Elmar Mock is listening carefully as Peter elaborates excitedly on an idea amid a sea of Post-it™ notes smothering the walls... ... Peter works for a pharmaceutical group that has hired Elmar's innovation consultancy, Creaholic, to help with a breakthrough product. The two men are part of a six-person innovation team holding a three-day offsite meeting.

The group is deliberately heterogeneous, a pastiche of different experience levels and backgrounds. Though all members are accomplished specialists, they joined the group not as technicians, but as consumers unsatisfied with the current state of affairs. Creaholic instructed them to leave their expertise at the door and carry it with them only as a "backpack" of distant memories.

For three days the six form a consumer microcosm and unleash their imaginations to dream up potential breakthrough solutions to a problem, unbridled by technical or financial constraints. Ideas collide and new thinking emerges, and only after generating a multitude of potential solutions are they asked to recall their expertise and pin down the three most promising candidates.

Elmar Mock boasts a long track record of breakthrough innovation. He is one of two inventors of the legendary Swatch watch. Since then, he and his team at Creaholic have helped companies such as BMW, Nestlé, Mikron, and Givaudan innovate successfully.

Elmar knows how difficult it is for established companies to innovate. Such firms require predictability, job descriptions, and financial projections. Yet real innovations emerge from something better described as systematic chaos. Creaholic has found a way to master that chaos. Elmar and his team are obsessed by innovation. 135

DESIGN

### Generating New Business Model Ideas

Mapping an existing business model is one thing; designing a new and innovative business model is another. What's needed is a creative process for generating a large number of business model ideas and successfully isolating the best ones. This process is called ideation. Mastering the art of ideation is crucial when it comes to designing viable new business models.

Traditionally, most industries were characterized by a dominant business model. This has changed radically. Today we enjoy many more choices when designing new business models. Today, different business models compete in the same markets, and boundaries between industries are blurring—or disappearing altogether.

One challenge we face when trying to create new business model options is ignoring the status quo and suspending concerns over operational issues so that we can generate truly new ideas.

Business model innovation is not about looking back, because the past indicates little about what is possible in terms of future business models. Business model innovation is not about looking to competitors, since business model innovation is not about copying or benchmarking, but about creating new mechanisms to create value and derive revenues. Rather, business model innovation is about challenging orthodoxies to design original models that meet unsatisfied, new, or hidden customer needs.

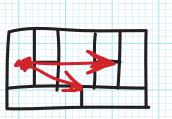
To come up with new or better options, you must dream up a grab bag of ideas before narrowing them down to a short list of conceivable options. Thus, ideation has two main phases: idea generation, where quantity matters, and synthesis, in which ideas are discussed, combined, and narrowed down to a small number of viable options. Options do not necessarily have to represent disruptive business models. They may be innovations that expand the boundaries of your current business model to improve competitiveness.

You can generate ideas for innovative business models from several different starting points. We will look at two: epicenters of business model innovation using the Business Model Canvas, and "what if" questions.



### **Epicenters of Business Model Innovation**

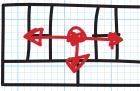
Ideas for business model innovation can come from anywhere, and each of the nine business model building blocks can be a starting point. Transformative business model innovations affect multiple building blocks. We can distinguish four epicenters of business model innovation: resource-driven, offer-driven, customer-driven, and finance-driven. Each of the four epicenters can serve as the starting point for a major business model change, and each can have a powerful impact on the other eight building blocks. Sometimes, business model innovation can emerge from several epicenters. Also, change often originates in areas identified through a SWOT analysis: an investigation of a business model's strengths, weaknesses, opportunities, and threats (see p. 216).



#### **Resource-Driven**

RESOURCE-DRIVEN INNOVATIONS ORIGINATE FROM AN ORGANIZATION'S EXISTING INFRASTRUCTURE OR PARTNERSHIPS TO EXPAND OR TRANSFORM THE BUSINESS MODEL.

Example: Amazon Web Services was built on top of Amazon.com's retail infrastructure to offer server capacity and data storage space to other companies. Example: When Cemex, a Mexican cement maker, promised to deliver poured cement to job sites within four hours rather than the 48 hour industry standard, it had to transform its business model. This innovation helped change Cemex from a regional Mexican player into the world's second largest cement producer.



#### **OFFER-DRIVEN**

OFFER-DRIVEN INNOVATIONS CREATE NEW VALUE PROPOSITIONS THAT AFFECT OTHER BUSINESS MODEL BUILDING BLOCKS.

