Functional Mapping

JOHN BESSANT
Managing Innovation

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One set of techniques of great value in new product (or service) development are 'roadmaps' which identify what and who will need to be involved in order to create the innovation. For example, technology road mapping helps focus attention on the technical capabilities which will be needed on order to create and bring a new product or service to market. Functional mapping fits within this set by looking at the ways in which different functions within the organization need to work together to create and deliver the innovation.

This can be a simple 'back of the envelope' exercise or a detailed and systematic plan. The main idea is to think ahead about what different knowledge sets and capabilities might be required from whom and how they will be sourced and integrated over time. So, for example, producing a new cosmetic might involve the following functions:

- Chemistry to develop a formulation
- Testing to ensure it works and is also safe
- Legal to ensure compliance with regulatory authorities like the FDA
- Manufacturing to ensure it can be made to consistent quality and as low cost as possible
- Procurement to ensure bought in goods and services are available, again at the right time, quality and cost
- Marketing to ensure the product is what the market wants and to identify how that market will be reached
- Etc.

It is good practice to ensure everyone is aware of what is being planned – early involvement is a key to fast new product/service development. But their involvement will vary over time in terms of commitment and responsibilities. Functional mapping allows this to be set out clearly and to explore where accountability lies, especially in areas where cross-functional co-operation is needed. An example map of the above might look like this:

Timeline of	-	-	-	-
project				
Involvement of				
Chemistry/R&D	Early phase	Handover	Technical support	Technical support
Testing	In parallel with R&D	Developing robust reproducible tests and handing over	Technical support	Technical support

Legal	Early stage exploration of requirements	Support	Support	Support
Manufacturing		Handover and acceptance	Production	Production
Marketing	Concept testing and early market information	Prototype and test marketing	Development of launch	Product management
Procurement	Identification and vetting of potential suppliers	Building supply chain	Operating supply chain	Optimizing supply chain
Etc.				

This map can take the form of a table like that above, or a flow chart. The main purpose is to ensure a discussion and to anticipate where and how the different functions fit together.

More information about the use of mapping tools can be found at http://www.innovare-inc.com/downloads/Product Tech Mapping Tools.pdf