

# CHAPTER 7

## BRAND VALUE TO USER

Users select a brand based on the economic return they expect to realize from it. Each task addressed by the brand, if used, creates value for the user. At any point in time, a brand has a specific value to a user based on which functionality is used to accomplish a goal. Or, the manufacturer may adjust the value by adding more tasks or make existing tasks better. The value of a brand, for a specific user, is defined as that user's value for each of the tasks the brand addresses. Brand value – as are all value determinations in the UTSQ – is established for a specific time period. Over time the user may adjust the value of specific tasks and/or the brand may modify the tasks addressed.

### FRAMEWORK

#### Decreasing impact of increasing functionality

As mentioned above, brand value changes according to needs of users and actions by manufactures. User needs change based on their requirement to realize economic value from the product. They may need more functionality and/or need easier access to and execution of existing functionality.

Manufacturers generally go for increased functionality by the addition of new tasks rather than improving existing ones. Adding tasks improves marketing by increasing the size of the checklist and is sexier for the engineers.

If brand value is defined as the maximum economic value a user could realize and if by improving tasks that already exist the product would provide more value, the manufacturer has, by adding functionality alone, decreased the brand value to some users. As functionality is

**HEURISTIC: LIMITED DURATION OF "FEATURE WARS"**

In a new domain the brands tend to compete with the "feature list," i.e. the number of tasks addressed by the brand. As the domain matures, the brands compete more and more on characteristics "within" a task – ease of use and/or intuitiveness of interface, cost of ownership, time required to get started, etc.

UTSQ, in the chapters that follow, builds a model of "user return" which shows why this transition happens. But we can provide this insight. As the brands address a larger number of tasks, the incremental value of the next task added diminishes. At some point the user-value created by reducing the costs associated with difficult to use and thus "expensive" tasks already addressed by the brand becomes greater than the value of new tasks. (The objective of UTSQ is to "instrument" the user value of tasks and the user return on existing task. Thus UTSQ aids the developer in allocating resource to maximize user return.)

added without regard to ease of use, the value of the brand diminishes over time.

Brand value represents the maximum economic return a user could realize. One of management's options is to increase the brand value by adding new functionality to address additional tasks.

In each development cycle, management will add functionality to address new tasks. As the total number of tasks handled by the brand grows, the incremental value increases as the percentage of total value the additions have decreases. This concept of new value as a percentage of new plus current value is shown below.

$$\text{Percent value increas} = \frac{\sum (\text{new value})}{[\sum (\text{new value}) + \sum (\text{current values})]}$$

Figure 7.1: Decreasing Value

Given that management is knowledgeable about the application domain, it is expected that functionality addressing the tasks of the greatest value is developed early. As depicted in Figure 101, this creates a diminishing increase of new functionality.

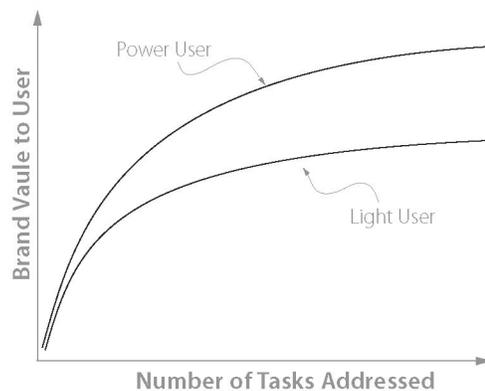


Figure 7.2 - Diminishing Returns of New Tasks

The "diminishing value" of new features is a structural principle of all software intensive system. However, it is a principle ignored by many product managers. The temptation to compete via the feature list is

almost irresistible. New features of questionable value are added at every development cycle.

---

INFRASTRUCTURE: DEVELOPMENT  
STYLES

the Wild West cowboy development style that served the firm in winning the “feature Wars” most likely is a dysfunctional style as the application domain matures. UTSQ provides metrics on how a firm’s development style is serving Users.

---

## ECONOMETRIC MODEL

The equation below develop the concept to user value and “implemented” value. The user value is a core concept. Implemented value is more of a management planning tool.

### User Value for Brand

The value  $V$  of a brand  $b$  for user  $u$  in period  $\delta$  is calculated from the sum of task  $t$  values for that user.

$$(7-1) \quad V_{b,u,\delta} = \sum_{t \in \bar{T}_{b,\delta}} v_{u,\delta}(\hat{T}_{t,\delta})$$

Where:

$t \in \bar{T}_{b,\delta}$  Task  $t$  in set of tasks  $T$  handled by brand  $b$  period  $\delta$ . See (6-5)

$$v_{u,\delta}(\hat{T}_{t,\delta}) \quad (6-1)$$

Chapter 6 developed the task/user econometric value concept. The discussion focused on a user deriving value by performing a specific task. (7-1) extends the concept of user valuation to all the sum of all tasks addressed by a brand in a time period.

For user  $u$  in period , the set of tasks addressed by brand  $b$  fall into one of three: Economic Value, No value and contingency Value.

The Econometric Value subset is comprised of all tasks  $t$  that user  $u$  completed in the period Each of these tasks is valued by the user as presented in Chapter 6 and (6-1).

The No Value subset is comprised of all tasks  $t$  that user  $u$  did not use in period and never expected to use at the beginning of the period.

This set of task capabilities is of no interest to the user.

The third subset is comprised of tasks  $t$  that user  $u$  did not use during period but, at the beginning of the period, had some probability of being needed. Thus, tasks in this set provided a value to the user even though not used in the period. (In the multi-period model presented in Section IV we will see that all tasks in future period are valued in this “contingency” form.)

For task in the Economic Value subset:

$$v_{u, \delta}(\hat{T}_{t, \delta}) = \text{the full economic value defined in 7-1.}$$

For task in the No Value subset:

$$v_{u, \delta}(\hat{T}_{t, \delta}) = 0$$

For task in the Contingency Value subset:

$$v_{u, \delta}(\hat{T}_{t, \delta}) = \text{A value greater than 0 but less than Full Economic value. The value is most likely the probability user } u \text{ placed on having to accomplish task } t \text{ in period at the beginning of the period.}$$

*Note: There is no free lunch. The cost model developed in Section III will focus mainly on the user cost for a task in the Full Economic subset. Establishing cost for these tasks is complex. In addition, cost models for No Value and Contingency Value tasks is developer.*