the project processes or work. These matters are regarded as the responsibilities of the project management and a successful outcome here would be considered to be a project management success. Project success is a broader concept that deals with the effects of the project. Baccarini (1999) instead uses the term project product success (which may be a better term) and states that it has three components: (i) meeting the project owner's strategic organizational objectives and satisfying (ii) users and (iii) stakeholders' needs in relation to the product. Shenhar and Levy (1997) show that project product success can be assessed along at least three distinct dimensions: impact on the customer, direct and business success and preparing for the future.

Project management success can be determined at the end of the project. Expanding the success criteria as indicated by the concept of project product success will necessarily postpone the final judgement of the project. The performance on some of these success criteria can only be finally decided months or years after the completion of the project.

These two success concepts may also be used to enlighten the debate on whether a project is a success or not. A project may in one sense (project management success) be regarded as a success, but in another (project product success) be regarded as a failure, and the reverse situation may even occur.

Fig. 1 is an illustration of these two concepts of project success. Project management success is determined at the end of the project by comparing the actual deliverables of the project with the goals of the project, traditionally expressed as completion date, budget and the quality of the deliverables. Project product success is measured by the achievement of the project's mission or purpose. It cannot be achieved solely by the efforts of the project itself. It depends on the actions of the base organization and its utilisation of the results of the project. It might also depend on the actions of different external stakeholders.

The extended concept of project success makes it important to focus on the purpose or mission of the project. Why should the base organization undertake this project? What kind of

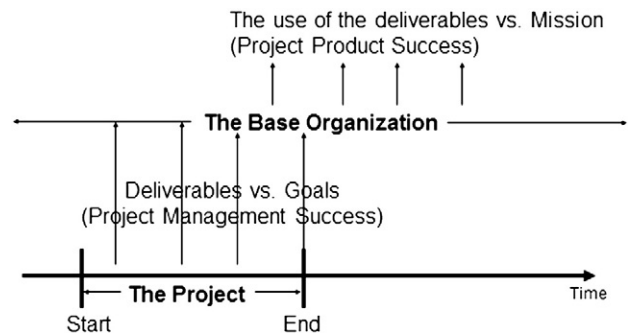


Fig. 1. The concepts of project success.

development should the project help achieve? It is further of great importance to clarify the links between the ambitions of the base organization and the project. White and Patton (2002) call these links critical integrative links. It is by understanding these links that we are able to determine the main deliverables of the project.

However, as stated above, project success depends on what the project delivers, but it is also dependent on the actions of the others involved. We need a tool to illustrate the relationships between the project and the desirable achievements of the base organization that should show what the project should do and what others (including external stakeholders) have to do.

The relationship between the project and its mission is not unidirectional. The mission of the project affects what the project should deliver, but the planning and discussions on what the project should deliver might reveal new opportunities and change the ambitions of the base organization. We thus need a flexible tool that allows for this kind of interplay between the mission of the project and the scope and quality of its deliverables.

The Olympic Games has traditionally been a sporting event, but all the infrastructure investments required for arranging the Games make it possible to consider a mission with a broader and more ambitious perspective. Both the Winter Olympics 1992 in Lillehammer, Norway (Løwendahl, 1995) and the Summer Olympics 2012 in London (Winter et al., 2006a) aimed to improve the environment, health and quality of life for the local communities.

A business school was located on five different locations. It decided to centralise its activities by building a new campus. This might be seen as a rather technical engineering project. The discussion on the mission of the project resulted in "The Learning Arena of the Future". This, combined with the vision of the school to become "one of the best business schools in Europe", led to a new perspective on what the project should deliver and what the base organization had to do to realise the mission (Andersen, 2008). We need a tool with flexibility that is able to direct and support the discussions on the mission of the project and division of work between the project and all the involved actors. The MBS aims to be such a tool.

