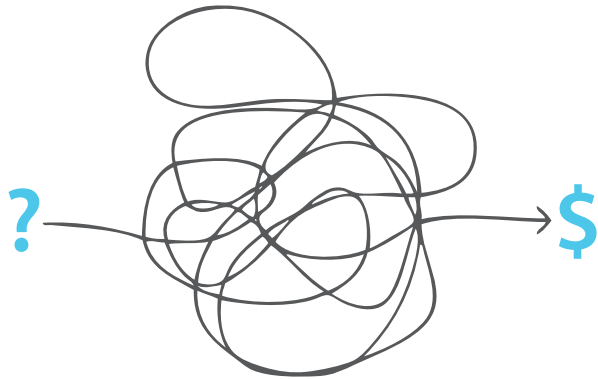
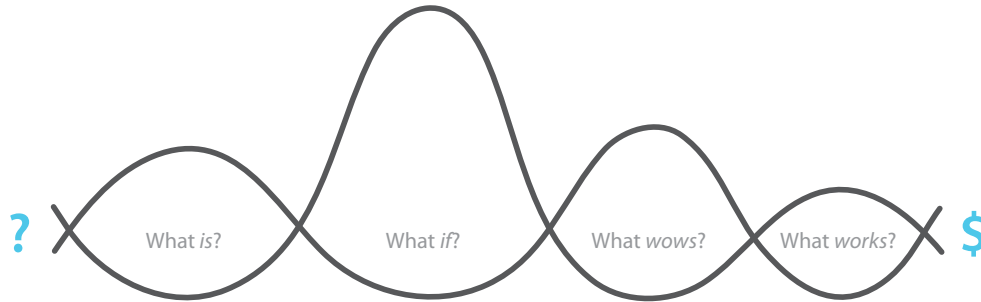


Every manager needs design. You can't grow a business without it. But what is it? Asked to describe design, Tim Brennan of Apple's Creative Services group drew the following picture:¹

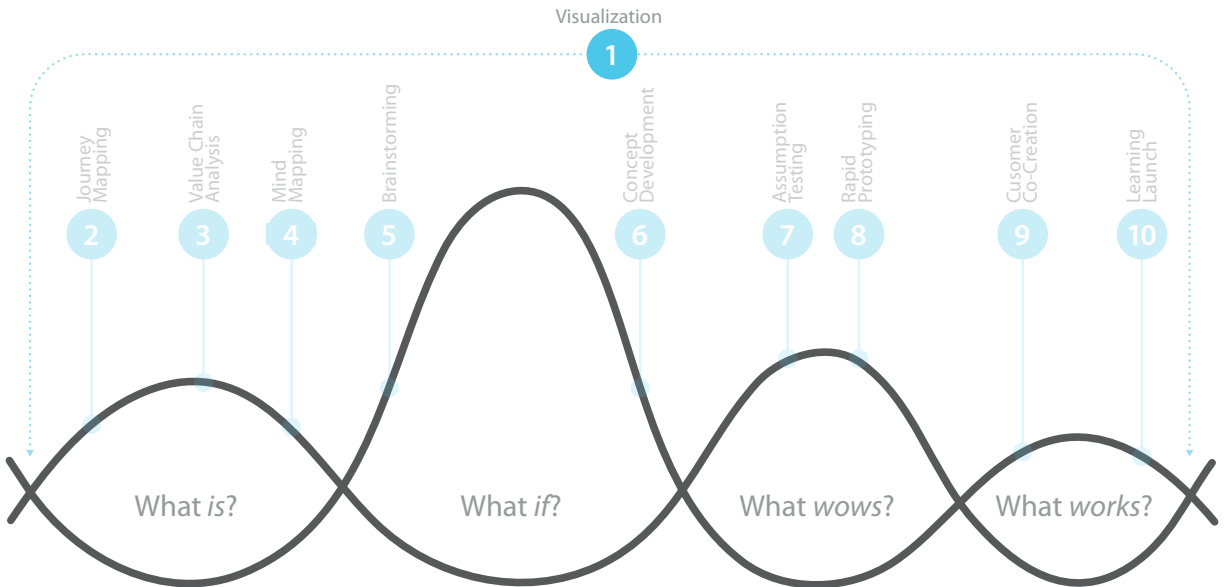


	BUSINESS	DESIGN
Underlying Assumptions	Rationality, objectivity; Reality as fixed and quantifiable	Subjective experience; Reality as socially constructed
Method	Analysis aimed at proving one "best" answer	Experimentation aimed at iterating toward a "better" answer
Process	Planning	Doing
Decision Drivers	Logic; Numeric models	Emotional insight; Experiential models
Values	Pursuit of control and stability; Discomfort with uncertainty	Pursuit of novelty; Dislike of status quo
Levels of Focus	Abstract or particular	Iterative movement between abstract and particular

Remember the drawing of the design process in Chapter 1? Here is ours:

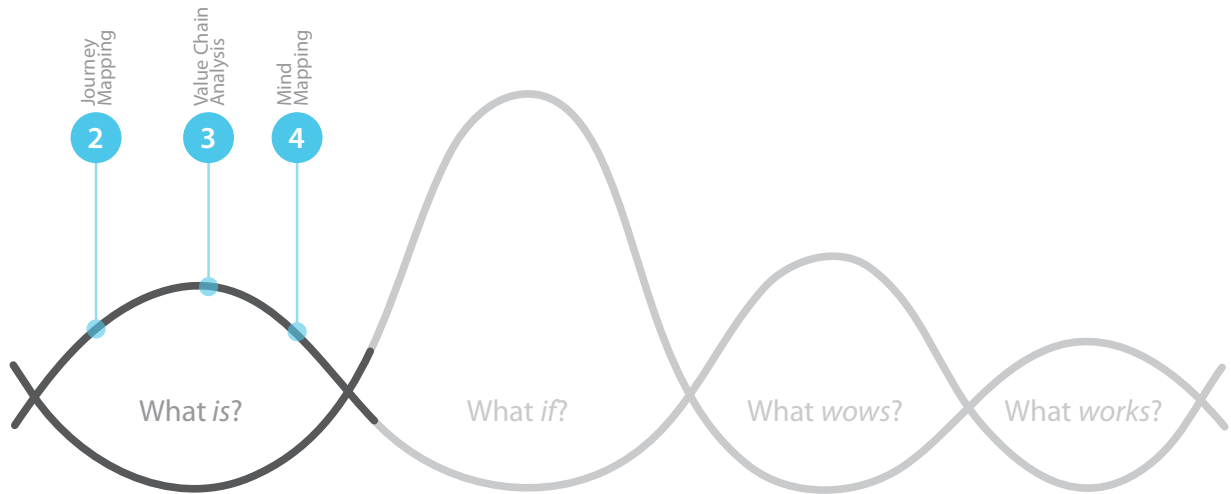


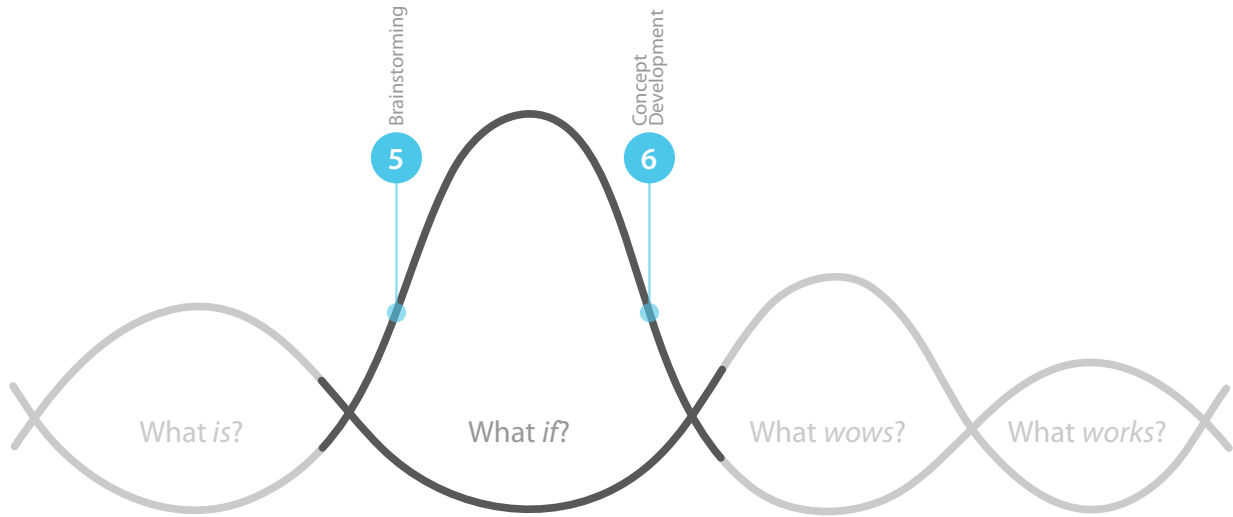
We start and end in the same place as Apple’s Tim Brennan, but we’ve untangled the hairball into a manageable process. Despite a lot of fancy vocabulary like “ideation” and “co-creation,” the design process deals with four very basic questions, which correspond to the four stages of the process: **What is?** **What if?** **What wows?** and **What works?** The **What is** stage explores current reality. **What if** envisions a new future. **What wows** makes some choices. **What works** takes us into the marketplace. The widening and narrowing of the bands around each question represent what designers call “divergent” and “convergent” thinking. In the early part of each stage of the design thinking process, we are progressively expanding our field of vision, looking as broadly and expansively around us as possible in order not to be trapped by our usual problem framing and pre-existing set of solutions. After we have generated a new set of concepts, we begin to reverse the process by converging, progressively narrowing down our options to the most promising.



