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Management of Supply Networks for Products and Services: Concepts, Design, and Delivery

Key Takeaways Document – Part I

Service Vision & Characteristics¹

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- Agenda and intended purpose of these notes
 - These present the key takeaways and messages from each session / lecture on the concerned topic/s.
 - Internalize the learning from each lecture.
 - Understand the link between class readings and the core messages from each lecture.
 - These notes are not intended as a substitute for the class readings and lecture slides.
 - They also provide a look back at the ground we have covered so far in the class.

¹ Version created on 7/28/2004 5:55 PM

² Based on Lecture Notes

Strategy and Segmentation

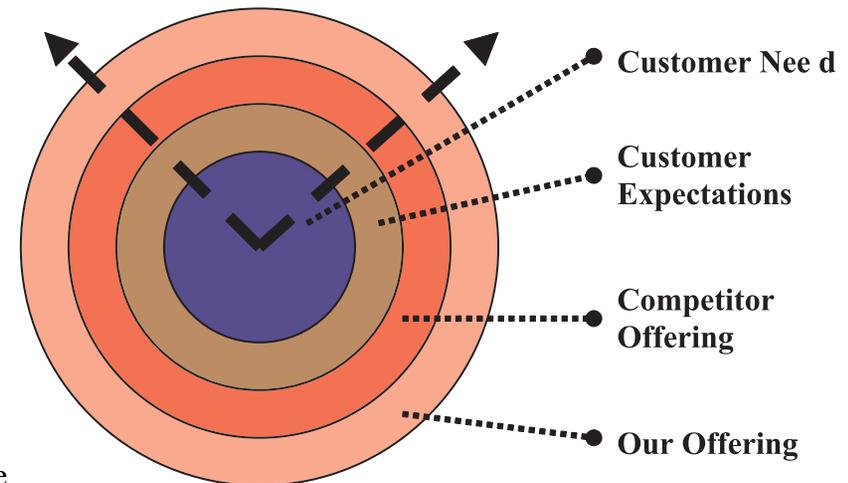
- Segmentation = Classification. Necessary to do Science
- Segmentation: Demographic data are not sufficient when dealing with services that are consumed with high frequency. In these cases data from transactions can play a major role in identifying segments.

Competitive Analysis

- Delta Model and Porter's Five Forces are the basis for a good strategic analysis

Differentiation

- **In services, Our Imagination is the Limit to our Success**
- **There Are No Mature Businesses But Only Mature Ways Of Doing Business**

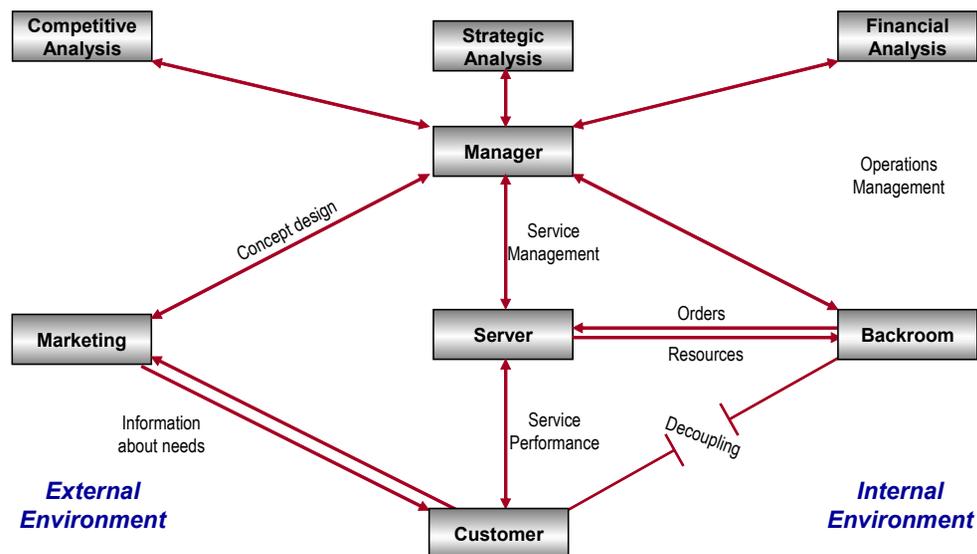


Enlargement of Product/Service

- *Core Services* versus *Facilitating Services*. Recall the dish washer example
- The bubble keeps expanding as customers' expectations increase (a dynamic process)
- A key decision is how much to offer beyond the core service while we still remain competitive.
- *Customer Satisfaction* and *Productivity* are two sides of the same coin.