DESIGN

**IDEATION** 



#### CUSTOMER-DRIVEN

CUSTOMER-DRIVEN INNOVATIONS ARE BASED ON CUSTOMER NEEDS, FACILITATED ACCESS, OR INCREASED CONVENIENCE. LIKE ALL INNOVATIONS EMERGING FROM A SINGLE EPICENTER, THEY AFFECT OTHER BUSINESS MODEL BUILDING BLOCKS.

#### FINANCE-DRIVEN

INNOVATIONS DRIVEN BY NEW REVENUE STREAMS, PRICING MECHANISMS, OR REDUCED COST STRUCTURES THAT AFFECT OTHER BUSINESS MODEL BUILDING BLOCKS.

#### MULTIPLE-EPICENTER DRIVEN

INNOVATIONS DRIVEN BY MULTIPLE EPICENTERS CAN HAVE SIGNIFICANT IMPACT ON SEVERAL OTHER BUILDING BLOCKS.

Example: 23andMe brought personalized DNA testing to individual clients—an offer previously available exclusively to health professionals and researchers, This had substantial implications for both the Value Proposition and the delivery of test results, which 23andMe accomplishes through mass-customized Web profiles.

Example: When Xerox invented the Xerox 914 in 1958one of the first plain paper copiers—it was priced too high for the market. So Xerox developed a new business model. It leased the machines at \$95 per month, including 2,000 free copies, plus five cents per additional copy. Clients acquired the new machines and started making thousands of copies each month.

Example: Hilti, the global manufacturer of professional construction tools, moved away from selling tools outright and toward renting sets of tools to customers. This was a substantial change in Hitli's Value Proposition, but also in its Revenue Streams, which shifted from onetime product revenues to recurring service revenues.

139

IDEATION

### The Power of "What If" Questions

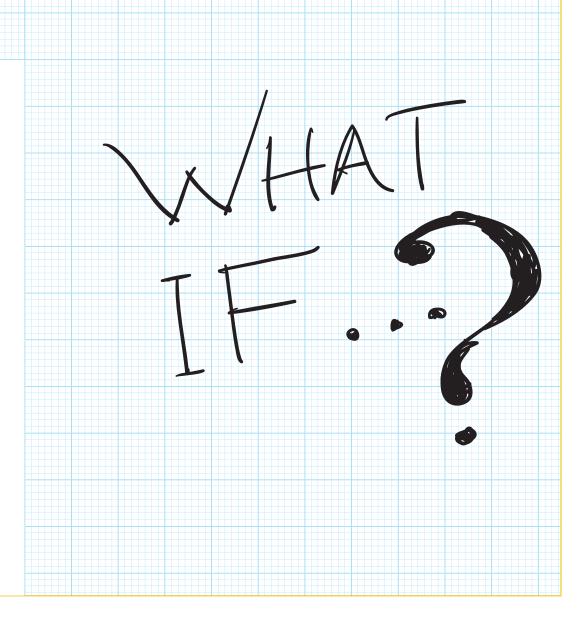
IDEATION

DESIGN

We often have trouble conceiving innovative business models because we are held back in our thinking by the status quo. The status quo stifles imagination. One way to overcome this problem is to challenge conventional 140 assumptions with "what if" questions. With the right business model ingredients, what we think of as impossible might be just doable. "What if" questions help us break free of constraints imposed by current models. They should provoke us and challenge our thinking. They should disturb us as intriguing, difficult-to-execute propositions.

Managers of a daily newspaper might ask themselves: What if we stopped our print edition and went to entirely digital distribution, through Amazon's Kindle e-book reader or through the Web? This would allow the newspaper to drastically reduce production and logistics costs, but would require making up lost print advertising revenues and transitioning readers to digital Channels.

"What if" questions are merely starting points. They challenge us to discover the business model that could make their suppositions work. Some "what if" questions may remain unanswered because they are too provocative. Some may simply need the right business model to become reality.



... furniture buyers picked up components in flat pack form from a large warehouse and assembled the products themselves in their homes? What is common practice today was unthinkable until IKEA introduced the concept in the 1960s.

... airlines didn't buy engines for their airplanes, but paid for every hour an engine runs? That is how Rolls-Royce transformed itself from a money-losing British manufacturer into a service firm that today is the world's second biggest provider of large jet engines.

... voice calls were free worldwide? In 2003 Skype launched a service that allowed free voice calling via the Internet. After five years Skype had acquired 400 million registered users who collectively had made 100 billion free calls.