3. Breakdown structures

Breakdown structures are well-known within the field of project management. For example, the work breakdown structure

(Haugan, 2002; PMI, 2006), often abbreviated to WBS, and risk breakdown structure (Holzmann and Spiegler, 2011; PMI, 2009) are heavily used. Some even see WBSs as the core of project management (Gheorghiu, 2011, p. 1): “If asked what I would consider the most important tool a project manager must have when leading project and project teams, I would return without hesitation that everything good or bad from Planning down to Closing originates from the WBS.”

The breakdown structure has the ability to display a comprehensive hierarchical scheme. This gives the user of the structure an overview and an understanding of it and, at the same time, detailed information is on hand. The breakdown structure can be reduced or broadened, in depth or in breadth, to meet varying needs. The items of a breakdown structure are exhaustive and mutually exclusive so that each one of them can be assigned only to a single item and cannot be allocated to more than one item. In addition, the breakdown structure provides a compact visual illustration. It is presented on one piece of paper.

The breakdown structure is developed using a top-down approach. One starts with the totality and breaks it gradually down into smaller pieces. The establishment of a breakdown structure most often requires group work because no one has the complete knowledge of all levels.

It has been discussed whether breakdown structures are generic in nature, namely they can be presented by a framework that is valid for any setting (Holzmann and Spiegler, 2011). This is not so, however. WBSs usually take as their starting points the activities to be conducted, but they may also use the deliverables/products of the project as their points of departure. Jung and Woo (2004) refer to the International Organization for Standardization (ISO), which defines eight classification classes (facets) of construction information: facilities (e.g., factory, hospital), spaces (e.g., recreations spaces, office spaces), elements (e.g., foundations, exterior walls), work sections (e.g., excavation, cast-in-place concrete), construction products (e.g., steel bars, paint), construction aids (e.g., scaffolding, tools), management (e.g., contracts, cost control) and attributes (e.g., size, weight). Risk breakdown structures can be divided into the management risk area (risks that can be controlled by the organization), the external risk area (risks that originate from factors beyond the control of the organization) and the technology risk area (risks that are inherent in the technology and processes used). However, we have experienced completely different ways of presenting these risk areas. The conclusion is that breakdown structures should be and can be adjusted to fit the challenge in question.

4. The MBS

The purpose (we call it the mission) of a project is to support the development of the base organization (or part of it). The project may propose a reorganization of the base organization; enhance it with a new product; support it with an improved IT system; or provide new offices. But how do we decide what should be the mission of the project?

The discussion on how the project should support the development of the base organization must be based on what constitutes the desired future situation of the base organization.

We purposely use the word “desired”. We distinguish between “desired” and “desirable”, where desired is something that is within reach, but desirable might not always be so. Of course, all projects do not change or affect the whole base organization. Then, the mission would be restricted to work to influence the desired future situation of a specific part of the base organization.

The mission shows us that the reorganization, the new product or the new IT system are not the ultimate goals. Instead, what we may want are a better functioning organization, a more competitive role in the marketplace or better information to take wise decisions. All these outcomes positively affect the company’s value creation.

Having stated the mission of the project, the next question is how can the desired situation be obtained? We might point to several prerequisites for achieving such a situation. We will distinguish between three important factors: the artefacts, actions and attitudes of the functions of the base organization and the actions and attitudes of other stakeholders.

Firstly, certain artefacts might be necessary. There might be a need for facilities such as buildings or offices, vehicles, IT systems or certain procedures or routines, or accessories and equipment. The required artefacts will depend on the actual desired situation. Secondly, the desired situation would also have implications on what would be demanded of the different functions of the base organization. Thirdly, the desired situation will affect certain stakeholders. Their attitudes and actions will be of utmost importance for whether it will be possible to achieve the desired situation.

It will always be of importance to bear in mind what constitutes project success. All three factors point back to the project’s success criteria. The artefacts are directly related to project management success and the traditional project triangle: time, cost and quality. Project product success depends on the actions by the different functions of the base organization. As Shenhar and Levy (1997) point out, success does also depend on satisfied customers and other stakeholders and their actions.

