



**Functional Requirements Document**

Smart Form

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**Record of Release**

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# Introduction

## Overview of the Requirement Specifications Document

### Purpose of the Document

Primary purpose of the document is to provide requirements to create a Smart form (web-based form) to redirect Amazon employee in scope transactions to self-service wherever applicable and redirect out of scope transactions which cannot be done through self-service to ticketing for manual submission. The document serves the purpose of reference during and after the latest design is being implemented in the existing Amazon environment.

### Distribution List

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Notes** |
| Orla Weare - Business  Ashok Verma – Technology | Project Owner | ?? |
|  | Process Owner | Escalation Point of contact for process related |
| Abhinav Sharma | Business Analyst | Point of contact for process related queries |
| Nitin Agarwal- DM Smart Form  Ewa Ziemkowska- Smart Form | Business PM | Point of contact for process related queries |
| Gary Tessler and Malissa Ford | Tech Solutions PM | Point of contact for process related delivery |

# Application Environment

## Business Context

Data management is currently one of the highest transaction volume processes and one where most defects are generated. Available self-service solutions (PeopleSoft and AtoZ) are not fully adopted and HR Services frequently manually processes transactions that should be self-served by employees.

For this purpose, a solution is required which will:

* help the requestor narrow their search and points the requestor to the right channel to submit their query.
* guide employee/manager/HR employee through raising the request.
* capture required approvals.
* enable executing a mass upload request.
* integrate with current ticketing, SIM and future workflow tools.
* enable changes/correction to multiple fields at same time (for Data Management).
* enforce requestor to complete all required field before submitting the form.
* help user with navigation and information on what is required and possible why (eg. Permanent address change cannot be legally processed without a signed affidavit or institutional confirmation)
* capture user response, history of changes and employee data in an efficient way.
* enable creating reports for HR teams to use for operational purposes.

## Limitations of the Current System

Currently, lack of a solution to help requestor complete and validate their ask is causing defects categorized by four root causes - Missing Information, Incorrect Information, Missing Attachment and Missing Approval. These 4 root causes drive up to 70% of defects for global Data Management processes. HR Services associates have to follow up with the requestor to obtain the correct information, attachments, and or approval which delays completing the request and creates additional effort for the HR Services teams.

## Scope of Work

Build a web-based portal to:

* Serve as a single-entry point for data management requests for APAC, EMEA, AMERICAS region
* Redirect the transactions to PeopleSoft self-service.
* Validate bulk requests for accuracy of each row for transaction that are in scope for bulk uploads
* Create tickets via Quicklink for requests that are not redirected to PeopleSoft self-service.
* Escape valve is to be created to allow requester to generate a ticket out of Smart form. Enable escape valve to capture the reason when user is unable to use the self-service and generating ticket using it.
* Reduce the volume of tickets such as Fake self Service (department for initial release) where earlier there was a ticket but now we will use an RPA to write the changes using Smart Form output.
* For Non-self-service transaction provide a web form which will validate and capture request from user before creating the ticket (via API or Quicklink).

### Assumptions

#### Responsive UI Development is based on the following assumptions:

* HTML and CSS development for 23 Pages
* Existing source code will be shared and made available
* Off-Page SEO such as Social Media Engagement, Social Bookmarking Sites, Forum Submission, Blog Directory Submission, Article Submission etc. have not been considered in estimation

#### Integration is based on the following assumptions:

* Development shall be made as per business requirements which shall be elicitated by Business Analyst from Business team
* Requirements not finalized by business but is included in scope shall not be considered for development purpose

### User Profiles

|  |
| --- |
| **User Profiles in Smart Form** |
| Employee |
| Manager |
| HR Assistants |
| HR Business Partners |

## Out of Scope

* Other than Americas, EMEA, APAC region which are identified in Appendix
* Other than the transaction that are in scope for person and job. All other transactions are out of Scope.
* Countries and transaction which are not mentioned here will be used as filter for smart form for initial wave
* Report and dashboards are not in scope

# Requirements Specifications

## Details of requirements gathering process

Requirement gathering processes covered for developing the current requirement specification documents are detailed as below;

* Walkthroughs with DM Business Analyst to understand the business requirements
* Brainstorming sessions with Amazon team to gather understanding of processes, tools, techniques etc.
* Study of existing application usage and DM process documents