As we get started, we want to call your attention to a very special design tool: **visualization (tool 1)**. This is really a “meta” tool, so fundamental to the way designers work that it shows up in virtually every stage in the process of designing for growth. Often, visualization is integral to the other tools we will talk about. It is an approach for identifying, organizing, and communicating in ways that access “right brain” thinking while decreasing our dependency on “left brain” media such as numbers. Visualization consciously inserts visual imagery into our work processes and focuses on bringing an idea to life, simplifying team collaboration and (eventually) creating stories that go to the heart of how designers cultivate empathy in every phase of their work and use it to generate excitement for new ideas.

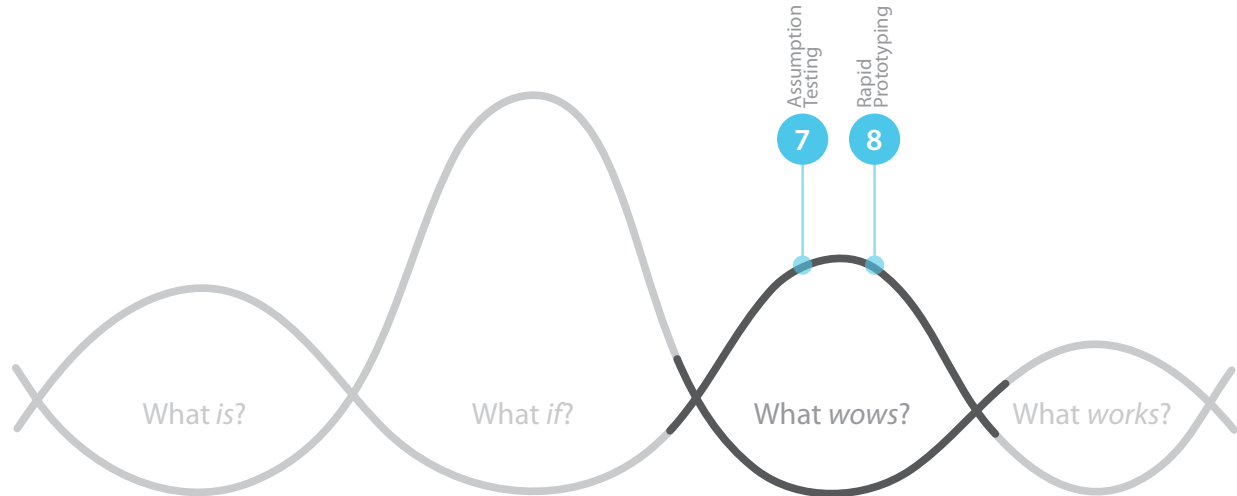
All this involves a **value chain analysis** (tool 3).





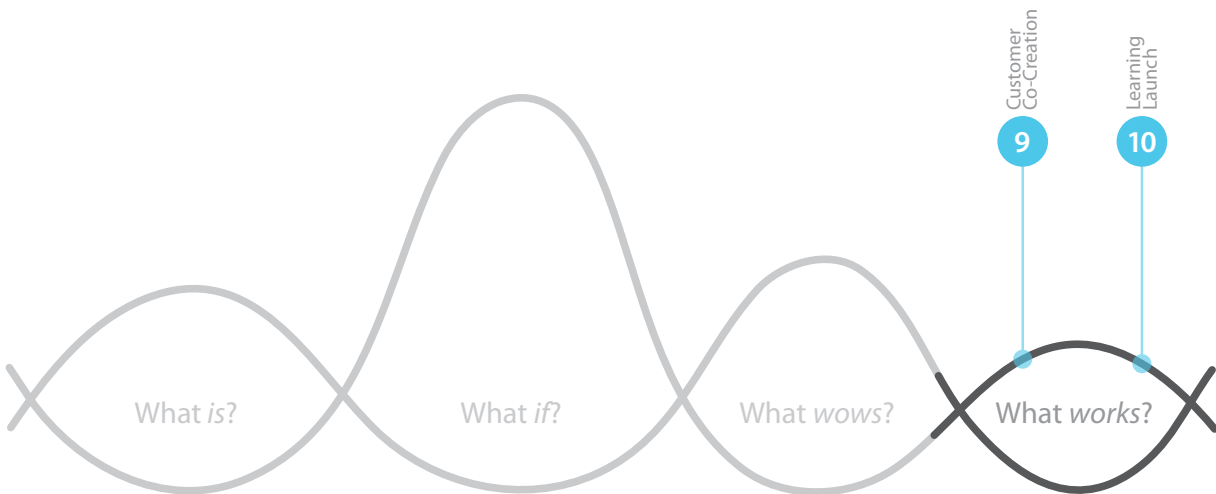
We will approach the ideation challenge using a familiar tool, **brainstorming (tool 5)**, although we will apply it with more structure than the free-form approach often used. A disciplined approach to brainstorming is crucial to overcome its inherent pitfalls. A key reason that brainstorming is unfulfilling is the lack of a formal process to convert the output into something valuable. Another design thinking tool we introduce here, **concept development (tool 6)**, will take the output of the brainstorming process, organize it into coherent clusters, and architect the most compelling clusters into a robust “concept.” We moved from data to insights in our first phase; in this one, we’ll move from insights to ideas to concepts. Ideas often fit onto a Post-it note, but a concept requires a poster.

It starts with the hypotheses generated by the **What if** question we've just talked about. Then it takes these new possibilities (which are really educated guesses about something we think is likely to be a good idea) and tests them by asking "Under what conditions would that hypothesis in fact be a good business?" Or—worded differently—"What would need to be true for my concept to be a good one?" The idea is to surface and test the assumptions underlying each hypothesis. The hypotheses that "pass" this first set of tests are good candidates for turning into real experiments to be conducted in the marketplace. And so **assumption testing (tool 7)** is one of the most potent arrows in the designer's—and the manager's—quiver. Remember, the goal here is not uncovering "truth"—it is making better choices under conditions of uncertainty.



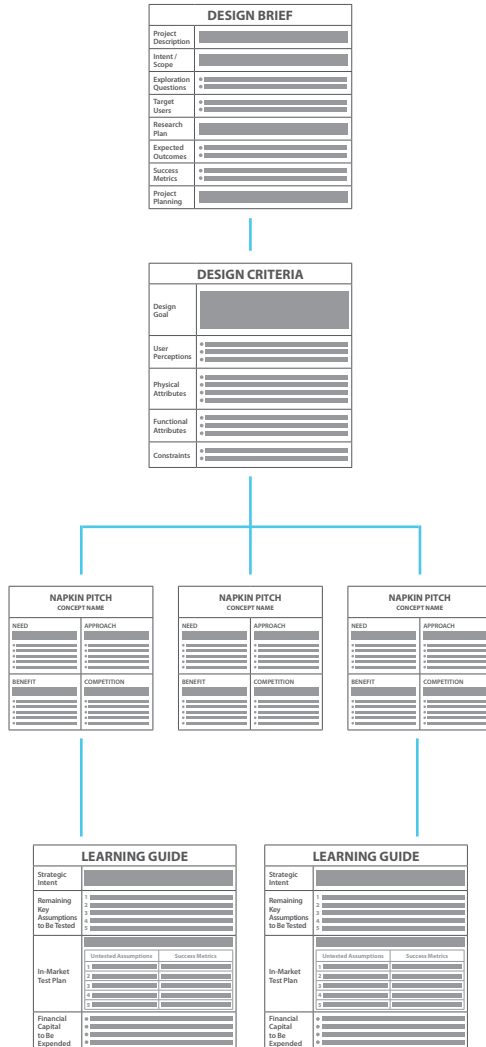
A particularly powerful approach to determining what works involves inviting the customer into the conversation in an active, hands-on way. The tool we'll use here is **customer co-creation (tool 9)**. There is no more effective way to reduce the risks of any growth initiative than to engage customers in designing it.

Improved prototype in hand, we are now ready to move into the marketplace. To accomplish this, we will offer a tool we call a **learning launch (tool 10)**, which moves your developing concepts into the field. As you design the launch, you will want again to be explicit about the search for disconfirming data. This is the information that disproves your hypotheses. It is the most valuable information to find—and the easiest to miss. To enhance your ability to detect it, you must lay out in advance what disconfirming data would look like.



PROJECT MANAGEMENT AID

PURPOSE



PMA 1 Design Brief

- Formalizes the growth project
- Defines goals, resources, timelines, etc.
- Serves as a “North Star” throughout the project

PMA 2 Design Criteria

- Sets criteria to evaluate alternative designs (derived from study of user needs and business requirements)
- Becomes part of the design brief

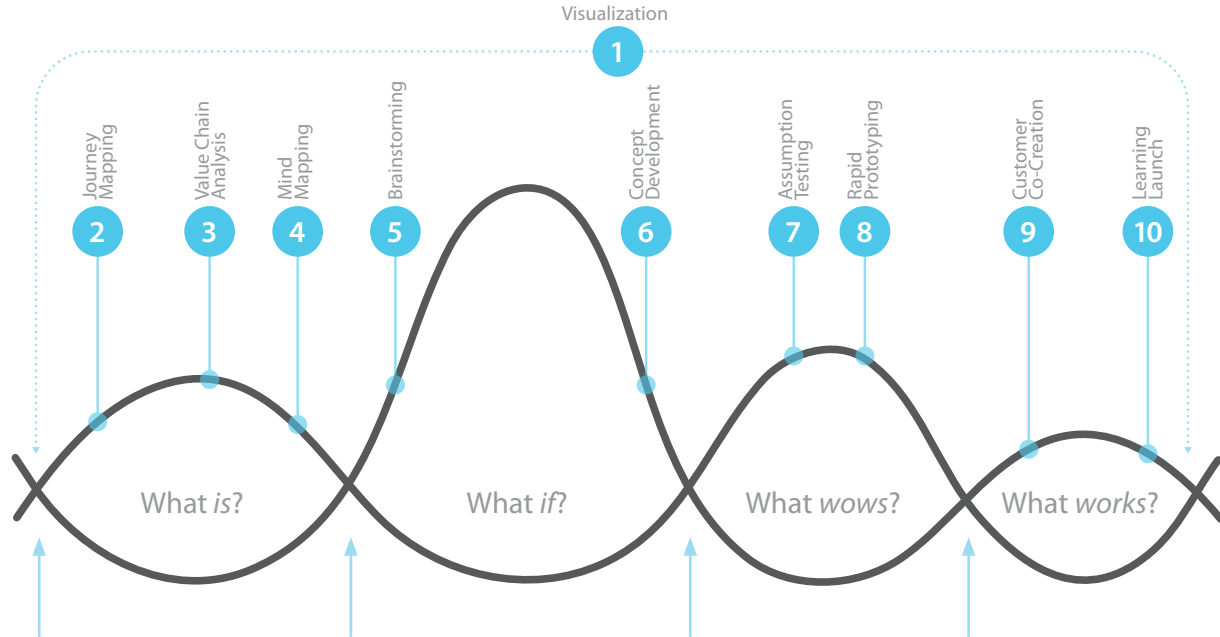
PMA 3 Napkin Pitch

- Crystallizes communication of solution concepts (after brainstorming and concept development)
- Describes each of the best few (3–5) solutions that meet the design criteria in a template that allows for apples-to-apples comparison

