Hello and welcome to the smart BA distance learning programme module 2 – in this module you are going to analyse the scope and context of the project and solution you are working on.

Analysis can be thought of answering many different questions about the same subject – which in this case is your project. So far we have been answering questions about who must be involved (your killer stakeholders), what the problems/opportunities/compliances are that the project addresses (drivers), and how everyone will know how successful the project has been (objectives and principles).

But how big is the solution the project delivers? And how do we measure how big it is? And what interactions does the solution have with users and other entities? For that matter, what interactions does the project have with other entities?

This module gets you to answer those questions for your project. Before we start though, another very important and fundamental point for analysts and this course: during this and subsequent modules you may find that the information you analyse changes the results of analysis already done in previous modules. That is to be expected because analysis is iterative and you will progressively refine your understanding as you proceed through the project.

In terms of the course, this simply means updating the results of previous analysis and resending to your mentor: even though you have already paid for and done the previous modules, because analysis is iterative, resubmitting previous work with updates is all included.

So let’s start the module proper by considering what scope and context are and how they can be analysed.
Here’s a reminder of a section we saw in module 1.

Context is a definition of all the external entities that the scope interacts with and why. They are called external entities because they are external to the scope. In this module we will analyse the context of the solution and your project that creates it.

This is very important: by definition of the fact they are external they are not under your control and you are not modifying their design in any way – you use them or interact with them using whatever means of communicating they already provide.

Scope is the extent of whatever the scope is about. In this module we will analyse the scope of your solution and the scope of your project that creates it.

This is very important: the fact that a dimension is declared as in scope means that you can modify the design and change the way that dimension works. To an extent it is under your control to change.
Let’s analyse the context of the solution first. This analysis will answer the question “What is the solution interacting with and why?”. First off let’s show the solution’s scope…let’s suppose we have a solution which is all about recording sales…

Remember: everything inside the solution scope is within the extent of the solution and is created or modified by the project that created the solution. Everything outside the solution scope is entirely and completely unchanged by the solution.

This solution might need to get customer information from the existing ABC Contact Management System. Making it an external entity means that the ABC Contact Management system can already supply customer data and no changes are required to it in order for it to supply that data to the solution.

The solution then interacts with the customer to get their sales information.

In order to interact with the customer, the solution may need to use the existing telephone technology. No changes are needed by the solution – no new numbers, diverts, voice menus or anything otherwise it would have been within scope of the solution to change it.

Having recorded the sale, the solution now hands this information off to the order fulfilment manual process when that process requests it.

The solution is operated out of head office and no changes at all to head office were required when the solution was created.

You may need other types of external entities to fully define the context of your solution. In which case, define them and the reason for the interaction with them.
So what exactly is within the “Record Sales” solution scope?

-What processes will change? For example, your solution might need to be able to allow the users to “validate customer”. When we get to the lower level of detail of drawing process maps (module 5), one of the features of the maps will be that each and every process and process flow is by definition in scope. You could at this level draw a top level process map to describe process scope – but we recommend that at this stage you just list them out.

-Who will be using or otherwise changed by the solution? For example, users of the process “validate customer” may well be themselves within the scope of the solution – they might need to learn a new process and a new application.

-What will change at which locations. For example the context defines that the solution is physically available at head office, but it will send order fulfilment messages to the warehouse which will need a new post box to receive them.

-What information is changed and produced by the solution. For example, the “record sales” process will need customer, product and user data in order to be able to work. When we get to the lower level of detail of drawing data models (module 6) one of the features of that model will be that each and every entity and relationship on the model is by definition in scope. You could draw a high level data model now but we recommend at this stage that you can just list the entities and relationships out.

-Changes to applications needed by the solution. For example, the solution might have been constrained to use a certain application to deliver certain functionality – perhaps the “record sales” process must be done on the ABC Sales Order System. Declaring an application as in scope means that there can be changes to it. If there are to be no changes to it, then it is one of the externals that the solution interacts with.