Fig. 2 illustrates that the desired future situation of the base organization has implications for what we need of artefacts,

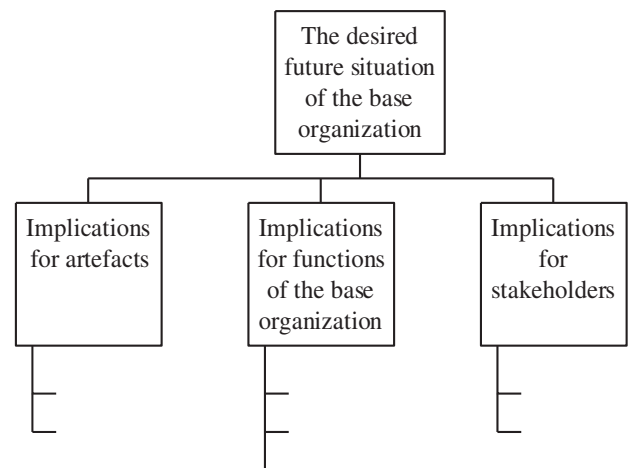


Fig. 2. The MBS—the desired situation and its implications for the artefacts, base organization functions and stakeholders.

what will be demanded of the different functions of the base organization and how we would like stakeholders to feel and behave. Further breakdown into sub-areas is also indicated. The point is to illustrate that the desired future situation may be broken down into smaller units to prepare for a discussion on how to accomplish the aspirations of the base organization. This will further facilitate discussions on which of these elements should be the responsibility of the project and which the base organization itself should handle.

As stated above, breakdown structures are not generic in nature. We have illustrated that three categories might be used for the MBS. Our choice is based both on reflections on what might be involved in creating a desired situation and on our experiences of carrying out these kinds of breakdowns. However, as we pointed out for the work and risk breakdown structures, other approaches might in certain cases seem to be of more relevance.

Once the MBS has been agreed on, the important work of dividing the responsibilities between the base organization and the project can start. It must be explained to all stakeholders that project product success depends both on the work of the project and on that of the members of the base organization. Sometimes we experience that some people believe that the project alone bears the full responsibility for project success. It must be made clear to all involved what the responsibilities of the project are and which responsibilities belong to the base organization.

The project charter can then be drawn up. An important part of the project charter will be the goals of the project. Defining the goals of the project should be a common effort by the project owner and the project manager.

The work on the MBS should result in the following:

- All stakeholders sharing a common understanding of the purpose of the project.
- People having a complete picture of the artefacts, stakeholders and functions that are affected by the project or that affect the project.
- A clear demarcation that defines what the project is responsible for and not responsible for (i.e., the tasks of others).

The purpose of the MBS is thus to create a precise picture of what contribution the project will make to the development of the business or its environment. This will create a common understanding of the purpose of the project and its scope. At the same time, it shows what the project will not carry out. It defines what others, especially the base organization, must do to realise the desired future situation of the base organization.

5. An illustrative case—new web-shop

We now present a case to illustrate what the MBS could look like. The author of this article served as an advisor to the group working on the case. The starting point was that the author wished to observe a real-life case to study the relevance of using the MBS. He contacted a consultancy firm and asked if

they were about to start up a new project. The firm responded that it had just found a client who wanted to set up a new web-shop. The consultancy firm was hired based on its IT competency, but the consultants had the feeling that the project involved more than IT work and they were happy to take part in the case study.

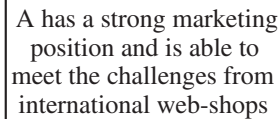
The client was a wholesaler, who was selling its international products through local retailers. The wholesaler had run a rather successful business for several years. However, suddenly international web-shops were appearing. They offered the same products at a lower price than local shops. Some customers found it more convenient and cheaper to buy from these web-shops than through local retailers. The wholesaler understood that it had to respond to this challenge if it was to avoid losing a lot of business. The solution would be to set up its own web-shop. A project dealing with this task was proposed. The management saw it as an IT project and felt it should be left to the IT people.