## References to Client’s documents

|  |  |  |
| --- | --- | --- |
| **Business Process** | **Description** | **File** |
| Data Management Discovery Package | Data Management process flow and user queries |  |
| Smart Form Discovery Package | End-To-End Smart Form process flow |  |

## Functional Requirements

### Requirement Quick View

|  |  |  |
| --- | --- | --- |
| **Requirement ID** | **Page Name** | **Brief Description** |
| [REQ.01](#REQ01) | Login Page | Page for user to log in |
| [REQ.02](#REQ02) | Landing page with populated data | Based on the role populate the requestor data from PeopleSoft |
| [REQ.03](#REQ03) | Personal details change | Navigate and edit personal data using self-service |
| [REQ.04](#REQ04) | Personal details change | Redirect to people soft by giving the targeted URLs |
| [REQ.05](#REQ05) | Job details change (Employee) | Post business validation success modify the data using self-service |
| [REQ.06](#REQ06) | Job details change (Employee) | If business validation fails, raise TT |
| [REQ.07](#REQ07) | Job details change - Manager/HR logged in | Populate employee indicative detail and modify the data |
| [REQ.08](#REQ08) | Job details change - Manager/HR logged in | Post business validation raise a ticket in TT |
| [REQ.09](#REQ09) | Job details change - Bulk request - Manager/HR logged in | Post basic validation upload the file |

### Detailed Requirement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section |
| REQ.01 | Functional | Derived | High | Page for user to log in |
| Requirement description | User not logged in shall be able to see place holders to enter ID and Password | | | |
| Scope |  | | | |
| Method of Verification & Validation | 1. Who is going to validate user credentials? PS or Integration service? | | | |
| Wireframe |  | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section |
| REQ.02 | Functional | Derived | High | Navigate and edit personal data using self-service |
| Requirement description | 1. The employee should be able to view the personal data 2. The employee should have option of selecting the URL to visit PeopleSoft or be able to edit the changes in the Smart form itself | | | |
| Scope | * + Preferred Name   + Gender   + Race/Ethnicity   + Veteran Info   + Disability Info   + Deemed Export Info   + Emergency Contact   + Home and Mailing Address   + Email Address   + Phone   + Business title   + Supervisor change   + Department   + FCLM Area and FCLM job   + Shift Pattern and ADP shift   + Product Line (Retail) | | | |
| Method of Verification & Validation |  | | | |
| Images |  | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section |
| REQ.03 | Functional | Derived | High | Redirect to people soft by giving the targeted URLs |
| Requirement description | 1. User not logged into VB shall also be allowed to use Selector from primary menu to filter and search products as per availability and visibility rules existing in current application | | | |
| Scope | For a user not logged onto Virtual Branch | | | |
| Method of Verification & Validation | 1. On User action ‘Click’ on Selector Menu link, user shall be redirected to Selector Page | | | |
| Images |  | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.04 | Functional | Derived | High | UI Language Component for not logged in user | [Quick View](#HOMEPAGE) |
| Requirement description | 1. User not logged onto VB shall be allowed to set language and UI localization from language preference button for VB 2. User Interface and Visibility rules are automatically set by browser setup as in current system locale 3. European English shall be set as default language for application interface | | | | |
| Scope | For a user not logged onto Virtual Branch, he shall be able to see the home page with primary menu | | | | |
| Method of Verification & Validation | 1. On User Action ‘Click’ on Globe or Application Language Setup Page, User shall be redirected to Application & Language Setup Page where, European English shall be set as default language | | | | |
| Images |  | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.05 | Functional | Derived | High | Banner section for not logged in user | [Quick View](#HOMEPAGE) |
| Requirement description | 1. On banner section as shown below of home page, user needs to hover mouse on the section and this shall initiate the upward movement of line area providing user with details as well as a ‘Know More’ button 2. Banner can be locale specific, provision to be provided at backend to allow business to enter required links and images which shall be shown as per local in which the VB application is opened 3. User may click on the ‘Know More’ button to be redirected to the respective page link. 4. Provision to change labels and links in the boxes needs to be provided to business from backend in the form of database fields | | | | |
| Scope | For a user not logged onto XXX Branch | | | | |
| Method of Verification & Validation | 1. User Action ‘Hover’ shall provide upward scroll animation for Banner images 2. User Action ‘Click’ on ‘Know More’ button shall redirect user to either You tube link for video, or to specific range, series, product page as set from backend by business | | | | |
| Images |  | | | | |

