

The Innovation Canvas:

An interactive tool to design products and business models

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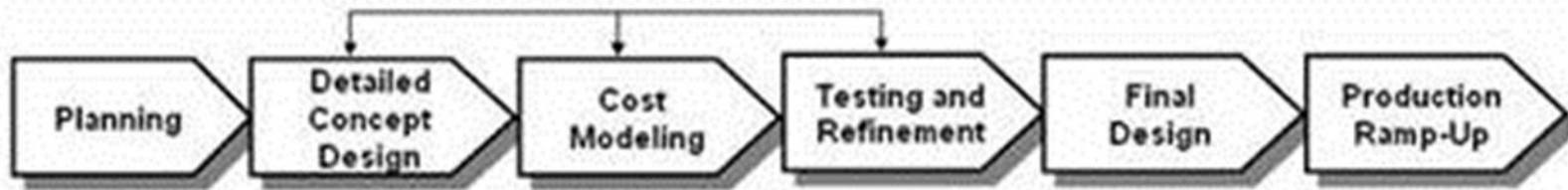
The materials for this presentation were culled from sources as listed in the Resources slide.

Introduction

The Innovation Canvas is a **tool** to **encourage collaboration** and inspire innovation through **associating**, **integrating**, and **aligning** the basic building blocks or themes of the **business model** and **product design**.

Introduction

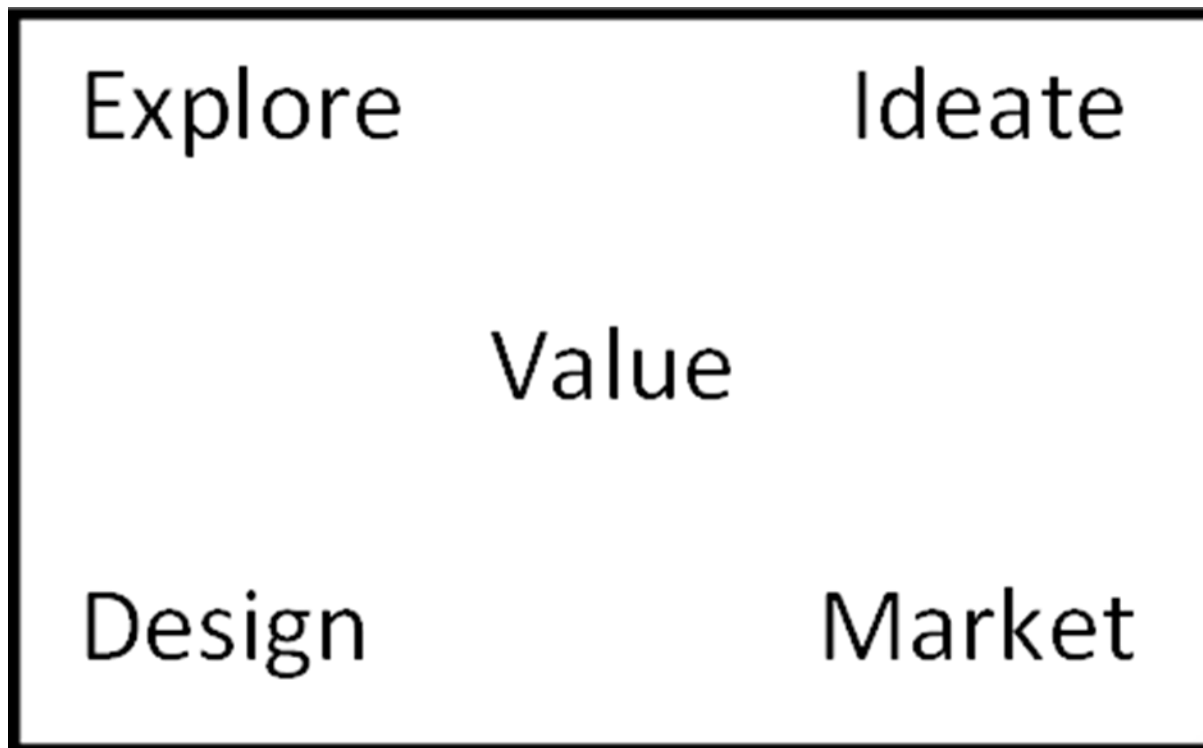
- Traditional product design process:



The product design process—Ulrich and Eppinger (2004)