The client company appointed the marketing manager as its contact person. The start of the project was marked by a meeting where the advisor (the author of this article) gave a short presentation of his ideas to the contact person. He proposed that the project work should start by creating an MBS. He emphasised that IT projects often are PSO projects, namely that project success depends on the parallel development of People, Systems and Organizations (Andersen, 2008). The same is expressed by Leavitt (1964), who states that the use of new Technology will affect People (the required competence), Task (the way the job should be done) and Structure (what would be the most adequate organizational structure). After the presentation by the advisor, the contact person quickly understood that it would be necessary to involve the top management, including the CEO. It was agreed that the CEO should take part in the first group meeting and later should be informed and be available to make the most important decisions about the strategy of the company and the direction of the project.

When creating the MBS, the way of working is of great importance. We advocate strongly that the development of a breakdown structure should be group work. Ideally, the group should consist of the project owner, future users and the potential project manager. The reason for engaging a group is to have the necessary knowledge and experiences represented, but it is equally important to create a common understanding and a commitment to the purpose of the project.

The first group discussion was on the mission of the project. We also use the term purpose, because it is easier to comprehend for most people. There was a general agreement that the most important thing was not the web-shop. The group rather quickly agreed that this project was about how the company should compete and meet the challenges from its competitors. This is reflected in the mission of the project, as seen in Fig. 3 (the company is referred to as A).

It is easy to lose track of what the mission of the project is once it has been launched. Therefore, it is of great importance to have it clearly expressed. Sometimes a slogan or a catchphrase can help make people more conscious about the mission. (In the case of the



A has a strong marketing position and is able to meet the challenges from international web-shops

Fig. 3. The mission of the project “New Web-shop”.

business school that needed a new campus, we could have expressed in more technical terms the requirements of the teaching, administrative and public facilities. However, the phrase “The Learning Arena of the Future” expressed the intention better and gained more attention.)

The next step was to determine who is affected or who can affect the mission. The artefact (the main deliverable) – the web-shop – was in this instance a vital piece, but we also had to identify the internal and external stakeholders. A stakeholder is any group or individual who can affect or is affected by the achievement of the organization’s objectives (Mitchell et al., 1997). There may be many, but we should at least identify the most important. We have to focus on the stakeholders who will be of importance for project success.

The work of identifying and discussing the roles of the stakeholders was organised as a brainstorming session. All group participants were given sheets of paper (3M Post-it notes) on which they could write their ideas and later post onto the wall for all to see. The important thing was that they were all given the opportunity to present their ideas and discuss how to structure and involve the stakeholders.

In this case, the group agreed that the most important external stakeholders were the customers and local retailers. It could also have been competitors and international web-shops, but the reasoning was that in this case they would probably not react to a new web-shop in a foreign country. The challenge for the project would be to make retailers and customers satisfied with the new situation where the wholesaler had its own web-shop.

The group also had to determine which functions of the base organization were affected by the mission of the project. To the surprise of the participants, many functions should be involved. Top management had to set the policy. Other functions involved were the warehouse (covering storage and transport), finance department and marketing department. The company did not have an IT department, so the IT work had to be outsourced to external consultants. They could have been listed as stakeholders, but it was thought that their involvement was covered by their work on the artefact. Fig. 4 shows the results of this step in the development of the MBS.

The group had so far identified which artefacts, stakeholders and functions of the base organization would be able to affect the implementation of the mission of the project. The next step was to discuss in more detail what they were supposed to do to secure success.

The criteria for a successful artefact were agreed upon: a web-shop that was easy to make and operate for the wholesaler, easy to use for customers and easy to change (could be secured by using standard software), that provides relevant information

to all the functions of the base organization (top management, warehouse, finance and marketing) and, finally, that promotes the retailers.

The relationship with the retailers was given special attention. It was of great importance that they did not react negatively to the web-shop, but even saw it as an advantage to them. It is a trend also noticed by newspapers that people go to clothing shops and try out the clothing and go back home and buy the same clothing on the Internet. The shops experience that they get extra work without any sale.

