

# **Exercise: Developing an Operational Profile**

## **The Digital Home Case Study**

## Developing an Operational Profile Exercise

### Scenario

In early September of 2010, HomeOwner Inc. (the largest national retail chain serving the needs of home owners) established a new DigitalHomeOwner division that was set up to explore the opportunities for equipping and serving “smart houses” (dwellings that integrate smart technology into every aspect of home living). In August and September of 2010, the Marketing Division of HomeOwner conducted a needs assessment for a DigitalHome (DH) product that would provide the computer and communication infrastructure for managing and controlling the “smart” devices into a home to best meet the needs and desires of homeowners. The Marketing Division produced two documents: the DH Customer Need Statement and the DH High Level Requirements Definition (HLRD).

Using the documents developed by marketing, DigitalHomeOwner has launched a pilot project (called the DH project) to examine and assess the technical and developmental issues of the smart house concept. A five person team was assembled for the project in early September 2010. After project launch, the team prepared a project plan and completed a Digital Home Software Requirements Specification (SRS) in October 2010.

During the development of the SRS, Jorge Ortiz, the DigitalHomeOwner Director, of the DH Project, emphasized to Disha Chandra, the DH team leader, the importance of system reliability. In response, Disha, based on her experience at SoftMedic, suggests that the team should prepare and use a DH operational profile. Jose agrees and asks Disha to have her team prepare an initial version. Disha requests the assistance of someone from marketing to help the team with the development of the initial version of the operational profile. Jose contacted the Marketing Division Head and set up a meeting between the DH Team and Karen Mullen, the lead for the DH needs assessment effort.

On the Friday, the DH team meets with Karen and begins its work in a DH Operational Profile.

### Learning Objectives:

Upon completion of this exercise students will have increased ability to:

- \* Examine needs and requirements documents to determine an operation list
- \* Establish and compute operation occurrence rates and occurrence probabilities
- \* Review a draft operational profile
- \* Understanding the advantages of developing an Operational Profile

## Reading Assignment

Read the below Case Study Artifacts:

- \* DH Background Scenario
- \* DH Team Biographical Sketches
- \* DH Customer Need Statement
- \* DH High Level Requirements Definition (HLRD)
- \* DH SRS, Version 1.3

## Exercise Description

1. As preparation for this exercise, read the Case Study Artifacts listed above.
2. You will be assigned to a small development team (like the DH team).
3. Each team carries out the following tasks:
  - a. Identify initiators of operations
  - b. Create an operations list
  - c. Review the operations list
  - d. Determine occurrence rates and probabilities
  - e. Document their work in the Operational Profile Form in the Exercise Booklet
  - f. Review the Operational Profile and revise as needed.
4. Each team completes the Operation Profile Form on the following page and chooses one member of their group to report to the class on the team's Profile.

Note: Recall that the HLRD does not represent all of the needs – but a subset, because of time constraints.