PMA 4 Learning Guide

- Defines an affordable level of resources to invest in learning whether (or not) the top 2–3 concepts are feasible

The bottom row of our design thinking model (below) shows where each PMA fits in the process.

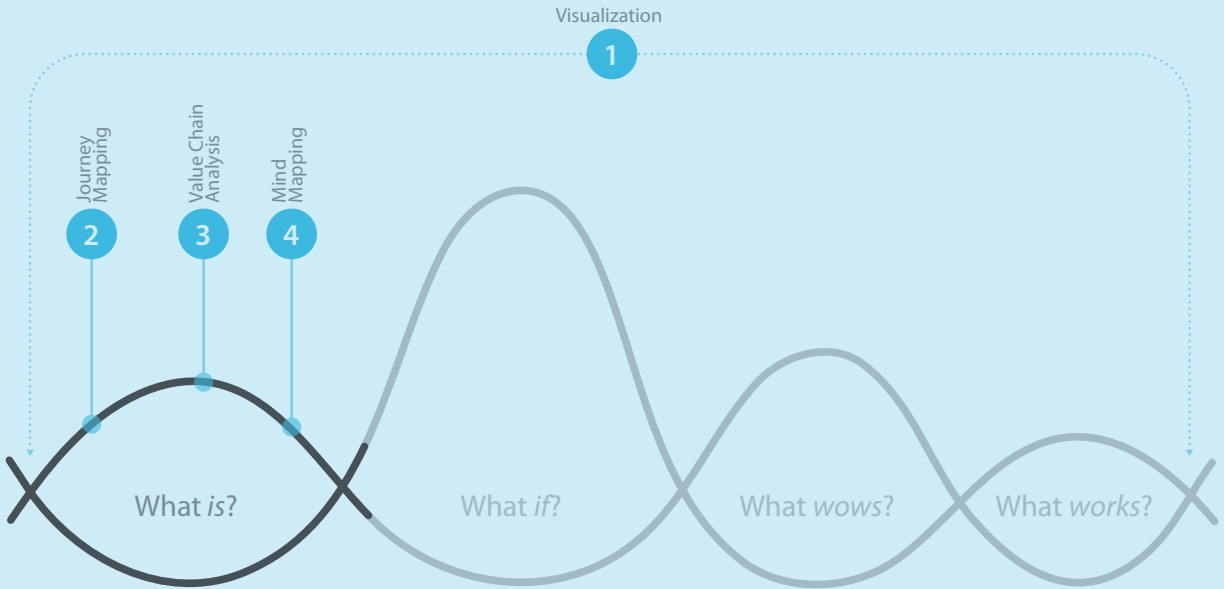


DESIGN BRIEF	
Project Description	
Intent / Scope	
Exploration Questions	<ul style="list-style-type: none">
Target Users	<ul style="list-style-type: none">
Research Plan	
Expected Outcomes	<ul style="list-style-type: none">
Success Metrics	<ul style="list-style-type: none">
Project Planning	

DESIGN CRITERIA	
Design Goal	
User Perceptions	<ul style="list-style-type: none">
Physical Attributes	<ul style="list-style-type: none">
Functional Attributes	<ul style="list-style-type: none">
Constraints	<ul style="list-style-type: none">

NAPKIN PITCH CONCEPT NAME			
NEED		APPROACH	
<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
BENEFIT		COMPETITION	
<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

LEARNING GUIDE			
Strategic Intent			
Remaining Key Assumptions to Be Tested			
1			
2			
3			
4			
5			
In-Market Test Plan		Success Metrics	
1			
2			
3			
4			
5			
Financial Capital to Be Expended			
<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

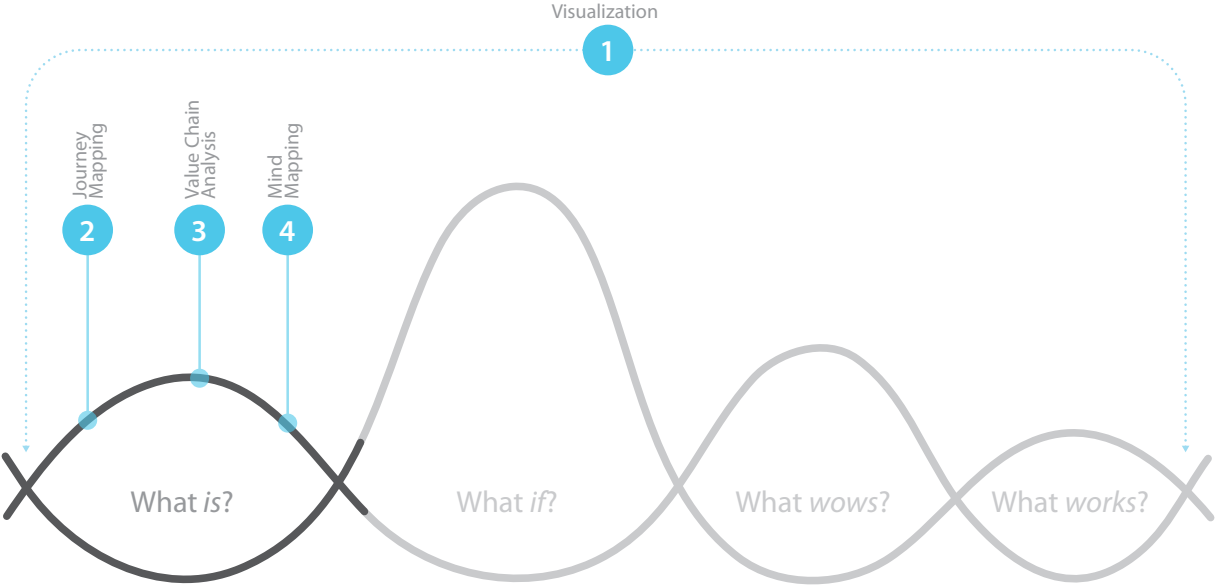


DESIGN BRIEF

We can imagine that AARP's Project Prepare design brief would have looked something like this:*

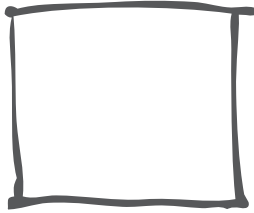
Project Description	AARP may be able to improve relevance to its core market (Americans 50+) by helping adult children (Gen Y and Gen X) achieve financial independence and "PREPARE" for their futures.
Intent/Scope	<p>The initial scope will focus on better understanding the needs of Gen Y and Gen X. AARP will then explore both for-profit and nonprofit approaches to meet their needs—with the project's primary goal being positive social impact. AARP will pursue a for-profit approach if and only if AARP can use its resources to create a new market space that will serve the public good.</p> <p>Opportunities for AARP may include: health insurance challenges, college debt burden, retirement planning, building credit, and/or improving credit card habits.</p>
Exploration Questions	<p>The project will inform key strategic questions including:</p> <ol style="list-style-type: none">1. What is the demographic/psychographic with the greatest need? What do these needs look like?2. Can AARP provide services to Gen Y and Gen X in a way that reinforces its mission to make life better for Americans over 50?3. Should AARP provide services to the public or only to the adult children of AARP members?
Target Users	At project kick-off the target audience includes all Gen Y and Gen X. We intend to align on a more focused target based on ethnographic research and strategic discussion.
Research Plan	We will screen Gen Y and Gen X research participants, in order to select the 30 most relevant subjects to follow up with an in-home interview.
Expected Outcomes	<p>We expect to discover several high-potential opportunities for AARP PREPARE to:</p> <ol style="list-style-type: none">1. Ensure Gen X and Gen Y have the resources to age and retire with dignity2. Build AARP's relevance to 50- to 65-year-old Americans by serving their children3. Build AARP's relevance to younger Americans to ensure future membership levels.
Success Metrics	<ol style="list-style-type: none">1. Did we discover a compelling reason to PURSUE or NOT PURSUE this target market at this time?2. Did we find any high-potential needs or demographic/psychographic segments that represent a compelling opportunity for AARP?3. Have we identified the design criteria that a service must meet to address these opportunities?
Project Planning	A 3-person full-time team will conduct the "exploration" phase over a 10-week time frame.

