Digital Discovery Process

Ideas can be powerful, life changing. Software applications can be a potent enabler of vision and a game changer for patients, customers and industry. The Digital Discovery Process[™] is a guided service that helps domain experts who are not familiar with the software development process structure their ideas, understand customers needs and package them into a clear vision built for action.



The greatest adventure is what lies ahead.

- J.R.R. Tolkien

The Process

The Digital Discovery Process is a unique service built to help faculty and staff move early stage software based ideas from unstructured brainstorms, fragments and broad based inspiration into well formed and developed concepts. This powerful service helps move your ideas from a rough sketch to an articulate vision that can be clearly presented, supported and actioned. An agile team of software industry professionals and external experts with business, technical, design and compliance experience walk you through a comprehensive process to structure your initial idea.

The goal of this process is allow you to engage successfully in two critical "next step" conversations with your project.

- 1. Sponsors
- 2. Development Resources

By crafting a tight, comprehensive and articulate story around your idea, sponsors can quickly identify and understand the benefits and value of your proposition. Equally important you will be able to engage technical development professionals to clearly understand your requirements, the scope of the project and quickly provide an understanding of budget and timing requirements. The entire discovery modeling process takes 6 – 8 weeks from inception to completion. At the conclusion you are equipped with a comprehensive deliverable known as a Digital Discovery Workbook which contains the key elements needed to tell the story of your idea. These components include the customer value proposition, core use cases, basic user experience wire-frames, a core path interactive comp., technical footprint requirements and an initial compliance and security assessment.

How It Works

1. Idea/Kick Off



The inventor provides a brief description of their core idea, one page maximum. With this outline in hand the Digital Discovery team helps unpack, identify and focus the core concept.

What is it? What is the core problem being addressed?

Who does it help? Where is it used?

Once the foundation has been established the inventor in collaboration with the Digital Discovery Team begin the first step at validation and understanding the proposition from the customer's point of view. The inventor is provided a quick immersion into the concept of Value Proposition Design as a means of establishing an understanding of customers core needs, challenges and opportunities.

2. Customer Discovery



Utilizing the well established methodology described in the Business Model Canvas the inventor and Digital Discovery Team work collaboratively to understand the value of their idea from the point of view of the customer. Through a series of focused interviews with potential customers the team applies the Value Proposition Canvas to surface two key components to success; the Customer Profile and the Value Map. By understanding who your customer is, their pains and opportunities and linking these directly to your idea's pain relievers and gain creation determines fit. At the conclusion of this phase the team can clearly answer three important questions for any product or service.

What problem are you trying to solve?

Why does it matter?

Who cares?



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3. Technical Footprint



With a firm foundation established the team moves toward hardening the initial concept. Using a set of core software tools the idea moves from a "cocktail napkin" sketch into a more robust set of tools helping build the story. Core deliverables include a set of primary use cases, a simple story telling technique that explains how a particular product may be used in practice. The use cases create a vision of the solution in practice helping build a story that is easily understood, relate-able and focused on telling how the solution solves a customer problem. Additionally, two sets of visualization tools are developed to help show the ideas basic implementation concept. Using a set of simple drawings, known as wire-frames, the main screens and interactions can be presented. Taking this a step further the team will develop an interactive simulation of the user experience known as a clickable comp which shows what the experience is like for a user. These three tools merge together helping to make the idea come to life and address the old adage that a picture is worth a 1,000 words.

In addition to the visualization aspect of the Technical Footprint a detailed outline of technical recommendations is provided. These recommendations provide the basic outline of requirements regarding security, scalability, development environment "stack", database and fundamental architecture. Alongside this technical footprint a first stage regulatory and compliance assessment is done for medical applications. This assessment helps to establish initial thinking with respect to FDA, HIPPA and HiTech regulatory compliance requirements allowing the inventor to establish early in the process needed documentation and controls.

4. Workbook Summary



The final step in the Discovery Process is the compilation of the previous elements into a single, unified document. This important asset is used to clearly and concisely explain your idea to collaborators, sponsors and technical development resources. The workbook is an organic document and is expected to be revised and extended as the ideas evolve and advance through further Customer Discovery, technical evaluation and design sessions. It is a foundation to be built upon, modified and adjusted as the idea moves from inception to reality.

It is not the mountain we conquer but ourselves.

- Edmund Hillary

Innovation Partnerships

Innovation Partnerships is the University organization responsible for the transfer of University technology to the marketplace. We enhance these research discoveries to encourage licensing and broad deployment with existing businesses and newly-formed U-M start-ups. U-M Tech Transfer has earned a reputation for performance among the top 10 of all universities.

Help us help you!

We are ready to help you move your ideas through the The Digital Discovery Process. A brief disclosure of your idea and a simple conversation will get things started, simply put that is all it takes.

Please contact the Innovation Partnerships Digital Discovery Team.

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