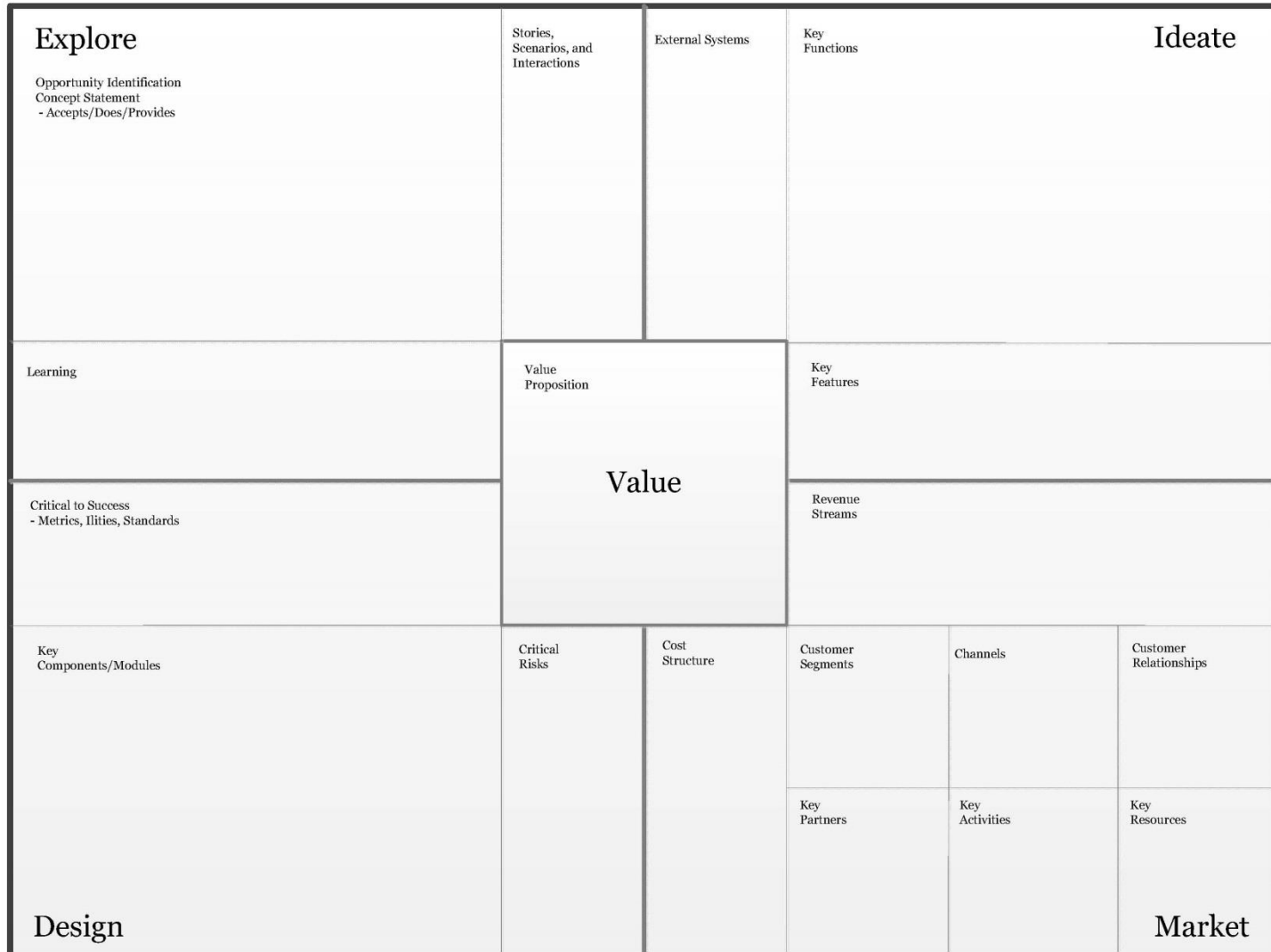
Components

- The Innovation Canvas includes four quadrants: *Explore*, *Ideate*, *Design*, and *Market* surrounding the core theme of creating *Value*:



Birds-eye View

The Innovation Canvas



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Version 1.0.1



Interaction with Canvas

- In practice, a team interacts with a poster sized version of the canvas and populates it with Post-It notes of critical information for each theme.
- Post-It notes set an expectation that input may be temporary and subject to change.
- Team members physically interact with the canvas.
- The use of color and Post-It notes aligns the experience with "fun" or "creativity."

Interaction with Canvas

- The interaction with the canvas as described:
 - encourages both sequential and simultaneous thinking,
 - encourages repetitive testing and refinement of the themes and basic building blocks critical to the development of the business model and product or service offering
 - promotes a team-based approach, where team members populate the canvas according to their particular perspectives and needs
 - inspires innovation by making visible the connections, interactions, and alignments among themes across the canvas
 - approximates the reality and complexities of developing a successful business venture through its lack of start points and end points.