As you read about each tool, think about the dynamic relationship among them. When they come together successfully, they will point the way toward opportunities that were always there but were hidden. They feed the imagination for the next stage: **What if.**



5. **Experiment with storyboarding.** Storyboards are nothing more than a series of panels that sketch out a sequence of events. They are a fundamental tool for visual thinking. Storyboarding involves just six simple elements:

Rectangle



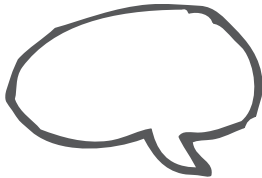
Setting



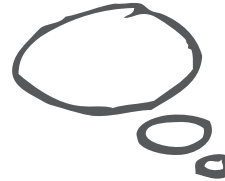
Stick Figure



Speech



Thought

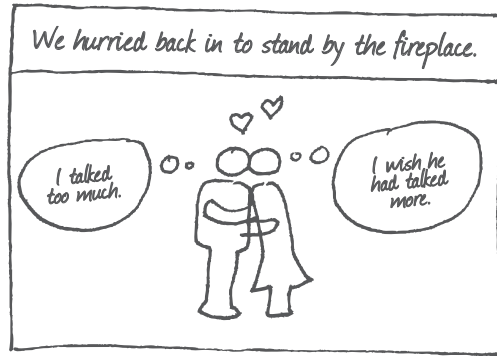
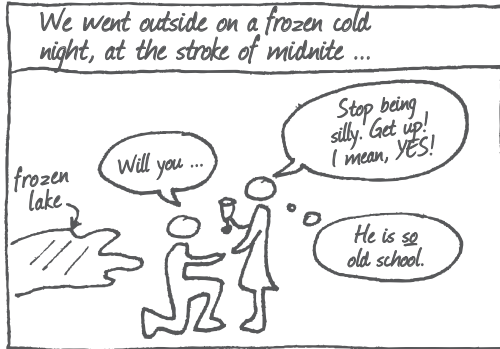
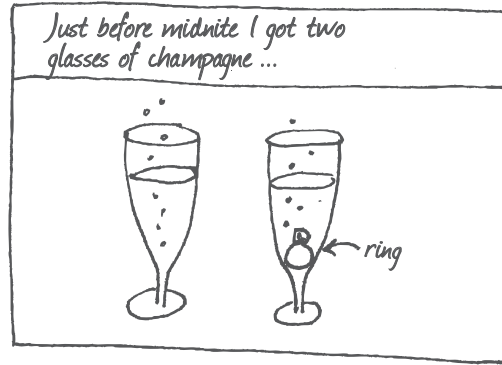
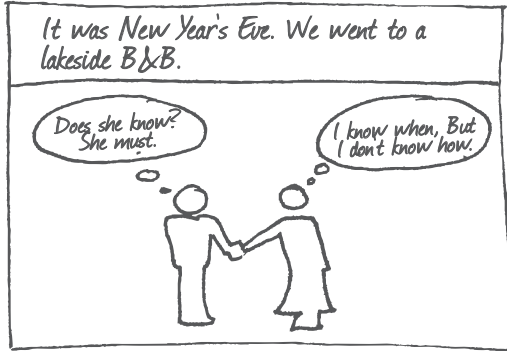


Tools



The rectangle provides your frame, and its background creates your setting. Stick figures represent your characters, and speech and thought bubbles capture their words and thoughts. Finally, you may want to include the tools that they use. We'll return to storyboarding for this chapter's "Try This at Home" assignment.

Here is an example (an appropriately humble one) that will help you get started.



Here's how journey mapping typically works, illustrated with a recent journey mapping project undertaken at the Darden School of Business:

1. **Select the customers whose experience you want to understand more fully.** Spend some time investigating the context in which they do the “job” that your offering contributes to. Secondary data sources like websites and blogs are often a good place to begin.

A faculty/student team undertook the mapping of the MBA student's journey at Darden. The aim was to improve the educational experience and increase student satisfaction. As team members began the project, they reviewed a wealth of published information about this generation of students.

2. **Lay out your hypothetical view of what the customer's journey looks like from beginning to end.** Be sure to include all steps in the journey, not just the ones in which your firm participates.

The MBA mapping team identified 12 key steps in the MBA journey, beginning with the decision to investigate getting the degree and ending with graduation.



The Darden mapping team identified the following potentially differentiating dimensions:

introvert ↔ extrovert

footloose ↔ outside obligations

embrace debate ↔ avoid debate

culturally malleable ↔ culturally rigid

ask for help ↔ help yourself

high confidence ↔ high humility

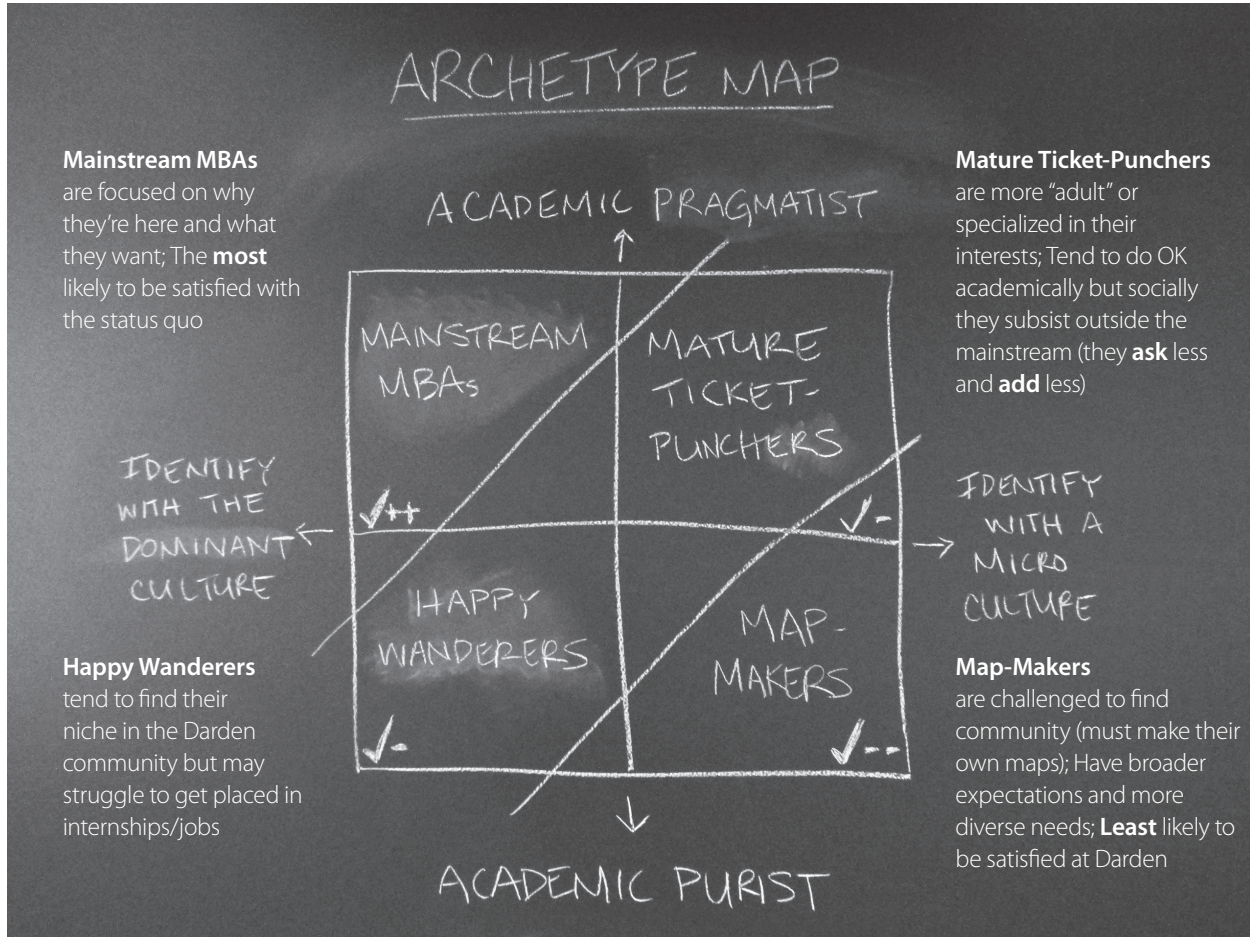
laser focus ↔ open exploring

extension of college ↔ extension of career

▶ identify with dominant culture ↔ identity with micro culture

▶ pragmatist (career advancement) ↔ purist (holistic learner)

The Darden team created the matrix using the two dimensions selected:



Here is Scott, the happy wanderer's, Darden journey:

Decide

1

- Research
- Network
- Visit Schools
- Commit

Start

2

- Plan for Darden
- Move
- Prep

3

- Pre Darden Socials
- Pre-Mats
- Tests

4

- LT/Section
- Cold Calls
- Class Discussion
- Time Mgmt
- Exams

5

- Briefings
- Job Search
- Club Activities

First Year

6

- Social Traditions
- Emotions
- Relationships

7

- Career Planning
- Internship Offer
- Accepting Offer
- Abroad Exp

8

- Club Elections
- Internship
- Academic Reflection

9

- Summer Offer/Not
- Full Time Recruiting

Second Year

10

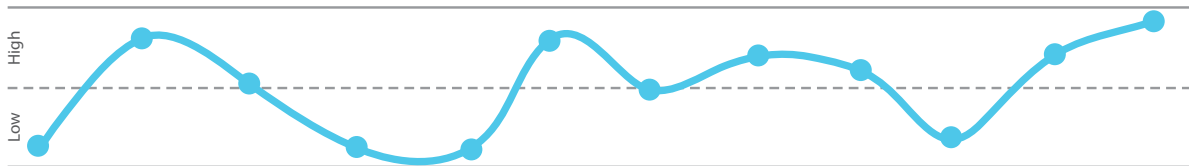
- SY Program
- Class
- Discussion

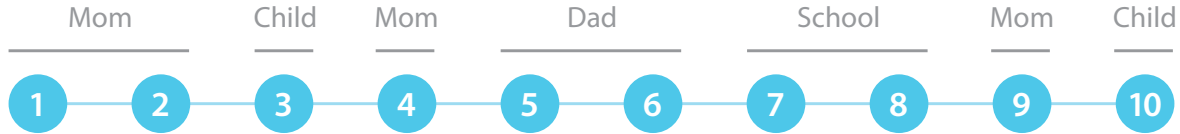
11

- Club Leadership
- Mentoring
- Social Traditions

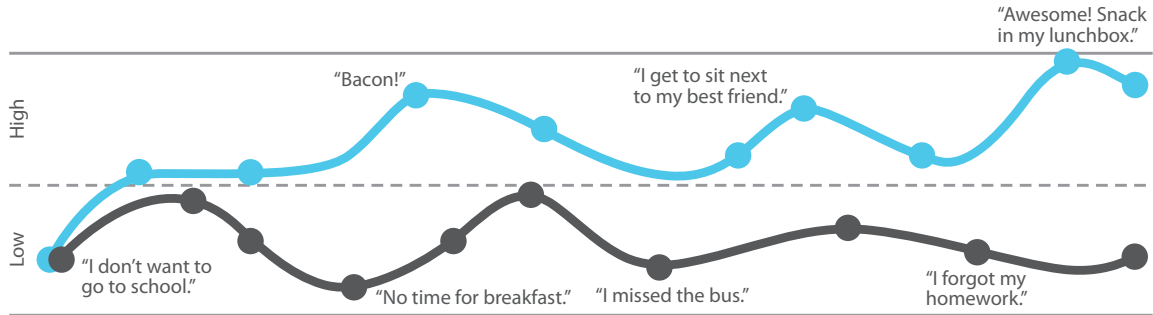
12

- More Time
- Full Time Offer/Not
- Graduation

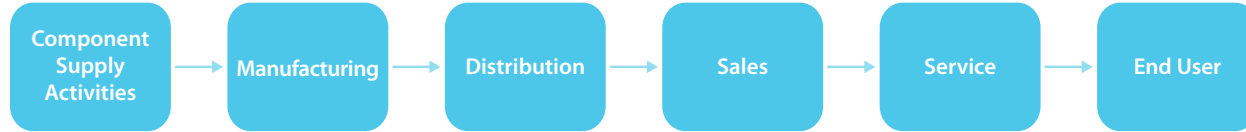




The resulting map contains the full sequence of steps but shows the entire journey as neutral. Now we can make some judgments about the experience.



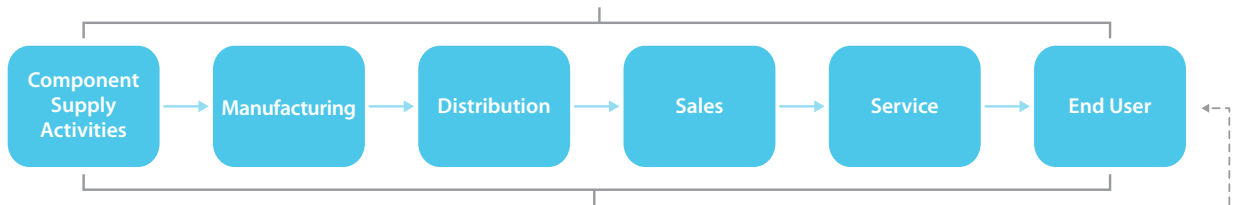
A typical value chain might include these kinds of clusters:



Making the business case

What is the potential value capture of different roles in the network?

- Who drives performance?
- Who has customer loyalty?
- Where does the strategic intent align and diverge?



The capabilities question

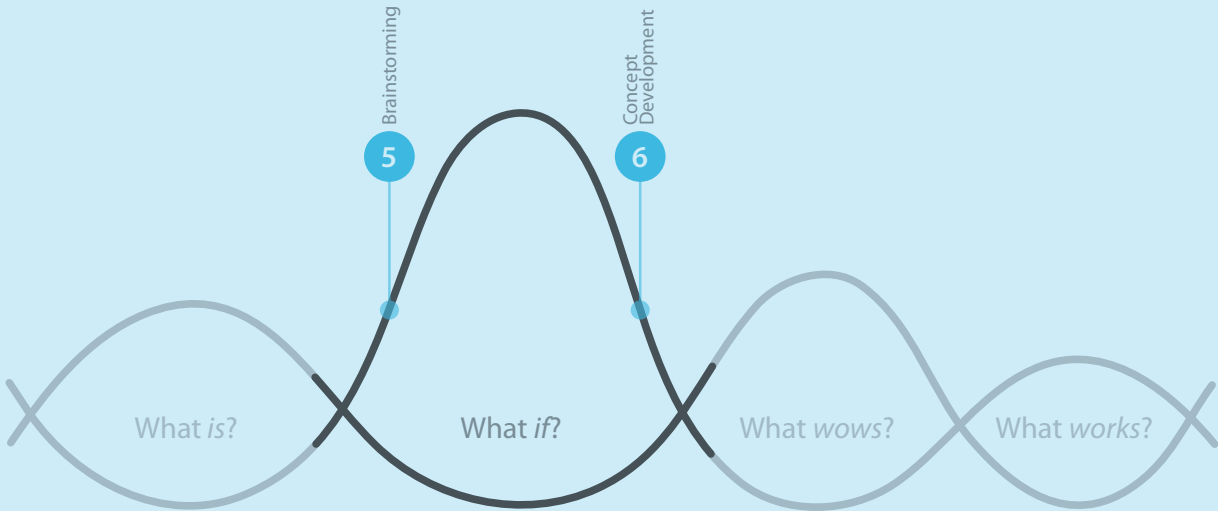
For each activity cluster in the value chain, what skills and processes are needed to succeed?

The positioning question

Where are we vulnerable?
What possibilities exist to shift/strengthen our role in ways that improve our ability to create and capture value?
What new capabilities do we need to develop or improve to do this?
Who should our partners be?

Making the customer case

How does the network create and enhance value as *defined by the customer*?

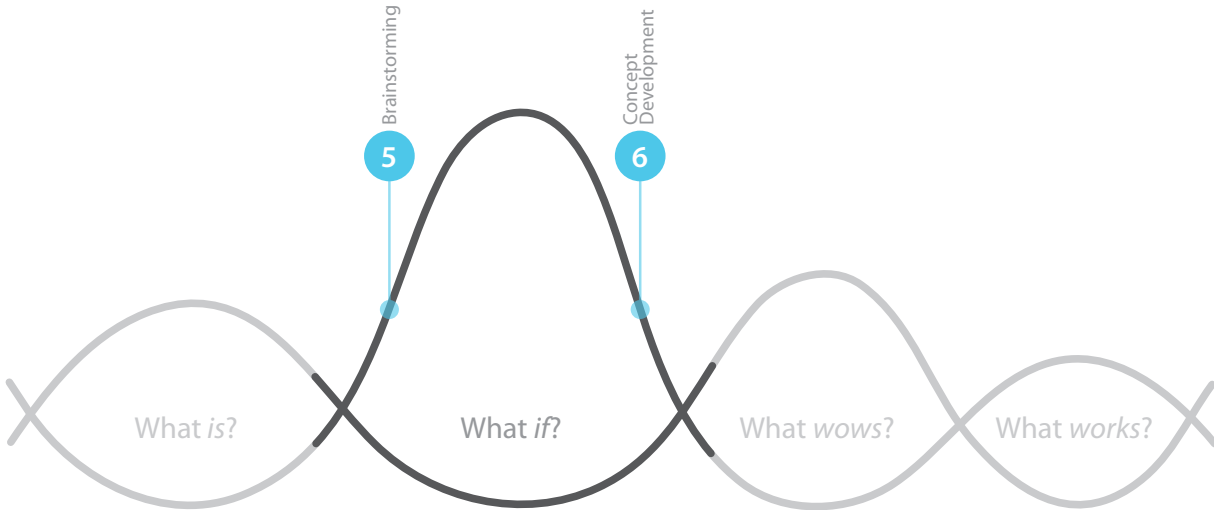


DESIGN CRITERIA

The design criteria are an addendum to the design brief. They further articulate a project's scope and direction for the *What if* stage. We can imagine that Brivo's design criteria would have summarized the learnings of the *What is* stage into something like the template below:*

Design Goal	<p>Brivo will create a scalable, Internet-based software solution for one of the following customer pain points:</p> <ol style="list-style-type: none">1. Finding rare items to purchase online is not easy.2. Qualifying for group discounts on e-commerce purchases, as a single buyer, is not possible.3. Buying repeat items, such as regular household consumables, is more trouble than it should be.4. Working couples cannot be home to receive deliveries; a residential delivery requires an average of 2.2 attempts.
User Perceptions	<ul style="list-style-type: none">• Easy to use• Secure and trusted
Physical Attributes	<p>Any device designed to solve pain point 4 must be:</p> <ul style="list-style-type: none">• Theft-proof• Weatherproof• Large enough to receive a shoebox-sized item• Relatively easy to install and maintain
Functional Attributes	<ul style="list-style-type: none">• Must make e-commerce easier for users• Should make e-commerce easier for another stakeholder, e.g., retailers or delivery services• Must position Brivo in the e-commerce information stream and generate useful data for shippers, delivery agencies, and users• Should create network effects that would allow it to go viral (maybe by rewarding users for enrolling others)
Constraints	<ul style="list-style-type: none">• A proof-of-concept model must be possible within 6 months.• Any solution must be positioned in a way that helps the existing ecosystem of e-commerce delivery rather than directly competing with it or hindering it.

The **What if** stage includes the **brainstorming** and **concept development** tools. It ends with our third project management aid, the **napkin pitch**, which helps you summarize the main attributes of your concepts and start working with them. Brainstorming (and its trendier synonym, ideation) causes many businesspeople to recoil. Trust us, you can do this. We share Larry Keeley's confidence that the results depend more on disciplined execution than on blue-sky creativity. The key is to approach brainstorming the right way and couple it with concept development to translate your ideas into concrete, fully developed concepts.

