A Model for New Product Development

Goals of Discovery
1. Looking for the gaps between current products and what people really need and/or want
2. Exposing the ‘work-arounds’ and pain points with existing products

Methods Used in Discovery
1. Observation of Real people in the real world doing what they really do!
2. Trend Analysis
3. Pop Literature Review

**Deliverables of Discovery**

1. Clear description of a **Product Opportunity**
2. Initial **Personas & Scenarios**

**What is a Product Opportunity?**
- A gap between current products and people's needs and/or desires.
- Described in terms of the experience of using the product rather than a traditional set of product requirements.

**What is a Persona Profile?**
- A description that embodies the important characteristics of potential users or stakeholders.

**What is a Scenario?**
- A story intended to illustrate one or more **Personas** performing an activity.
- Usually illustrates how deficiencies in a currently available products make the activity more difficult and/or less fun than it ought to be.
- Captures the 'work-arounds' that people invent to achieve their goals with existing tools available to them.
What Does a Scenario Diagram Look Like?

Scenario Diagram Example: Day in the life of a Banker

Meeting new and serving existing customers (60%)

Sales Partner

Primary Tasks

Verifying Identities
Ordering Checks
Credit Reports
New Account Checklists
Wire Transfers
Profiling Future Prospects
Credit Card Qualifications

Secondary Tasks

Verifying Identities
Ordering Checks
Credit Reports
New Account Checklists
Wire Transfers
Profiling Future Prospects
Credit Card Qualifications

Major Daily Problems

Under great pressure to meet quotas
Lots of unnecessary paper
Constant interruptions

Must use two different systems

Sales & Service System
Teller System

Neither system promotes a natural ‘personal’ verbal interaction with customers (i.e. very lock-step ‘checklist’ oriented dialog)
Research

Research Goal
Achieving a true understanding of what it will take to make the product experience valuable and appealing to the people who will be using it.

Methods Used in Research Phase
1. Rigorous Observation (Ethnography)
2. Persona & Scenario Refinement
3. Initial Market Research
4. Human Factors Analysis
5. Questionnaire Pilot Testing
6. Usability Evaluation Planning

Research Deliverables
1. Refined Personas & Scenarios
2. An initial assessment of potential market size and competitors
3. Results from questionnaire pilot testing
4. Initial Usability Testing Plan
Actionable Insights

Goal of Actionable Insights
Making sense of Discovery & Research findings

Actionable Insights Deliverables
1. Articulation of Value Opportunities
2. Description of Product Characteristics
3. Market Insights from early Marketing Research

What are Value Opportunities?
Value Opportunities are the things that will make the new product appealing: i.e. Useful, usable & desirable.

What is the Description of Product Characteristics?
This is not a traditional Requirements Document, but rather documentation of some of the concrete product attributes that will delight customers.
Concept Development

Note:
Concept Development is the so-called User-Centered Development Cycle. Many organizations get it wrong by starting here, ignoring the critical prior stages of Discovery, Research and formulating Actionable Insights.

Goal of Concept Development
Transform Value Opportunities into actual Product Concepts and then reduce the list to one that is...
1. Useful
2. Usable
3. Desirable

Concept Development Deliverables
1. Refined Prototype
2. Product Concept
Rigorous Marketing Research

Rigorous Market Research Deliverables

1. Market Definition (e.g. who is going to buy this product?)
2. Pricing Model
3. Marketing Plan
4. Rollout Strategy
Concept Refinement

Goal
Produce a Refined Product Concept that is—
1. Empirically certified as useful, usable and desirable
2. Patentable (if relevant)
3. Ready for Implementation

Methods
1. Design
2. Usability Testing
3. Appeal Assessment
4. Depth Interviews
5. Engineering

Concept Refinement Deliverables
Refined Product Concept with specs for form factor, aesthetic values, core technologies, materials & manufacturing
Implementation

This is the point at which the ‘Front End’ is finished and development begins. Many organizations start here, but at a tremendous risk of product failure.