-Changes to technology. For example in order to support the “record sale” process, the solution might need the network to run ABC Sales Order System and it might need phones to allow sales people to talk to warehouse people. As with applications, declaring technology as in scope means that there can be changes to it. If there are to be no changes to it, then it is one of the externals that the solution interacts with.

-Any other changes to any other dimensions required by the solution. In the example above, we might want to use customer segments to state that only sales orders for premium customers are in scope. And so on. Use the dimensions you need to in order to define the scope completely and accurately.

-What has been definitively excluded from the solution. Everything not explicitly stated as in scope is – by definition – out of scope. However, as you progress you may find that you debate certain dimensions and conclude that some are out of scope. You should record the conclusion, the reasons it was reached, who reached it, why and what material impact it has on the solution. Then you won’t have to re-discover the conclusion next time it arises!
Assignment Task 1:
Document the scope and context of your project’s solution

- Use the solutions scope and context templates in the supporting documentation pack – add to documentation from module 2
- Analyse the scope and the context of your project’s solution
- Justify each scope and context element by mapping to objectives and/or principles
- Challenge the scope and context
- Get it challenged by the project stakeholders.

Task 1 is to document the scope of your project’s solution.

Use the templates that accompany this module to document the products of your analysis. Copy the relevant worksheets to the analysis deliverables spreadsheet from module 2 to keep all the analysis together in one spreadsheet.

Analyse the scope and the context within which the solution will work in. Who are the suppliers and customers of information the solution will use?

Be able to justify each dimension of scope and context by mapping them to the project objectives or principles.

As you document them, challenge them with your self to make sure they are as full, complete, accurate and definitive as possible.

When you are confident in them, get your killer stakeholders to review and challenge them.
You might be wondering why are defining scope and context for the solution and project separately when we only did one set of objectives and principles. The answer is that the objectives are the benefits and vice-versa: they are one and the same thing. The point of the project is to deliver the solution, and the point of the solution is to achieve the objectives – so the project and solution have the same objectives. Context and scope, on the other hand, defines the extent and size of the solution and project. The extent and size of the project will not be the same as the extent and size of the solution.

But project context and scope do not form part of analysis of change requirements deliverables. However, you and the Project manager are going to find that knowing the definitive context and scope of the project has numerous advantages as it defines:
- What the project will be doing
- Who needs to be working as part of the project team and for what reasons
- Who the project will be interacting with and why
- What changes to locations the project needs in order to be able to operate
- What information is required by and produced by the project
- Applications and technology support needed by the project
- What has been definitively excluded from the project.

Now let’s analyse the context of the project. This analysis will answer the question “What is the project interacting with and why?”. So let’s continue the example of the solution to “record sales” and the project is called “record sales project”. Remember: everything inside the project scope is within the extent of what the project is doing to create the solution. Everything outside the project scope is entirely and completely unchanged by the project.

This project will need to get requirements information from the Sales Team organisation unit.

In order to interact with the sales team, the project may need to use the existing telephone technology. No changes are needed by the project – no new diverts, voice menus or anything otherwise it would have been within scope of the project to change it.

The project also gets Management Information or MI reports on the volume of sales that are recorded from the existing solution that produces the MI called ABC MI System.

The project has to go through a project prioritisation process when the requirements have been signed off.

The project is operated out of head office and no changes at all to head office are required to run the project.

You may need other types of external entities to fully define the context of your project. In which case, define them and the reason for the interaction with them.
Now we are going to analyse the scope of the project will deliver the solution. But remember, we are not analysing the scope of the solution, but the scope of the project that will deliver the solution.

You can define project scope in lots of different ways – and these are called dimensions. While you could draw diagrams and model these dimensions like you can for most of the solution, we would recommend just listing them out: you do not progress the analysis of the project any further than this and it is sufficient to just know what particular elements are in scope of each dimension.

So first up, What processes will the project run? For example, your project might need to be able “analyse requirements”, get analysis phase sign off and so on.

