1 Introduction

1.1 Document Purpose and Scope
This document outlines the vision for the Hardware Request system. The purposes of this document are to:

- Identify and agree on the problems faced by end users and the effects of those problems on productivity and efficiency
- Gather and describe customer requests for software features
- Propose a solution (new development or alternative)
- Identify any constraints to the proposed solution
- Identify stakeholders and users
- Identify the software development team

The scope of the document is limited to the coordination and facilitation of Hardware requests between customers and the Company.

1.2 Supporting References
For information relating to the Company Hardware Request project, see the SharePoint web site.

2 Problem Statement

<table>
<thead>
<tr>
<th>The problem of</th>
<th>o No standard form exists for documenting Hardware requests</th>
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<tbody>
<tr>
<td></td>
<td>o No guidelines exist for gathering correct Hardware requirements in requests</td>
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<td></td>
<td>o No central location exists for submitting requests for Hardware</td>
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<td></td>
<td>o No standard tool exists for documenting and tracking requests for Hardware</td>
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<td></td>
<td>o No guidelines for minimum Hardware request lead times</td>
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<td></td>
<td>o No feedback loop to person who originally requested Hardware</td>
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<tr>
<td>Affects</td>
<td>o Hardware department</td>
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<tr>
<td></td>
<td>o Planning department</td>
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<tr>
<td>causing the impact of</td>
<td>o Inefficient recording and tracking of Hardware requests</td>
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A successful solution would provide

A process that enables users to:

- Submit Hardware requests from a web browser
- Record Hardware requests:
  - Special Hardware requirements
  - Standard Hardware requirements
- Route requests from requestor to appropriate Lead by Product ID
- Provide accurate Hardware delivery dates
3 Product Features

3.1 Ability to Submit Requests Using Web Browser
Web-based system must be accessible to the Company and to the customers, where all Hardware requests can be submitted.

3.2 Ability to Record Request Information

3.2.1 Record Standard Hardware Request Information
Users want to record basic information about the Hardware request, including, but not limited to the following:

- Date and Time of Hardware request submission (date and time stamp of when the request was submitted)
- Owner of Request (Username of Planner) – Planner who owns the Hardware request and is responsible for communicating with the customer
- Hardware Request ID – This is a unique number of the request and may be automatically generated
- Product ID
- Quantity of Hardware Items
- Requested Availability Date
- Priority
- Status
- Customer Account Information, including:
  - Customer Name
  - Customer Business
  - Customer Address
  - Customer Phone
  - Customer E-Mail

3.2.2 Record Special Requirements for Hardware Requests
Users want to record special Hardware requirements. Users need the ability to list each special requirement when Hardware request are submitted by customers.
3.2.3 Record Comments and Justification

Users want to record comments about the Hardware Request and to provide justification information for particular requirements or dates provided.

3.3 Ability to Track Hardware Requests

3.3.1 Assign Hardware Request Status

Part of the tracking process involves the ability to maintain the status of a request. Examples of Hardware Request Statuses include the following:

- **Submitted** – Customer submits Hardware Request.
- **Assigned** – Lead Planner assigns Planner to Request.
- **Pending** – Planner accepts the Hardware Request.
- **Under Review** – Planner completes initial review of Hardware Request to validate that the request is reasonable and acknowledges the Hardware Request. This Review state must be completed within 48 hours of the Submission or the Request is automatically moved to the state of Escalated.
- **Escalated** – When a Hardware Request remains in the status Under Review for more than 48 hours, the Hardware Request is automatically assigned the status Escalated, and the Planners receive a notification that they need to review the Hardware request.
- **Reviewed** – Planning completes the initial review of the Hardware request and determines that the Hardware Request is reasonable and the requirements can be met.
- **Rejected** – Planning rejects the Hardware Request because the requirements cannot be met by Planning.
- **Approved** – Planning approves the request and determines that the Hardware Request is reasonable. Upon approval, Lead Planners are notified of the approval so they can communicate with the customer that the Hardware Request requirements can be met.
- **Completed** – Planning delivers the Hardware and ships the Hardware to the customer.
- **Closed** – Planning will close the request when he or she has ensured that the customer received the Hardware and that they were satisfied.

3.3.2 Assign Hardware Request Priority

Tracking also involves the process of designating a priority of a request. Examples of Hardware Request Priorities include the following:

- Low
- Medium
- High
- Critical
3.3.3 Assign Hardware Request Version

Users want to assign a version number to a Hardware Request to record the submission of a Hardware Request and to track changes made to a Hardware Request. When a change has been made to the Hardware Request, a new version of that Hardware Request will be created and captured in the system so that users can view the different versions of a Hardware Request and see the progress of that Hardware Request. In addition, users can revert to a previous version of a Hardware Request, if needed.