The CEO was asked to develop a policy for how to treat the retailers. One idea was that the customers had to go to their local retailers to pick up their purchases from the web-shop. This was rejected. The advantage of having the retailers deliver the goods to their local customers could be that the retailers would put more efforts into promoting the web-shop, but the main disadvantage, which turned out to be the decisive argument, was that one could not be sure that the retailers had all products in stock, which would result in delayed deliveries. Instead, it was decided to give “kickbacks” (honorariums) to local shops when customers from its sales territory bought products through the web-shop. This would mean that the retailer would not see the web-shop as a competitor; instead, they would encourage their local customers to use the web-shop. The wholesaler would also allow retailers to have links to their Internet homepage on the web-shop in order to promote visits to their physical shops. It would be the task of the finance department to arrange for payments to retailers.

The warehouse should also play an important role in promoting the mission. It should ensure that orders on the web-shop are executed swiftly and delivered quicker compared with competitors’ deliveries (which should be possible because the deliveries from the national web-shop do not have to go through customs and can use local transportation instead of international). However, this means good communication between the web-shop and the warehouse, and the warehouse must also have the products in stock and good procedures for sending the products to customers. The wholesaler knows that there are a lot of fake products on web-shops within its branch. The warehouse is delegated the task of ensuring that this wholesaler only sells products of high quality.

The marketing department would also be heavily involved. Its task should be to make the web-shop known to potential customers. It should also ensure that the presentation of the company and its products on the web-shop are aligned with the product ideology of the company. It was given the responsibility for updating the web-shop and ensuring that new products are presented on the web-shop as soon as they become available.

After discussions, the MBS was finalised (Fig. 5). Actually, the final MBS was not completed in one group meeting. After being discussed in the first meeting, the advisor was given the task to sum up the discussions and draw an MBS and send it to the CEO, the marketing manager, the managers of the other affected functions and a representative of the consultancy firm. The comments were positive; only small adjustments were proposed, and in a second group meeting, the MBS was agreed on.



Fig. 4. The artefacts, stakeholders and base organization functions affected by the mission of the project “New Web-shop”.

The MBS shows that many factors affect the successful achievement of the mission of the project. The task, which for many seemed to be an isolated IT project, was a complicated and integrated process with many actors involved. Project product success not only depended on the project, but also relied heavily on many different departments/functions understanding their roles and responsibilities.

The next step in the work was to decide specifically what should be the responsibilities of the project: what is within the scope of the project and what is going to be taken care of by others? There is no single right answer to this. The CEO and project manager should jointly decide the role of the project. Their decisions were made clear by marking the role of the project on the MBS. Fig. 6 illustrates the decision.

We see from Fig. 6 that the project was given the responsibility for creating the web-shop and allowing for integration with retailers’ homepages and the warehouse function. We see, which emphasises what we said earlier, that the work of the project is only part of what would secure project success.

The final stage was to set the goals of the project. For each of the boxes, which are the responsibility of the project, goals must be determined. We see that the project is responsible for getting the web-shop up and running. The goal had to specify when it should be in operation and the budget. It was also necessary to specify what was meant by saying that the web-shop should be easy to operate. The other boxes also asked for specified quality criteria that the web-shop would have to meet.