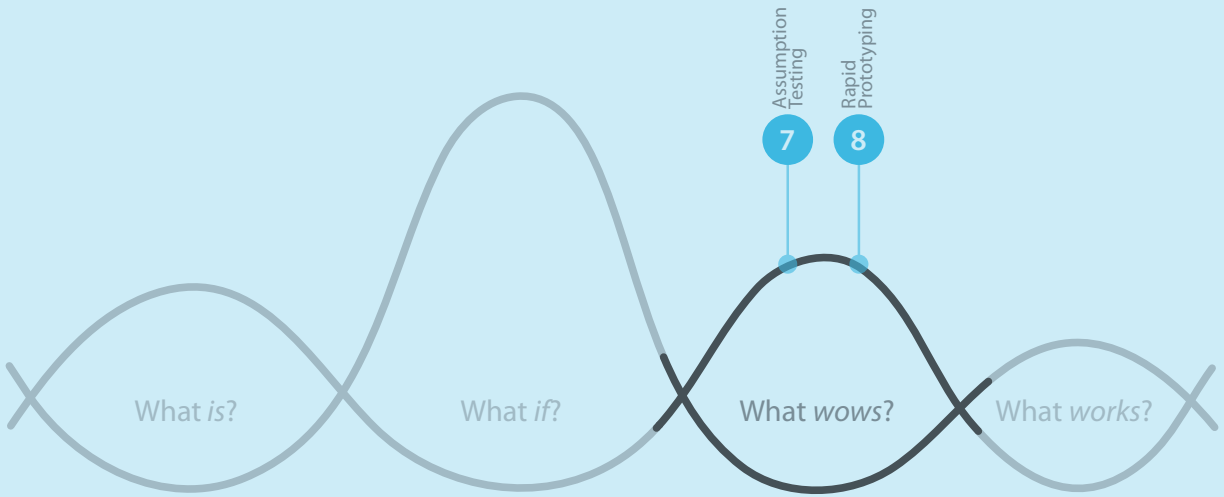


CONTRA-LOGIC AND THE FINE DINING INDUSTRY

One of our favorite ways to trigger new insights is to invite brainstorm participants to act as contrarians. But instead of asking them to contradict everything, we focus their attention on the underlying elements that make the current business work. We call these the “dominant logic” of the business. For example, imagine you are a recent graduate of the Culinary Institute of America and you’re looking for an innovative way to provide high-end gastronomical experiences. We could define the dominant logic of the fine dining market like this, according to the flow of goods, information, and money:

	DOMINANT LOGIC	CONTRA-LOGIC
Physical Flows	<ol style="list-style-type: none"> 1. Fresh food from nearby markets 2. Seasonal ingredients 3. Location: High-end retail storefront 4. Food prepared to order 5. Mostly low-wage workers 6. Food consumed on-premises 	<ol style="list-style-type: none"> 1. 2. 3. 4. 5. 6.
Information Flows	<ol style="list-style-type: none"> 7. Customers read reviews 8. Advertise in regional magazines 9. 60% reservations, 40% walk-in 10. Food management software 	<ol style="list-style-type: none"> 7. 8. 9. 10.
Financial Flows	<ol style="list-style-type: none"> 11. Pay for food supplies daily 12. Customers pay after dining 	<ol style="list-style-type: none"> 11. 12.

Rather than try to upset all flows at once, we might ask a brainstorming team to focus on changing one or two to see what new combinations are possible. For example, if we change Physical Flow 3 to “Airstream trailer,” we have a new experience where the food can travel to customers willing to try a high-end dining experience outside their building or even at their favorite National Park. This eliminates a high-cost element of the traditional business model—real estate—and opens up amazing possibilities. If we change Physical Flow 6 to “Food frozen and eaten at a later date,” we have created a prepared-meals business model. Finally, if we change Physical Flow 5 to “Recently released prisoners seeking to build new life skills,” we have DC Central Kitchen, a widely emulated community-development model that also provides great food.



NAPKIN PITCH: Lending Community for Debt Repayment

Need

Debt Management

Gen Y customers with student loans:

- Feel dread of being “alone with debt forever,” which can create apathy toward debt management
- May not understand how to prioritize payment of different types of debt (i.e., credit card debt vs. student loans vs. home loans)
- Parents/relatives have difficulty collecting money when they make informal loans to “help out”
- Face a downward spiral of debt

Benefit

- Gen Y users gain a “new lease on life” by getting out from under the treadmill of servicing student debt
- Gen Y users can still learn responsible debt repayment but at significantly lower interest rates
- Parents/relatives have a formal contract that is agreed to for loan repayment
- Parents/relatives can still “help out” financially, without interfering with growth of financial independence and responsibility

Approach

AARP provides contract templates, payment plans, and/or billing mechanism.

- AARP could help its members formalize their approach to providing money to their adult children
- AARP could provide flexible templates for contracts and payment plans (and recommendations for how to best leverage them)
- AARP could work with a partner to provide a no-cost or low-cost formal billing mechanism

Other Service Providers*

- Circle-lending platforms
- Traditional loan servicers
- Lawyers
- Informal community lending

NAPKIN PITCH: Life Plan Visualization

Need

Life Planning

Gen Y customers in the Overwhelmed, Catastrophic, Optimistic, and Achieving segments ALL:

- Face important life decisions
- Struggle to visualize the impact of financial decisions on their lifestyle and lifestyle decisions on their finances
- Struggle to weigh the importance of different demands on their finances

Approach

A virtual reality where users can visualize various lifestyle trajectories and get advice on life stage decisions. Possible features could include:

- A lifestyle and life event simulation tool
- Narrative component to explain common pitfalls and offer advice
- Highly graphical, highly interactive visualization that aggregates multiple financially complex decisions into a simple, approachable diagram
- Inspirational & Individual: “Write Your Own Adventure” or “Your American Dream”
- Fun: “Game of Life” or “Second Life” world where avatars encounter life stages
- AARP 50+ members serve as online mentors
- Financial experts provide pro bono advice

Benefit

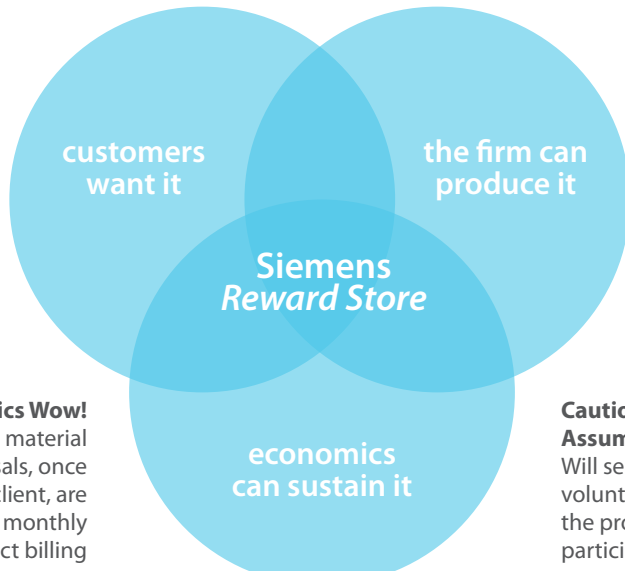
- Gen Y users are freed to pursue their “Dream” by allaying fears associated with dramatic life changes
- Gen Y users can receive personal guidance from experienced advisors who have “been there, done that”
- AARP 50+ members may find it rewarding to serve as community mentors

Other Service Providers*

- For-profit, in-person financial advisors
- For-profit, phone-based financial advisors (e.g., Charles Schwab)
- Financial diagnostic quizzes offered by financial institutions (e.g., USAA)
- Newspaper and online advice columnists

*This quadrant would generally be labeled “Competition,” but nonprofit organizations do not technically have competitors.

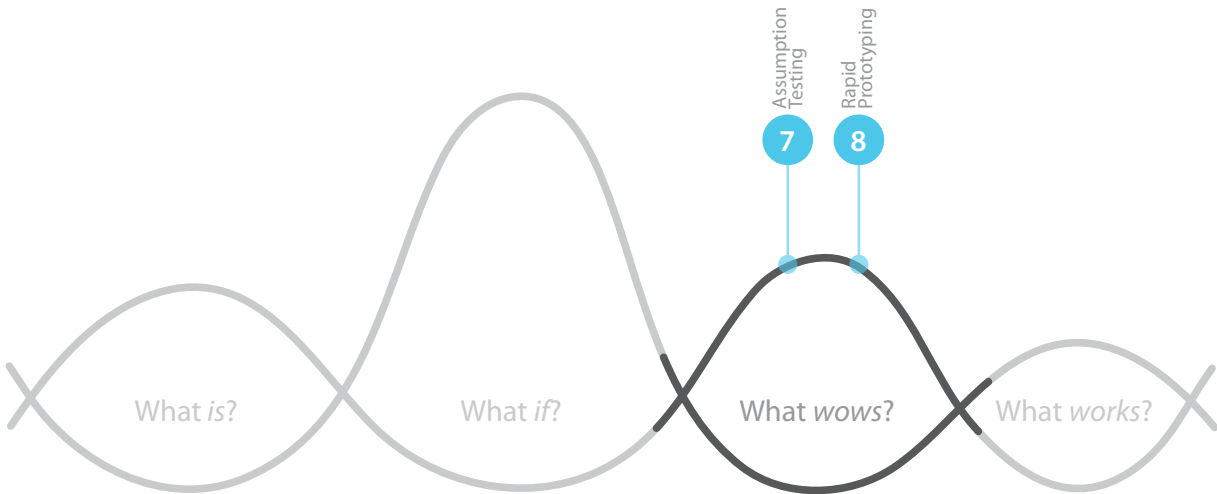
Customer Wow!
Customer gets ad hoc proposal instantly; request is fulfilled within days

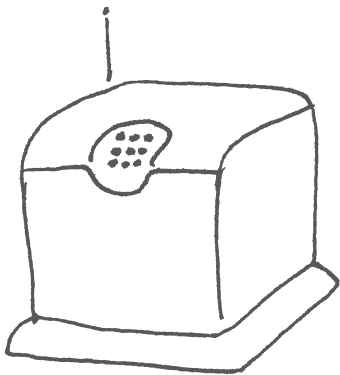


Execution Wow!
Service techs are already on-site; they create T&M proposals easily using their handheld device

Economics Wow!
Time and material proposals, once accepted by client, are paid via the monthly contract billing

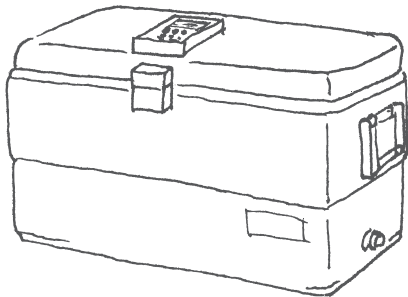
Caution! Key Assumption to Test
Will service techs voluntarily enroll in the program and participate actively?