The Canvas in Detail

- In the following slides, we will explain the sections of the canvas in detail.
- To make the use of the canvas more concrete, we will use a running example of how Jeff Bezos might have filled in this section of the Innovation Canvas, had he used this tool.
- This information is very loosely based on a March 1999 Wired Interview with Jeff Bezos [7].

Explore

- In this “quadrant,” we:
 - *Identify opportunities.*
 - *Develop a concept statement.*
- Activities that fall into this quadrant include:
 - Identifying market opportunities.
 - Identifying unmet needs.
 - Identifying existing solutions.
- As part of these activities, we:
 - May prompt customers and stakeholders for feedback.
 - May identify potential customers.
- In this section, several close and competing opportunities may be identified.

Explore - Example

Explore

Opportunity Identification
Concept Statement
- Accepts/Does/Provides

sell cars online
sell books online
sell candy online

Stories,
Scenarios, and
Interactions

Learning

managing inventory

Ideate

- In this section, we identify:
 - *key features* and
 - *key functions* of the product we wish to develop.
- We identify:
 - *External systems* with which our system will interact and
 - The *characteristics* of our solution that provides value.
- In keeping with the spirit of the dynamic and physical interaction with the canvas, features may and should be identified for several of the opportunities identified in the “Explore” quadrant.
- Ideally, there will be a good amount of feedback and interaction between these (and any of the quadrants.)

Ideate – Example

External Systems	Key Functions	Ideate
distributors delivery: UPS USPS FedEx	user can search inventory on a web-site user can order from a web-site user may obtain tracking of order easy returns listing of books by sales rank user reviews in addition to professional reviews	
	Key Features	

Design

- In this section, we identify:
 - *key components* and
 - *modules*.
- We identify:
 - *metrics*,
 - *ilities* and
 - *standards* that are critical to the success and
 - *Critical risks*.

Design - Example

<p>Critical to Success - Metrics, Ilities, Standards</p>	
<p>Key Components/Modules</p> <p>web-server web-site information on books database of customer data crew to unpack/pack books printing labels Storage of inventory Design</p>	<p>Critical Risks</p> <p>B&N Borders copy our idea and steamroll us</p>

Market

- In this section we identify:
 - potential *revenue streams* and the
 - *cost structure*.
- As part of this activity, we identify:
 - *customer segments* and the
 - *Sales channels*
- We will identify:
 - How much the market is willing to pay for our product
 - How we will *price* our solution
 - *key partners*
 - And benchmark against potential competitors

Market - Example

Revenue Streams Mark-up on books			
Cost Structure - wholesale book prices - UPS picks up packages for free - Distributor delivers for free	Customer Segments people with computer and internet access	Channels	Customer Relationships
	Key Partners distributors delivery companies	Key Activities maintain web-site unpack boxes pack into smaller boxes	Key Resources Market

Value

- Everything surrounds and centers on this critical category: the *value proposition*.
- In this section, we identify:
 - How value is developed and provided.
- Value can be measured in terms of financial value or non-monetary value.

Value - Example

Value
Proposition

- huge inventory
- order from comfort and convenience of your home/office
- save on time and gas
- recommendations by fellow-purchasers

Conclusions

- The innovation canvas is an interactive tool to develop product designs and business models.
- It is best used by a team.
- It is designed to focus the team's work on a central value proposition.
- It has very dynamic work-flow, encouraging the users to revisit ideas or decisions made at an “earlier” time.

Resources

[1] [Blank Innovation Canvas](#)

[2] General information about the innovation canvas: [Rose-Hulman Institute of Technology Office of Innovation & Engagement](#)

[3] The paper in which the canvas was proposed: Kline W., Hixson C., Mason T., Brackin P., Bunch R., Dee K., Livesay G., [The Innovation Canvas - A Tool to Develop Integrated Product Designs and Business Models](#), in: *Proceedings of the 120th ASEE Annual Conference & Exposition*, 2013.

[4] An instructors guide for the innovation canvas: Ahmed J., Rogge R., Kline W., Bunch R., Mason T., Wollowski M., Livesay G., [The Innovation Canvas: An Instructor's Guide](#), in: *Proceedings of the 121st ASEE Annual Conference & Exposition*, 2014.

[5] The idea for the Innovation Canvas was expanded upon at an event called "unconference" and was inspired by the work of Alexander Osterwalder and Yves Pigneur, in which they looked at a 'business model canvas' and documented it in their popular text [Business Model Generation](#)

[6] For information on tools that might be used to fill in the canvas, see [Innovation Canvas Resources](#).

[7] A source of a good Computer Science case study: Wired Interview with Jeff Bezos entitled [The Inner Bezos](#)

[8] Ulrich, Karl T. and Steven D. Eppinger. *Product Design and Development, 4th Edition*. Boston: McGraw-Hill Higher Education, 2008.