... car manufacturers didn't sell cars, but provided mobility services? In 2008 Daimler launched car2go, an experimental business in the German city of Ulm. Car2go's fleet of vehicles allows users to pick up and drop off cars anywhere in the city, paying by-the-minute fees for mobility services.

... individuals could lend money to each other rather than borrowing from banks? In 2005, U.K.-based Zopa launched a peer-to-peer lending platform on the Internet.

... every villager in Bangladesh had access to a telephone? That is what Grameenphone set out to achieve under a partnership with micro-finance institution Grameen Bank. At the time, Bangladesh still had the world's lowest tele-density. Today Grameenphone is Bangladesh's largest taxpayer.

### The Ideation Process

to producing innovative business model options:

142 1. TEAM COMPOSITION

Key question: Is our team sufficiently diverse to generate fresh business model ideas?

The ideation process can take several forms. Here we outline a general approach

Assembling the right team is essential to generating effective new business model ideas. Members should be diverse in terms of seniority, age, experience level, business unit represented, customer knowledge, and professional expertise.

#### 2. IMMERSION

#### Key question: Which elements must we study before generating business model ideas?

Ideally the team should go through an immersion phase. which could include general research, studying customers or prospects, scrutinizing new technologies, or assessing existing business models. Immersion could last several weeks or could be as short as a couple of workshop exercises (e.g. the Empathy Map).

#### 3. EXPANDING

#### Key question: What innovations can we imagine for each business model building block?

During this phase the team expands the range of possible solutions, aiming to generate as many ideas as possible. Each of the nine business model building blocks can serve as a starting point. The goal of this phase is quantity, not quality. Enforcing brainstorming rules will keep people focused on generating ideas rather than on critiquing too early in the process (see p. 144).

#### **4. CRITERIA SELECTION**

#### Key question: What are the most important criteria for prioritizing our business model ideas?

After expanding the range of possible solutions, the team should define criteria for reducing the number of ideas to a manageable few. The criteria will be specific to the context of your business, but could include things such as estimated implementation time, revenue potential, possible customer resistance, and impact on competitive advantage.

#### 5. "PROTOTYPING"

#### Key question: What does the complete business model for each shortlisted idea look like?

With criteria defined, the team should be able to reduce the number of ideas to a prioritized shortlist of three to five potential business model innovations. Use the Business Model Canvas to sketch out and discuss each idea as a business model prototype (see p. 160).

### Assemble a Diverse Team

The task of generating new ideas should not be left exclusively to those typically considered to be "creative types." Ideation is a team exercise. In fact, by its very nature business model innovation requires the participation of people from across the entire organization. Business model innovation is about seeking to create value by exploring new business model building blocks and forging innovative links between blocks. This can involve all nine blocks of the canvas, whether Distribution Channels, Revenue Streams, or Key Resources. Thus it requires input and ideas from people representing multiple areas.

That's why assembling the right task force is a critical prerequisite for generating new business model ideas. Thinking about business model innovation should not be confined to the R&D unit or the strategic planning office. Business model innovation teams should have a diverse membership. The diversity will help you generate, discuss, and select new ideas. Consider adding outsiders, or even children. Diversity works. But make sure to teach people how to listen actively, and consider engaging a neutral facilitator for key meetings. A diverse business model innovation team has members... A diverse business model innovation team has members... from various business units of different ages with different areas of expertise of differing levels of seniority with a mixture of experiences from different cultural backgrounds 143

DESIGN

## Brainstorming Rules

Successful brainstorming requires following a set of rules. Enforcing these rules will help you maximize the number of useful ideas generated.

#### Stay focused

Start with a well-honed statement of the problem at hand. Ideally, this should be articulated around a customer need. Don't let the discussion stray too far; always bring it back to the problem statement.

#### **Enforce rules**

Clarify the brainstorming rules upfront and enforce them. The most important rules are "defer judgment," "one conversation at a time," "go for quantity," "be visual," and "encourage wild ideas." Facilitators should enforce the rules.

#### **Think visually**

Write ideas down or sketch them out on a surface everyone can see. A good way to collect ideas is to jot them down on Post-it<sup>™</sup> notes and stick these to a wall. This allows you to move ideas around and regroup them.

#### Prepare

Prepare for brainstorming with some sort of immersion experience related to the problem at hand. This could be a field trip, discussions with customers, or any other means of immersing the team in issues related to your problem statement.