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| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.06 | Functional | Derived | High | Search Component for not logged in user | [Quick View](#HOMEPAGE) |
| Requirement description | 1. On click of ‘Search’ icon the user shall open Search Bar 2. Search results are subject to existing Visibility and availability rules for the non-logged in user | | | | |
| Scope | For a user not logged onto Virtual Branch | | | | |
| Method of Verification & Validation | 1. On User Action ‘Click’ on Search Icon, it shall open Search bar from where User may start searching for Product Offerings, Documents, Item Codes and replacements 2. Product Offerings shall be default selected | | | | |
| Images |  | | | | |

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| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.07 | Functional | Derived | High | Language Selector Footer Component for not logged in user | [Quick View](#HOMEPAGE) |
| Requirement description | 1. On click of the ‘Language Preference’ button (Globe Icon) at footer level the user shall be redirected to Application and Language setup page | | | | |
| Scope | For a user not logged onto Virtual Branch | | | | |
| Method of Verification & Validation | 1. On user action ‘click’ on Globe icon shall redirect user to Application & Language setup page | | | | |
| Images |  | | | | |

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| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.08 | Functional | Derived | High | Product Offering Section for not logged in user | [Quick View](#HOMEPAGE) |
| **Requirement description** | 1. Category images shown shall be clickable and would redirect user to Mega menu with auto opening of Group and Ranges 2. Horizontal sliders to me enabled if the options to be displayed are more than 5 columns to be displayed 3. At a time, there shall be only 5 categories need to be shown on screen to user 4. Provision to change labels and links in the boxes needs to be provided to business from backend | | | | |
| Scope | For a user not logged onto Virtual Branch | | | | |
| Method of Verification & Validation | 1. User shall be able to see Categories as per visibility rules applicable to him as per his company and region 2. If Categories are more than 5 on screen, the slider shall get enabled | | | | |
| Images |  | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.09 | Functional | Derived | Deferred | Tools and Resources Component for not logged in user | [Quick View](#HOMEPAGE) |
| Requirement description | 1. In the Tools and Resources section on home page as shown in image when a user clicks on ‘Know More’ button he shall be redirected to respective pages as provided by business in backend 2. Provision to change labels and links in the boxes needs to be provided to business from backend in the form of database fields | | | | |
| Scope | For a user not logged onto Virtual Branch | | | | |
| Method of Verification & Validation | 1. Tools and Resources shall be shown as per applicable visibility rules for user’s region 2. Non-Registered user shall be able to see ‘Contact Us’ icon in place of My Support 3. User Action ‘Click’ shall redirect user to respective page as maintained by business | | | | |
| Images |  | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Requirement Id | Requirement Category | Requirement Type | Priority | Component Section | Link to Quick View |
| REQ.10 | Functional | Derived | High | Product Offering Component for not logged in user | [Quick View](#HOMEPAGE) |
| Requirement description | 1. In the Product Offerings section as shown below in image on home page when a user clicks on Group icon he shall be presented with the list of Range Products associated with that Group 2. When user clicks on presented Range on click to them the user shall be redirected to the respective Series page 3. Provision to change labels and links in the icons needs to be provided to business from backend via Arca in the form of fields in database | | | | |
| Scope | For a user not logged onto Virtual Branch | | | | |
| Method of Verification & Validation | 1. Icons shall be shown as maintained by business in backend 2. Labels shall be shown as maintained by business in backend | | | | |
| Images |  | | | | |

### Security

Security Testing for VB and VBDesk shall be highly critical aspect for secure and integrated application, for the purpose developers need to utilize OWASP 2017 top 10 vulnerabilities to be tested in codebase of VB, the document for OWASP is attached here as below;