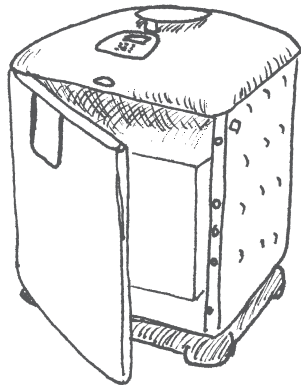
Early prototype

- Concept sketch (2D)
- Time to create: 5 minutes
- Materials cost: \$1



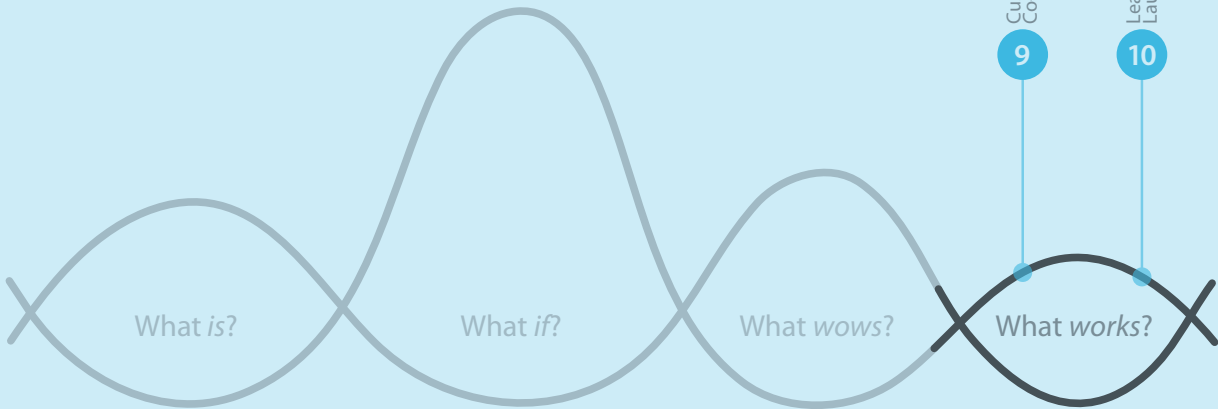
Functional prototype

- Retrofitted cooler (3D)
- Magnetic door strike attached
- Keypad attached
- Time to create: 3 days
- Materials cost: \$600



Market test prototype

- Original design by IDEO
- Fully functional
- Required original tooling
- Time to create: 3 months
- Materials cost: >\$10,000 (due to tooling cost)

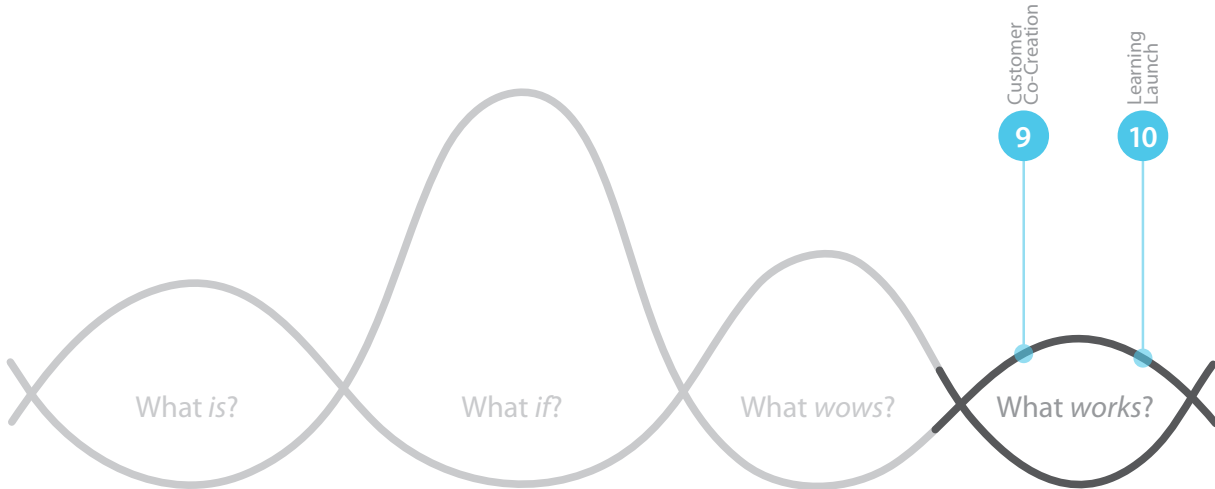


LEARNING GUIDE

We can imagine that Crowe's learning guide would have summarized the goals of the *What works* phase into something like the template below:*

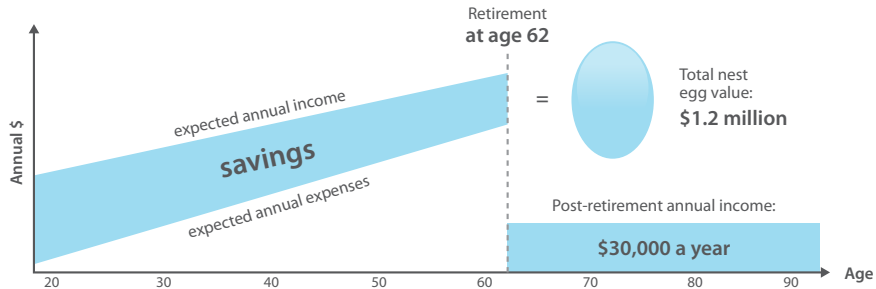
Strategic Intent	Introduce inventory management software for car dealerships that (a) lets a dealership easily identify slow-moving cars and price them according to their <i>true cost of carrying</i> , and (b) informs the dealership's future ordering process to minimize likely slow movers. The overall goal is to improve the dealership's per-car yield for an affordable one-time software investment and minimal ongoing maintenance cost.				
Remaining Key Assumptions to Be Tested	<ul style="list-style-type: none">• Dealership staff will enter data into the system within one day of a car's arrival on the lot with 99%+ compliance• The current sales incentive model can accommodate this new information in the workflow and create a win-win for management and salespeople				
In-Market Test Plan	<table border="1"><thead><tr><th data-bbox="428 655 954 701">Untested Assumptions</th><th data-bbox="954 655 1479 701">Success Metric for Learning Launch</th></tr></thead><tbody><tr><td data-bbox="428 701 954 994"><ol style="list-style-type: none">1. Dealership staff will enter data into the system within one day of a car's arrival on the lot with 99%+ compliance2. The current sales incentive model can accommodate this new information in the workflow and create a win-win</td><td data-bbox="954 701 1479 994"><ul style="list-style-type: none">• Dealership staff enter new-car data accurately within 36 hours of arrival for 95% of new cars arriving during 60-day trial period (to allow for learning curve)• Of 24 salespeople involved, 80% rate the system as either "good" or "excellent"• Same ratings from the six managers involved</td></tr></tbody></table>	Untested Assumptions	Success Metric for Learning Launch	<ol style="list-style-type: none">1. Dealership staff will enter data into the system within one day of a car's arrival on the lot with 99%+ compliance2. The current sales incentive model can accommodate this new information in the workflow and create a win-win	<ul style="list-style-type: none">• Dealership staff enter new-car data accurately within 36 hours of arrival for 95% of new cars arriving during 60-day trial period (to allow for learning curve)• Of 24 salespeople involved, 80% rate the system as either "good" or "excellent"• Same ratings from the six managers involved
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Financial Capital to Be Expended	<p>Learning launch of standalone software prototype for 60 days at two dealerships will require the following resources:</p> <ul style="list-style-type: none">• Learning launch manager + 1 support staff, both part-time on program• Not to exceed 200 hours of professional staff time• Software modification budget of 50 hours if necessary• Not to exceed \$5,000 in out-of-pocket expenses for travel				

This section introduces the final tools in the design thinking tool kit. **Customer co-creation** invites a few potential customers to collaborate with you—by playing with rough prototypes—in order to develop an offering that truly meets their needs. During the **learning launch**, you then take an improved prototype into the market for an extended experiment designed to test the remaining key assumptions that stand between your concept and its full commercial development. Now, instead of “trying this at home,” we are ready to try it in the market.



