

## **Transcript for “Decomposition Diagrams” Presentation**

### **Section 1: Decomposition Diagrams**

In this module, we'll take a look at another visual tool called the decomposition diagram. Decomposition diagrams are great ways to organize the thoughts and information that you capture during interview sessions and then the follow up affinity diagramming. Any time you're doing voice of customer or any type of stakeholder interview session. They are also effective tools to help you estimate the total amount of needs and total amount of work that's going to be required for the project and sometimes call the finish decomposition diagram that gets passed off to the project manager for this estimating a work breakdown structure. In a visual format, you start with just a whole pile of needs and statements, collection of information. Then you begin to categorize and organize it into different levels of business and user requirements and in the end you've got something that looks like this; a fully flushed out decomposition diagram with ID numbers that you can use to trace needs as you move from current to future state project deliverables.

### **Section 2: Raw Feedback to Categorized Requirements**

So let's take a look at the steps involved in creating a decomposition diagram. Most of the heavy lifting, most of the real work involved is not in the diagram itself; it's in the needs collection through interviews. After interviews have been established, questionnaires created, feedback given and that information recorded, affinity programming typically takes place in separate sessions and separate workshops can be done to explain affinity diagram, but we've all done it in one way or another before and let me give you a quick visual where we lay out the feedback that we've got from an interview session into particular need statements that are on sticky notes or on notecards and then we begin to categorize those statements into specific themes or needs. It might be things like external user interface needs versus reporting needs.

It might be needs related to a particular shop or environment, but different categories. That's all part of the affinity diagramming. Finally, we take those affinity diagrams, the categorized sticky notes and we create an electronic document. This electronic document in the end is a decomposition diagram. So from interviewing to taking the results and breaking them into individual statements. From the individual statements we begin then to categorize them in using affinity diagramming techniques and from the affinity diagram we electrify that result into a decomposition diagram.

### **Section 3: A Closer Look**

Let's take a closer look at a decomposition diagram. At a theoretical level it's nothing more than a layered approach at the organized user and business needs where we have high-level needs in the first layer and then those are drilled down into deeper, more detailed need's statements. When we look at a decomposition diagram, a lot of people will say, well, Scott, that's nothing more than a tree diagram or a modified version of an org chart but where the organization is not of particular titles of work group but it's an org chart of the needs for the future state solution and I would completely agree with you; that's exactly what a decomposition diagram is. Below we've got an example of a flushed out decomposition diagram where at a high level here are within this system we need to do registration and then at a lower level data entry, transactional verification, data updates and different types of reports.

Then further lower levels we can break down need statements further. They don't need to be 1, 2, 3 levels deep. They could be 5, 10 levels deep if you need to.

#### **Section 4: Identifying Needs**

This example we've got a much more fleshed out decomposition diagram in the above. This is a decomposition diagram flushing out the needs for a particular training or educational event. We can take then elements of this decomposition diagram and then code out and ID out the particular need statements that were created in the diagram itself and that's what these numbered values are. The very thing about that is then you can trace the needs as we move towards future state solutions and as developers work on fulfilling those needs you can go back and check to make sure, check the test and make sure that those needs actually are fulfilled in the future state. So not only is a decomposition diagram a great way to organize the results of an affinity diagramming session and organize your need statements but it's also a great tool for ID'g and tracing those needs.

#### **Section 5: Benefits**

Decomposition diagrams I think are a great tool for the business analyst, you know, they give you a way to take a workshop setting in which you're trying to unearth business needs, you're using a variety of paper-based sticky notes, affinity diagramming techniques, free form brainstorming techniques, but at some point you've got to capture all of that information and be able to pass it on to others working on the project. That's when a decomposition diagram comes into play and you can take those need statements that you capture from the free form sessions and place them into an electronic document and add ID statements to them so that they're traced throughout the future state solution and this exact diagram then can also be passed on to the project manager for estimating total project deliverables, how long it's going to affect the schedule, how much it's going to cost to fulfill on these needs.

It's a great tool and visual artifact that not only is helpful for the business analyst but later on for the project manager themselves.

#### **Section 6: Summary**

I really like to use decomposition diagrams and think that they're an effective tool for the business analyst. They take a free form, free flowing needs gathering session like you see above where you're using a combination of brainstorming techniques, mind mapping and affinity diagramming to come up with different categories and different ways to organize those needs into that you can pass on to other analysts and other project managers. The decomposition diagram also is a tool that can be used to trace and track those needs; that's why we like to include those ID numbers and the decomposition diagram can be used not only for the business analyst in understanding what's needed in future state but this exact same document then can be used for helping the project manager estimate how much it's going to cost, how long it's going to take to fulfill those needs.

The decomposition diagram is a great cross functional tool for both the business analyst and the project manager. That's why I like to use them when I can.