What is the project structure? For example, project steering groups, sponsors, user reps, Business Analysts(!).

What changes to locations are needed – for example setting up a training environment for users.

What information is needed by the processes that the project runs. For example, the “analyse requirements” process may need information about requirements and produce prioritisations for requirements.

Changes to applications needed by the project. For example, the project might document the analysis of requirements in Excel and Visio.

Changes to technology needed by the project. For example the project might need a set of shared folders et up on a network drive.

Any other changes to any other dimensions required by the project. In the example above, we might want to use time and budget to say that the project has a fixed budget and finite life-span. And so on. Use the dimensions you need to in order to define the scope completely and accurately.

What has been definitively excluded from the project. Everything not explicitly stated as in scope is – by definition – out of scope. However, as you progress you may find that you debate certain dimensions and conclude that some are out of scope. You should record the conclusion, the reasons it was reached, who reached it, why and what material impact it has on the project. Then you won’t have to re-discover the conclusion next time it arises!
Assignment Task 2:
Document the scope and context of your project

- Use the project scope and context templates in the supporting documentation pack – add to documentation from module 2
- Analyse the scope and the context of your project
- Justify each scope and context element by mapping to objectives and/or principles
- Challenge the scope and context
- Get it challenged by the project stakeholders.

Task 2 is to document the context and scope of your project.

Use the templates in the material accompanying this module to document the products of your analysis. Copy the relevant worksheets to the analysis deliverables spreadsheet from module 2 to keep all the analysis together in one spreadsheet.

Analyse the context and scope of the project. Who are the suppliers and customers of information the project will use? What will the project be doing, where and so on.

Be able to justify each element of scope and context by mapping them to the project objectives or principles.

As you document them, challenge them with your self to make sure they are as full, complete, accurate and definitive as possible.

When you are confident in them, get your killer stakeholders to review and challenge them.
...and finally

- **Dependencies**
  - What processes/factors/groups/people are you dependent on and for what?

- **Constraints**
  - What constrains your activities? In what way? How much?

- **Issues**
  - What factors have arisen that are impeding your work which are outside of your control? How do they impede you?

- **Assumptions**
  - What assumptions have you made – and why (to work around an issue?)

- **Risks**
  - What might go wrong (maybe as a result of the issues you identify), how likely is it if they will occur and what will be the impact?

You should be getting used to this after 3 modules! There is one more set of information we need to analyse and this is a set of elements that can arise at any time but varies in subject matter by what you are analysing. So for this module we are interested in the following elements as they relate to Projects only. This is because the solution dependencies and constraints are already defined as scoping statements and a project should not be implementing a solution with issues, assumptions and risks …

Dependencies are things outside of the project that need to happen before the project can complete or are other projects waiting on this one.

Constraints are imposed on the project to limit what the project will be able to do.

Issues are things that happen that prevent the project from progressing. The project cannot control the issue but what it can do is make an assumption that allows it to progress.

So assumptions are often linked to issues but not always. In any case, you need to define the assumption and analyse what the impact would be if the assumption turned out to be false.

Finally, risks. In the course of doing this project, what might happen that could stop the project from progressing or impair achieving objectives? How likely is it that it will happen and what will be the impact if it does?
Assignment Task 3:
Document the dependencies, constraints, issues, assumptions and risks you discover

• Use the relevant templates in the supporting documentation pack for this module to document them
• Analyse the material impact they have on the project
• Challenge them
• Escalate them as required.

Your final task in this module then is analyse the project’s dependencies, constraints, issues, assumptions and risks.

Use the templates in the material that accompanies this module to document them.

Don’t document them for the sake of documenting them: analyse the material impact they have on the project.

Challenge them and every part of them until you are happy they are correct.

When you are confident that they are right, escalate any that need escalating (particularly risks, issues and assumptions) – probably to the Project Manager.
End of module 2

That is the end of the introduction to module 2. I look forward to receiving your analysis deliverables!