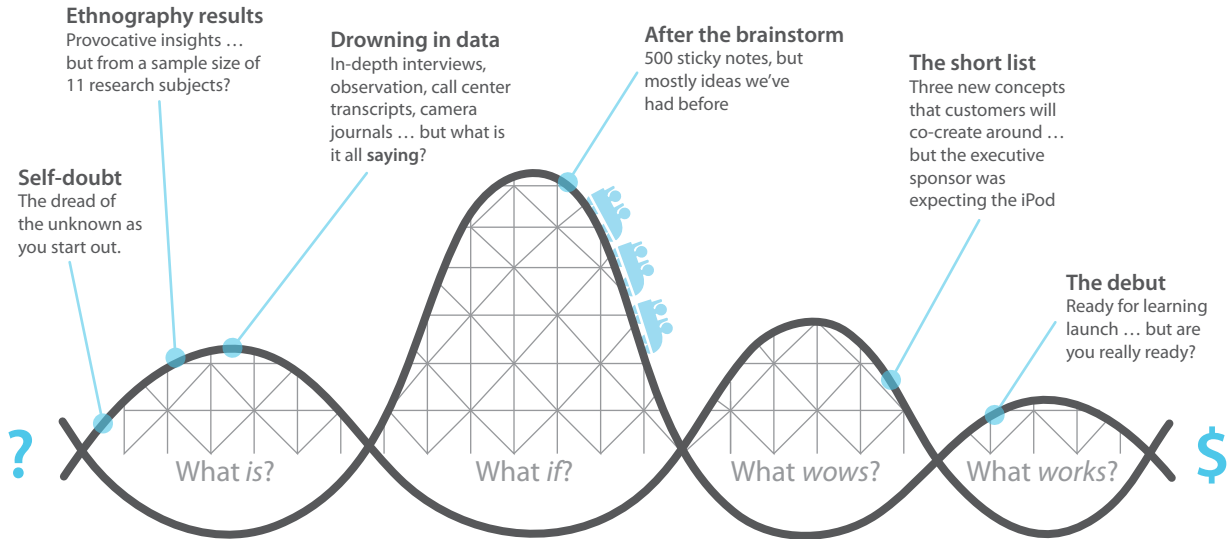
Tool 1: Visualize Your Nest Egg

- After retirement, your annual income will come from the money you have saved while you worked
- An interactive tool would allow you to calculate your post-retirement annual income based on how much money you save per year AND your planned retirement age

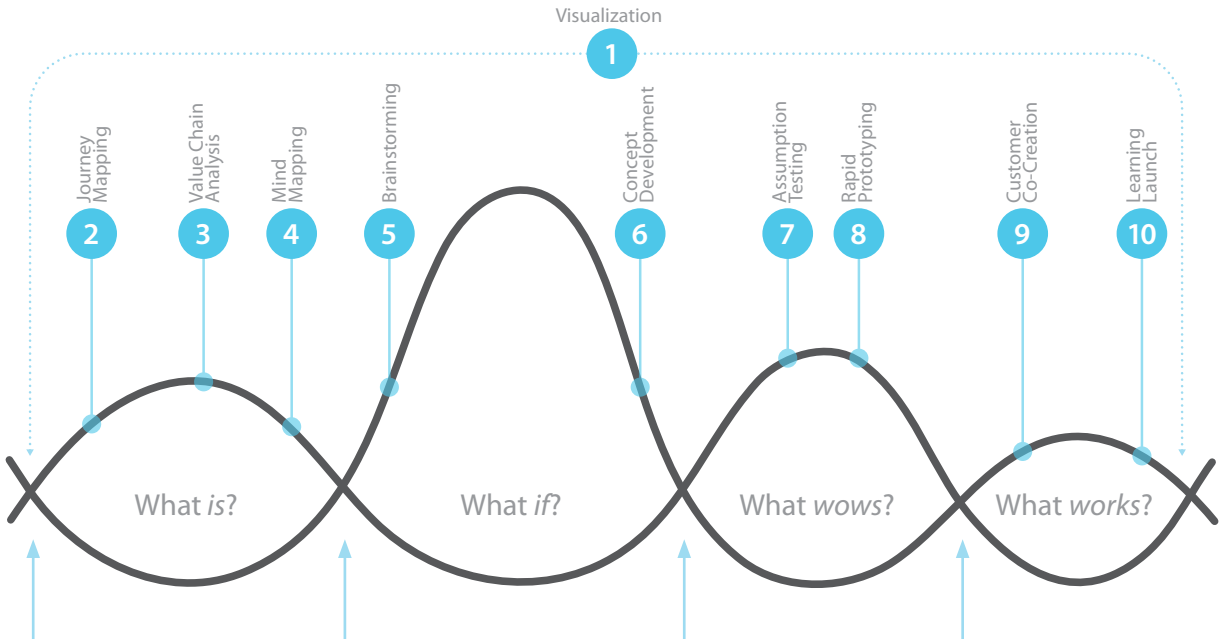


[Click here to calibrate your own Nest Egg savings plan](#)

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The self-doubt moment. This is when it dawns on you: “I just promised *WHAT?* By *WHEN?* With only *WHAT* resources to get it done?” After pitching and re-pitching your project, you expected to enjoy the thrill of victory and instead are suffering the dread of the unknown.



DESIGN BRIEF	
Project Description	
Intent / Scope	
Exploration Questions	•
Target Users	•
Research Plan	
Expected Outcomes	•
Success Metrics	•
Project Planning	

DESIGN CRITERIA	
Design Goal	
User Perceptions	•
Physical Attributes	•
Functional Attributes	•
Constraints	•

NAPKIN PITCH CONCEPT NAME	
NEED	APPROACH
•	•
•	•
•	•
BENEFIT	COMPETITION
•	•
•	•
•	•

LEARNING GUIDE													
Strategic Intent													
Remaining Key Assumptions to Be Tested	1 2 3 4												
In-Market Test Plan	<table border="1"> <thead> <tr> <th>Untested Assumptions</th> <th>Success Metrics</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>3</td> <td></td> </tr> <tr> <td>4</td> <td></td> </tr> <tr> <td>5</td> <td></td> </tr> </tbody> </table>	Untested Assumptions	Success Metrics	1		2		3		4		5	
	Untested Assumptions	Success Metrics											
	1												
	2												
	3												
4													
5													
Financial Capital to Be Expended	•												

DESIGN BRIEF

Project Description	<p>What is the business problem or opportunity? Describe the project in a few sentences, as you would in an “elevator pitch.”</p>
Intent Scope	<p>What is within the scope of the project and what is outside it? What efforts sit adjacent to this particular project?</p>
Exploration Questions	<p>What key questions will you need to answer through your research? These may include customer needs to understand better, emerging technical possibilities, and new business models.</p>
Target Users	<p>Who are you designing for? Try to be as specific as possible. Whom do you need to understand? Why are they important?</p>
Research Plan	<p>How will you explore your opportunity space? You will need a plan, including a timetable and milestones, for both primary and secondary research.</p>
Expected Outcomes	<p>What outcomes would you like to see?</p>
Success Metrics	<p>How will you measure success?</p>
Project Planning	<p>What resources do you need? Why? At what stages? What is creating the time urgency? What is the relevant time frame for fulfilling the brief?</p>

DESIGN BRIEF X

Defines the challenge this project intends to solve, the resources it will use, the timing, etc.

DESIGN CRITERIA TO FULFILL DESIGN BRIEF X

Describes the attributes of an ideal solution to the design brief, which become know during **What is**

DESIGN CRITERIA	
Design Goal	
User Perceptions	<ul style="list-style-type: none">
Physical Attributes	<ul style="list-style-type: none">
Functional Attributes	<ul style="list-style-type: none">
Constraints	<ul style="list-style-type: none">

DESIGN CRITERIA

Design Goal	<ul style="list-style-type: none">• What have you learned about the target customer?• What needs (functional, emotional, psychological, social) does the design have to fulfill for the target customer?• Why is it strategically important for your organization to address those needs?
User Perceptions	<ul style="list-style-type: none">• How important is your proposed offering to the target customer's well-being?• Are there aesthetic attributes necessary to succeed with the target customer?• Does the target customer expect the offering to have certain social, ethical, or ecological attributes?• What does ease-of-use mean to the target customer?
Physical Attributes	<ul style="list-style-type: none">• Must the offering be able to capture, store, and /or transmit information about usage?• Does the offering need to be designed for use in specific environments or situations?• Are there weight or size considerations for lifting, use, or transport?• Are there memory, bandwidth, or connectivity issues?
Functional Attributes	<ul style="list-style-type: none">• Does the design of the offering need to accommodate specific use-case scenarios? List them in order of importance to the target customer.• Does the design need to address compatibility or standards issues?
Constraints	<ul style="list-style-type: none">• Does the final offering need to be completed by a specific date?• What constraints does your current business impose (the offering must use the existing manufacturing base, provide higher profit margins than current offerings, leverage proprietary technologies, etc.)?• Are there ecosystem and regulatory concerns (height of shelves at retailers, OSHA regulations, etc.)?

NAPKIN PITCH: Concept Name

Need

- What customer wants this?
- What unmet need(s) does it serve?

Approach

- What asset or capability does this leverage?
- How would it create value?
- How will our company create a sustainable advantage?

Benefit

- How will the customer benefit?
- How will our company benefit?
- What other parties will benefit?

Competition

- What firms currently serve this need?
- How will they respond to our entry?

LEARNING GUIDE

Strategic Intent

Describe in two to three sentences (maximum) what this project is setting out to achieve, both for consumers and for the firm.

Remaining Key Assumptions to Be Tested

List the key assumptions about the concept that you have not yet been able to test with the data you already have. (For more on assumption testing, see Chapter 9.)

In-Market Test Plan

Define which assumptions are most important to answer during this phase. For each one, define what constitutes a successful test by specifying one or more metrics.

Here is a good format to use:

Untested Assumptions	Success Metric for Learning Launch
1. (Short description of a key assumption to be tested)	Define how it will be measured and what the threshold for success will be

Financial Capital to Be Expended

Testing these assumptions is deemed to be an acceptable use of the financial resources noted below, even if the results discourage future investment in the growth concept.

Describe the capital resources (budget, people) that will be made available during the **What works** phase to test key assumptions in the marketplace, whether through co-creation or formal learning launches.