Framework to Analyze Service Operations (The Service Diamond)

- *External Environment*: where customers and competitors are, where marketing and strategy are critical
- *Internal Environment*: by definition is the place where customers are not present, where operations and manufacturing techniques are critical.
- *Interface*: where customers and company get in touch, it is often referred as the moment of truth. It is the point in time where customers for their perception of the service received and compare it with their expectations. Remember that the secretaries could care less about all the assets deployed by FedEx.
- An important feature of the Framework is the connection between the Internal Environment and the Interface. The service contact personnel are highly dependent on this link.
- This framework is useful, as a first step, to analyze service operations and also it is quite a tool to create new services, recall Benihana.
- A modern tendency is to give the customer a window into the internal environment, the question is how much information to share, recall Yossi Sheffi's talk and the Dell example.
- My opinion is that this tendency will evolve over time and Internal Environments will become progressively more transparent! If this turns out to be true, there will be many opportunities to change the ways of doing business and to start new ones.



Characteristics that are More Prevalent in Services

OR

Fundamental Attributes of Services

- **Intangibility:** Services are intangible; as a consequence, it is often the case that customers do not note them, or perceive them differently than the company desires. Hence, it is necessary to **Make Them More “Visible”**. This can be done by shaping perceptions and expectations, which require a good knowledge of Psychology.
 - A good example of shaping perceptions and expectations is the management of waiting time.
(Other consequences of Intangibility are :)
 - The importance of all the **Physical Aspects** associated with the service, like the appearance of service contact personnel (drivers of FedEx) as well as brochures, facilities etc...
 - The **Lack of Patents**, which requires industry leaders to be creative on a steady basis, and to have a very flexible IT infrastructure and a Culture suitable to continuous change.
 - The need to **Materialize** the Service, recall the examples of the maintenance company, the car wash ... The two 747 aircraft that FedEx flies empty every night and the snow equipment in Memphis are two missed opportunities. Think about what your company does for its customer that they are not aware of and they may pay for it.
- **Perishability:** The fact that services are perishable eliminates the possibility of using inventory management to *match supply and demand*. There are several strategies that can be used to *match supply and demand* in Services (**broadly recognized as the most difficult problem faced by operations managers in Services**). We will have several classes on this topic.
- **Heterogeneity:** Services are very often delivered by humans. An important attribute of customer satisfaction is **Consistency**, which humans are not known for. Companies tend to minimize this problem with training. However they often forget that recruiting is more critical because it may be very costly to train individuals who do not have a natural fit with the job (recall the example of the waitress and the salad bar)

- **Simultaneity:** Services are **produced and consumed simultaneously**. As a consequence customer purchase the service and part of the delivery system (in a restaurant, customers purchase an experience and not just food). Because of this property **it is difficult to separate marketing, customer service, and operations in a service organization**.
 - **The simultaneity property complicates the management of quality in service operations.** The reason is the lack of consistency and the fact that supervisor cannot be present in all encounters.
- **Keep in mind that in services, what the company does is not necessarily what the customer perceives.** Sometimes this difference between customer perception and what the company does, occurs by design (examples are Benihana and Disney).
- **Whenever possible keep the design of the system simple. Often, simplicity is a sign of understanding of the essence of the business while complexity is the opposite. The pursuit of a simple design leads to understanding and elegance. Of course, sometimes there is no alternative to designing a complex system; however, to attempt to simplify it is a beneficial exercise. Always ask why do I need this feature? Can I get rid of it? ...**
- **Interaction** among customers and suppliers, in a Supply Chain, creates the opportunity of **adding value to the final product through services**. The synchronization of the Supply Chain, which is the center of a publicity campaign by UPS, stresses exactly this value. This notion of synchronization just scratches the surface of the potential of services in a Supply Chain. We will explore this topic at length in the remaining sessions.
- **Please make sure that you understand why it is that Supply Chains or Value Networks that incorporate *superior* Services *effectively* can offer to their customers a differentiated superior product. If this is not clear to you please let me know!!!**