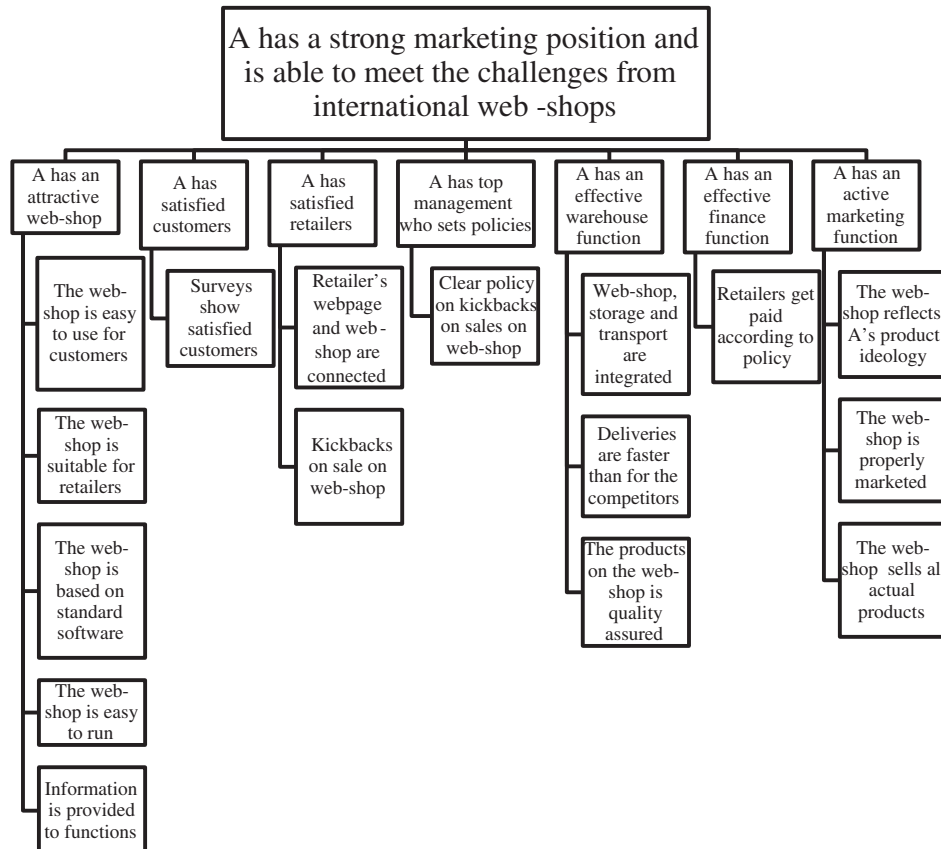


Fig. 5. The MBS for the project “New Web-shop”.