> Adapted from an interview with Tom Kelley of IDEO in *Fast Company* magazine: "Seven Secrets to Good Brainstorming"

### Warm-Up: The Silly Cow Exercise

To get your team's creative juices flowing, it can be helpful to start an ideation session with a warm-up such as the Silly Cow exercise. Here's how it works: Instruct participants to sketch out three different business models using a cow. Ask them to first define some characteristics of a cow (produces milk, eats all day, makes a mooing sound, etc.). Tell them to use those characteristics to come up with an innovative business model based on a cow. Give them three minutes. ACTIVITY

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ABIRGE 2.0

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Keep in mind that this exercise can backfire, as it is indeed quite silly. But it has been tested with senior executives, accountants, risk managers, and entrepreneurs, and usually is a great success. The goal is to take people out of their day-to-day business routines and show them how readily they can generate ideas by disconnecting from orthodoxies and letting their creativity flow.

#### NOMINE

## Technique\_No. 3 Visual Thinking

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#### October, 2006

The meeting room walls are plastered with large posters on which a group of 14 people are assiduously sketching drawings and pasting Post-it<sup>™</sup> notes. Though the scene almost has the atmosphere of an art class, it's taking place at the headquarters of Hewlett-Packard, the technology products and services giant ...

... The 14 participants hail from throughout HP, but all are involved in information management. They've gathered here for a one-day workshop to literally draw a picture of how a global enterprise should manage information flows.

Dave Gray, founder and chairman of consultancy XPLANE, is facilitating the meeting. XPLANE uses visual thinking tools to help clients clarify problems involving everything from corporate strategy to operational implementations. Together with an XPLANE artist, Dave helps the 14 HP specialists gain a better understanding of the big picture of information sharing in a global enterprise. The group uses the posted sketches to discuss information sharing, to identify relationships between elements, to fill in missing pieces, and to develop a joint understanding of multiple issues.

With a knowing smile, Dave talks about a common misconception: that one shouldn't draw something until one understands it. On the contrary, he explains, sketches—however
rudimentary or amateurish—help people better describe, discuss,
and understand issues, particularly those of a complex nature.
For the 14 Hewlett-Packard collaborators, XPLANE's visualization
approach has worked beautifully. They gathered as 14 specialists
with deeply individual understandings, but parted with a simple
one-page image of how a global enterprise should manage information. XPLANE's client roster, which reads like a who's who of
the world's most successful companies, testifies to the growing
number of organizations that understand the value of this type of
visual thinking.

### The Value of Visual Thinking

Visual thinking is indispensable to working with business models. By visual thinking we mean using visual tools such as pictures, sketches, diagrams, and Post-it<sup>™</sup> notes to construct and discuss meaning. Because business models are complex concepts composed of various building blocks and their interrelationships, it is difficult to truly understand a model without sketching it out.

A business model really is a system where one element influences the other; it only makes sense as a whole. Capturing that big picture without visualizing it is difficult. In fact, by visually depicting a business model, one turns its tacit assumptions into explicit information. This makes the model tangible and allows for clearer discussions and changes. Visual techniques give "life" to a business model and facilitate co-creation.

Sketching a model transforms it into a persistent object and a conceptual anchor to which discussions can always return. This is critical because it shifts discourse from the abstract toward the concrete and greatly improves the quality of debate. Typically, if you aim to improve an existing business model, visually depicting it will unearth logical gaps and facilitate their discussion. Similarly,

if you are designing a completely new business model, drawing it will allow you to discuss different options easily by adding, removing, or moving pictures around.

Businesses already make frequent use of visual techniques such as diagrams and charts. Such elements are used extensively to clarify messages within reports and plans. But visual techniques are used less frequently to discuss, explore, and define business issues. When was the last time you attended a meeting where executives were drawing on the walls? Yet it is in the strategic process where visual thinking can add tremendous value. Visual thinking enhances strategic inquiries by making the abstract concrete, by illuminating relationships between elements, and by simplifying the complex. In this section we describe how visual thinking can help you throughout the process of defining, discussing, and changing business models.

We refer to two techniques: the use of Post-it<sup>™</sup> notes and the use of sketches in combination with the Business Model Canvas. We also discuss four processes improved by visual thinking: understanding, dialogue, exploration, and communication.

