### **Vertix Limited**

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Vertix Whitepapers
Scoping Business Requirements for Technology Projects
Version 1.0

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## Scoping Business Requirements for Technology Projects

An overview of the process of defining project requirements with a business led focus

#### 1 Overview

The specification of a businesses needs for a project or product is one of the first steps that must be undertaken before embarking on any technology-based project. It is one of the most important processes to get right, yet also one of the hardest. The "business needs" that are to be specified aim to answer the "why are we building it?" and "what are we building?" questions, not "how will it be built?" or "who will build it?". The output of such a scoping exercise should define the business aims of the project, the main components that must be produced, and the interactions between components, with users, and with third-parties.

This is not a technical exercise, but one that will inform subsequent technical architecture and specification and lays the groundwork for any development work that will be undertaken.

#### 2 Process

The process of scoping out the business requirements of a project can be undertaken in many different ways, however, it is important that all key stakeholders input into the process and review the outputs of the process such that consensus is agreed and any required clarification is included. Where the stakeholders meet to discuss and go through this process, it is important to understand what the main outcomes of each meeting are and who is allocated the tasks of capturing the details discussed and producing the resulting documentation. It is easy to lose much of the value of verbal discussion when it comes to producing the documentation, and as such a process of drawing and diagramming the components and interactions as a group is often highly valuable, where detail and text can be added later.

Broadly speaking, any such process will start with the mission statement and functional areas of the project and having a written mission statement agreed before proceeding with the later stages of the process will help cement the goals and direction of the scoping exercise.

This is an exciting part of any project where the vision and aims are discussed and agreed and the process of distilling these ideas into a scoping document will help set the course of the project for the future.

#### 3 Output

There are a number of key outputs of the process of scoping business requirements, some of which may already be in place or be well understood. One of the goals of this process is to consolidate such information into one place and to affirm and agree this information at the early stages of the project, to provide a framework within which development work can begin.

The scoping and defining of a project's business led requirements should not be viewed as a one-off process and the outputs need not be static but viewed as living documents that can be improved, enhanced, and reviewed as information subsequently becomes available or if the direction of the project changes.

#### 3.1 Mission Statement

The Mission Statement of a project articulates the fundamental purpose of the project, the vision for what the project will produce, and the goal that it aims to achieve. It should be succinct, plain, inspiring, and useful. In most cases, a mission statement proceeds the scoping of business requirements, but it is valuable to repeat this in the output of the scoping phase to provide the context within which the project is being undertaken.

#### 3.2 Functional Areas

What are the high level, functional areas that, when put together, aim to fulfil the mission statement of the project? These are the key areas of the business that provide services to users. In the output of the scoping phase, these functional areas should be clearly defined in terms of their purpose and functionality to the end-users. In defining these business functions, we are expanding on the mission statement and answering the fundamental question of how we are to achieve such a mission statement. In most cases, we will be talking about a relatively small number of business areas that will be covered by the project; rather than thinking of the individual components that will be built, that may be numerous in each functional area, we are defining the overarching areas that such components will fall into.

For example, a company such as Google may list some of their key functional areas as:

- Internet search services,
- Cloud hosted email and document storage,
- Website data driven analytics,
- User focussed advertising,
- Cloud hosted infrastructure,
- Etc;

All of which can be easily tied back to their mission statement:

"Our mission is to organize the world's information and make it universally accessible and useful."  $^{1}$ 

The output produced in this step, may be in the form a diagram or simple text, but should clearly outline what the project aims to deliver, broken down into constituent services that the end-user will use, and should be easily tied back to the mission statement. Where it is not easy to see how and why a functional area fulfils the mission statement this should be carefully reviewed and if necessary re-evaluated.

#### 3.3 Components

Once the mission statement and functional areas of the project are known and agreed upon, the key components can begin to be detailed. More information is now being added into the scope of the project and while this begins to feel more like a technical architecture, it is important to remember that we are scoping out the business requirements at this stage and not the technical detail, so the information that is produced should be relevant to the functional area within which the component resides, giving detail on why each component is needed and what it aims to achieve. These could be components such as: a customer website, mobile application, customer reports, administration website, document store, etc. The purpose and main functionality of each component should be

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<sup>&</sup>lt;sup>1</sup> https://www.google.com/about/

detailed from perspective of the stakeholders of the project with regards to the functionality for the users.

At this stage, it important to note that detailed technical specification will be produced later on in the lifecycle of the project, and while it is easy to be pulled into technical discussion, the focus is on the business requirements and user functionality.

#### 3.4 Interactions

With the key components of each functional area understood and detailed, the interactions between these components can be added into scoping phase. Here, the information that needs to be output and received by each component is listed and we begin to define the contract or interface, in business terms, that builds up the interactions between components within functional areas. Where is it not immediately obvious why each component may require certain information, or what the information is, further explanation and clarification should be added such that the interactions can be viewed and understood in the context of each component and functional area.

As well as the interactions between components, the interactions with third-parties (and well as information on the relevant third-parties) should also be included. Where specific third-parties are not yet known, the nature of the third-parties should be included as a placeholder along with the functionality that will be provided within the scope of the project.

Other interactions that should also be included at this stage include, internal and user reporting or communication, as well as other process-driven interactions with users and internal staff operating the product.

#### 3.5 Diagram

A natural output of defining the components, interactions, and third-parties relevant to the project is a diagram that presents this information in an easily digestible format that can be referred back to in later stages of the project. Such a diagram does not need to include excessive detail and clarification but should be easily tied back to further description in the output documentation such that reference can be made where required.