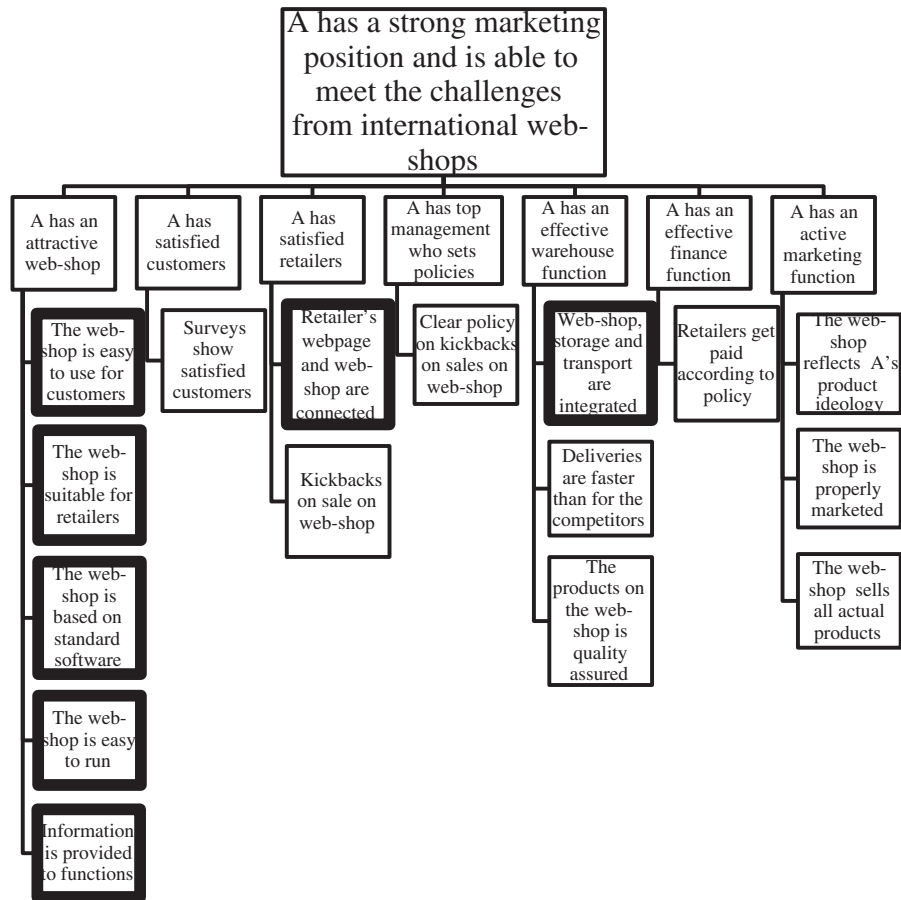


Fig. 6. The MBS for the project “New Web-shop” with the responsibility of the project highlighted.

After the work with the MBS, we asked people from the client company (the wholesaler) and the consultancy firm for comments. The marketing manager from the client company expressed that it had been a fruitful and valuable process that had provided a much better understanding of the job ahead, especially that it required the involvement of and decisions by several managers. She also found it very valuable that we had insisted that the CEO should take an active part in the work.

The people from the consultancy firm also agreed that it had been an illuminating process that had given the firm a clear picture of its responsibility. The firm decided to arrange a seminar for its customers to present the process and the results.

The story could have stopped there. However, it has an epilogue. Our agreement with the consultancy firm and client company was that we should be allowed to publish the case study and the results. As part of the preparation for the seminar for the customers of the consultancy firm, we sent our PowerPoint slides to the client company. After a while, the company told us that it had contacted its American parent company, which had decided that the MBS could not be published because it would reveal the strategy of the company and such information would be valuable for its competitors. This was a clearly a breach of the agreement we had. We did not want to make it a judicial matter, but suggested as a compromise that we should be allowed to present the case

without mentioning the name of the company and its products nor even the kinds of products the company was selling (it is not clothing). The company agreed to this.

For the author, who had put a lot of effort into the case, the imposed restrictions on what he was allowed to publish, was a great disappointment. However, it has a positive pedagogical element. It illustrates a valuable aspect of the work on the MBS, namely that the discussions on and the results of the MBS focus on the important, even strategic, matters.

6. Conclusions

The broader concept of project success requires a thorough understanding of the mission (purpose) of the project. We need to know what the base organization would like to achieve by setting up the project. We need to know what the project should deliver and how the base organization should make use of and relate to the deliverables to secure success. The MBS is a helpful tool in the process of understanding the roles of the project and the future users.

It is our view that the MBS could be used for all kinds of projects. It may be obvious that it is needed for work on “soft” projects such as organizational development projects where the project only creates the foundation for a well-functioning organization and where the follow-up activities of the base

organization are crucial for success. Our case shows that the MBS is also useful for IT projects. The MBS of the case study shows that the work is not over when the project has been completed and that it is of utmost importance to understand the interaction between the base organization and the project.

We have shown that the important steps in making an MBS are the following:

- Describe the mission of the project (the future desired situation of the whole base organization or a specific part of it);
- Identify the elements crucial to achieving the mission. It is wise to consider the implications for the necessary artefacts and the involvement of different functions of the base organization and different stakeholders. It is wise to keep the number of affected elements to a reasonable number to retain an overview of the project;
- Break down the chosen elements into more specified elements; and
- Divide the responsibilities for these different elements between the project and the base organization.

Once the MBS has been finalised and the responsibilities of the project decided on, the next step is to outline the goals of the project.

To sum up, the purpose of the MBS is to create a precise picture of the contributions the project should make to the development of the business or its environment. This will create a common understanding of the purpose of the project and its scope. At the same time, it shows what the project will not carry out. It defines what others, especially the base organization, must do to realise the future desired situation.

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