* Injection: Injection flaws, such as SQL, NoSQL, OS, and LDAP injection, occur when untrusted data is sent to an interpreter as part of a command or query
* Broken Authentication: Application functions related to authentication and session management are often implemented incorrectly, allowing attackers to compromise passwords, keys, or session tokens, or to exploit other implementation flaws to assume other users’ identities temporarily or permanently
* Sensitive Data Exposure: Many web applications and APIs do not properly protect sensitive data, such as financial, healthcare, and PII. Attackers may steal or modify such weakly protected data to conduct credit card fraud, identity theft, or other crimes. Sensitive data may be compromised without extra protection, such as encryption at rest or in transit, and requires special precautions when exchanged with the browser
* XML External Entities: Many older or poorly configured XML processors evaluate external entity references within XML documents. External entities can be used to disclose internal files using the file URI handler, internal file shares, internal port scanning, remote code execution, and denial of service attacks
* Broken Access Control: Restrictions on what authenticated users are allowed to do are often not properly enforced. Attackers can exploit these flaws to access unauthorized functionality and/or data, such as access other users' accounts, view sensitive files, modify other users’ data, change access rights, etc.
* Security Misconfiguration: Security misconfiguration is the most commonly seen issue. This is commonly a result of insecure default configurations, incomplete or ad hoc configurations, open cloud storage, misconfigured HTTP headers, and verbose error messages containing sensitive information. Not only must all operating systems, frameworks, libraries, and applications be securely configured, but they must be patched and upgraded in a timely fashion
* Cross-Site Scripting: XSS flaws occur whenever an application includes untrusted data in a new web page without proper validation or escaping or updates an existing web page with user-supplied data using a browser API that can create HTML or JavaScript. XSS allows attackers to execute scripts in the victim’s browser which can hijack user sessions, deface web sites, or redirect the user to malicious sites
* Insecure Deserialization: Insecure deserialization often leads to remote code execution. Even if deserialization flaws do not result in remote code execution, they can be used to perform attacks, including replay attacks, injection attacks, and privilege escalation attacks
* Using Components with known vulnerabilities: Components, such as libraries, frameworks, and other software modules, run with the same privileges as the application. If a vulnerable component is exploited, such an attack can facilitate serious data loss or server takeover. Applications and APIs using components with known vulnerabilities may undermine application defenses and enable various attacks and impacts
* Insufficient Logging and Monitoring: Insufficient logging and monitoring, coupled with missing or ineffective integration with incident response, allows attackers to further attack systems, maintain persistence, pivot to more systems, and tamper, extract, or destroy data. Most breach studies show time to detect a breach is over 200 days, typically detected by external parties rather than internal processes or monitoring
* Query string which are being used while transmitting data from server to client as part of key value pairs must be encrypted to prevent users from viewing and tempering the information contained in links

## External interface requirements

### User Interface

* Latest designed screen/menu as per XXX standards
* All pages need to be responsive as per operating platform like, Desktop, tablet and mobile and changes to size and resolution shall occur without breaking the interface

### Software Interface

* Software Interface of VB to external applications includes: Site Minder and Zendesk which shall be utilized to authenticate User Accesses and service ticket creation respectively
* VB shall also interface and is tightly coupled with VBDesk which is the XXX Service Desk application for VB

### Database Requirements

* Use of existing application’s database environment i.e. Oracle and MongoDB
* Restrictions on size of database objects shall be maintained as in current application
* Data Backup and Archiving procedure shall be followed same as in current application

## Other requirements

### Installation

Installation of SiteMinder web app on server to be utilized by development team for integration and user authentication

# Prototype/Current Application

Virtual Branch exists as application at location provided below;

# Acceptance

## Acceptance Criteria

Some of the Acceptance criterion for business to accept the deliverables are provided as below

### User Base to be catered by Application

Delivered product shall be able to serve following user profiles

|  |
| --- |
| **User Profiles** |
| Admin User |
| DM Team |
| Amazon Employee |
| HR Assistants |
| Local HR |
| Recruiter |
| HR Business Partner |
| Manager |
|  |
|  |

### Delivered Work Product

Delivered Product need to mirror current application in terms of functionality along with the new features to be added as mentioned in requirements with quality deliverables

### Application Testing Type

|  |  |  |
| --- | --- | --- |
| **Tests** | **Preparation Ownership** | **Execution Ownership** |
| Unit Testing | Project Developer | Project Developer |
| System Integration Testing | Project Tester | Project Tester and BA |
| User acceptance Testing | Business Team | Business Team |

# Abbreviations / Bibliography

|  |  |
| --- | --- |
| **Abbreviations** | **Meaning** |
|  |  |
|  |  |
|  |  |
|  |  |