Examples of the versioning numbers include the following:

- Create Hardware Request – Version 1.0
- Planner Approves Hardware Availability Dates or Quantities – Version 1.2
- Planning Changes Date or Quantity Requirements – Version 1.3
- Planning completes Request – Version 1.4
- Planning closes Request – Version 1.5

3.3.4 Escalate Hardware Request

Users want the ability to escalate a Hardware Request if particular actions do not occur within the defined timeframe of the process.

3.4 Ability to Route Requests

Users want to define the workflow of the process, and then configure the system so that the system automatically routes requests by Product ID to the correct owner of a particular step of the request process.

3.5 Ability to Notify Users of Hardware Request Actions

Users want the ability to notify users of the system when particular actions occur during the Hardware Request process. For example, when Planners submit a Hardware Request, they want to notify Lead Planners. In addition, notifications might occur when the status or priority of a Hardware Request changes or when changes have been made to the Special Requirements or to the quantity or delivery date of the Hardware requests.

3.6 Ability to Define Access Security

Users want to determine who has access to perform certain tasks within the system. For example, some users may be able to view and edit requests, and some users may only be able to run reports from the system.

3.7 Ability to Run Reports

Users want to run canned and ad-hoc reports using information recorded in the system. The following canned reports need to be available:

- By Product ID
- By Hardware Request Status
- By Hardware Request Owner
- By Total Number of Hardware Requests
- By Hardware Request Submit Date Range

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3.8 Ability to Export Data
Users want the ability to export data from the system to other systems. For example, users may want to export data to Excel or to a reporting tool. Users also want the ability to send system data to other users in e-mail.

4 Constraints
4.1 Design Constraints
4.1.1 System-Supported Platforms
The system will be developed using platform tools and languages supported by the company, including:
   - VB6
   - ASP.net
   - MS SQL Server database
System must be multi-platform and support Windows, Linux, and UNIX standard browsers.
4.1.2 Expose Features as Services
Where possible, the system will be designed in such a way that its features can be exposed as services.
4.1.3 Use Existing Services and Data
Where possible, the system will use existing services and data.
4.1.4 Browser Compatibility
System should be web-based.

5 Risks
5.1 Risk List
Possible risks to the success of implementation include, but are not limited to:
   - Lack of software development support
   - Unclear goals of the system
   - Non-user-friendly system
   - New requirements added; end-users insist on new requirements
   - Changing baseline requirements; requirements have been baselined, but continue to change

6 Stakeholder and User Descriptions
6.1 Stakeholders

<table>
<thead>
<tr>
<th>Name</th>
<th>Represents</th>
<th>Project Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Doe</td>
<td>Hardware Department</td>
<td>Customer Project Lead,</td>
</tr>
</tbody>
</table>
### 6.2 Users

<table>
<thead>
<tr>
<th>Title</th>
<th>Role</th>
<th>Description of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Department Leads</td>
<td>Super-user of system</td>
<td>Experienced users of system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Experienced users reviewing Hardware requests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Providing Hardware Delivery Dates and Quantities</td>
</tr>
<tr>
<td>Planners</td>
<td>Super-user of system</td>
<td>Experienced users of system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Reviewing Hardware Requests</td>
</tr>
</tbody>
</table>

### 7 Project Team Members

<table>
<thead>
<tr>
<th>Resource</th>
<th>Project Role</th>
<th>Responsibilities</th>
<th>Area Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Doe</td>
<td>Project Sponsor</td>
<td>Provides management level support and direction to the project</td>
<td>Hardware Department</td>
</tr>
<tr>
<td>Jane Doe</td>
<td>Customer Project Manager</td>
<td>Manages customer related-project activities</td>
<td>Planning</td>
</tr>
<tr>
<td>Planner</td>
<td>Working Group Member</td>
<td>Define and prioritize planning requirements</td>
<td>Planning</td>
</tr>
<tr>
<td>Software</td>
<td>Software Engineer, Project Technical Lead</td>
<td>Develop and maintain the overall Project Plan, Iteration Activity Schedule, and Iteration Plans. Design and develop system</td>
<td>Software</td>
</tr>
<tr>
<td>BPA</td>
<td>Business Process Analyst</td>
<td>Develop and maintain business process definition: system Vision, business use-cases, system use cases, and test cases</td>
<td>Software</td>
</tr>
<tr>
<td>DBA</td>
<td>DBA</td>
<td>Provide data services support</td>
<td>Software</td>
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