DES



DESIGN

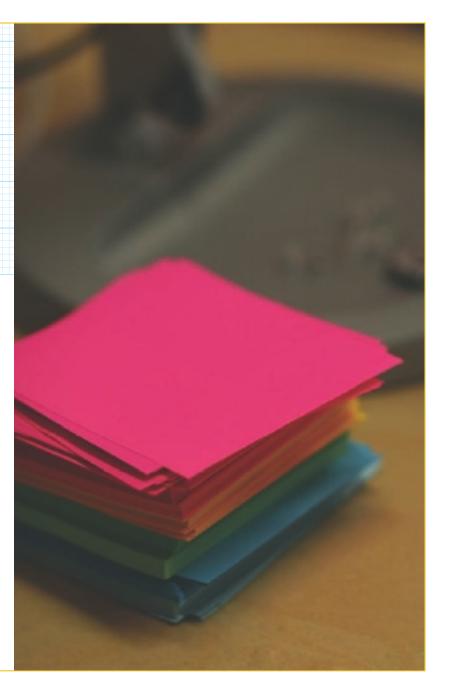
### Visualizing with Post-it<sup>™</sup> Notes

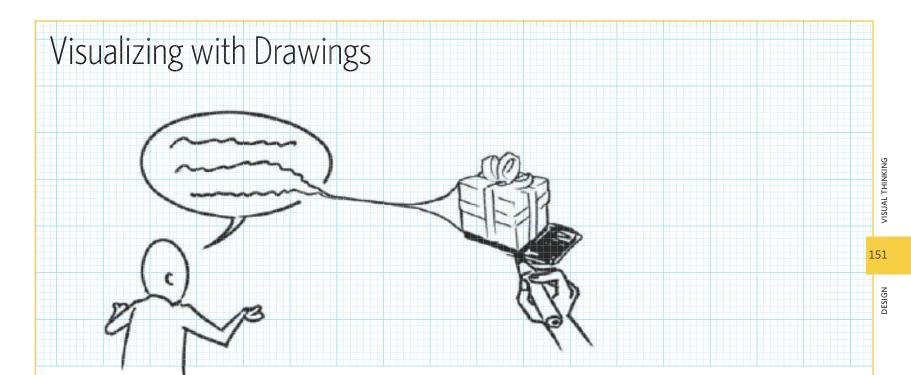
DESIGN

A set of Post-it<sup>™</sup> notes is an indispensable tool that everyone reflecting on business models should keep handy. Post-it<sup>™</sup> notes function like idea containers that can be added, removed, and easily shifted between business model building blocks. This is important because during business model discussions, people frequently do not immediately agree on which elements should appear in a Business Model Canvas or where they should be placed. During exploratory discussions, some elements might be removed and replaced multiple times to explore new ideas.

Here are three simple guidelines: (1) use thick marking pens, (2) write only one element per Post-it<sup>™</sup> note, and (3) write only a few words per note to capture the essential point. Using thick markers is more than a detail: it prevents you from putting too much information on a single Post-it<sup>™</sup>, and makes for easier reading and overview.

Keep in mind, too, that the discussion leading to the final business model picture created by all the Post-it<sup>™</sup> notes is just as important as the outcome. Discussion around which notes to place on or remove from the Canvas and debate over how one element influences others give participants a deep understanding of the business model and its dynamics. Consequently, a Post-it<sup>™</sup> note becomes more than just a piece of sticky paper representing a business model building block; it becomes a vector for strategic discussion.





Drawings can be even more powerful than Post-it<sup>™</sup> notes because people react more strongly to images than to words. Pictures deliver messages instantly. Simple drawings can express ideas that otherwise require many words.

It's easier than we think. A stick figure with a smiling face conveys emotion. A big bag of money and a small bag of money convey proportions. The problem is that most of us think we can't draw. We're embarrassed lest our sketches appear unsophisticated or childish. The truth is that even crude drawings, sincerely rendered, make things tangible and understandable. People interpret simple stick figures far more easily than abstract concepts expressed in text. Sketches and drawings can make a difference in several ways. The most obvious one is explaining and communicating your business model based on simple drawings, something we explain how to do at the end of this chapter. Another is sketching out a typical client and her environment to illustrate one of your Customer Segments. This will trigger a more concrete, intensive discussion compared to outlining that person's characteristics in writing. Finally, sketching out a Customer Segment's needs and jobs-to-get-done is a powerful way to exploit visual techniques.

Such drawings will likely trigger constructive discussion from which new business model ideas will emerge. Now let's examine four processes improved by visual thinking.

# Understand the Essence VISUAL THINKING 20 152 DESIGN

#### VISUAL GRAMMAR

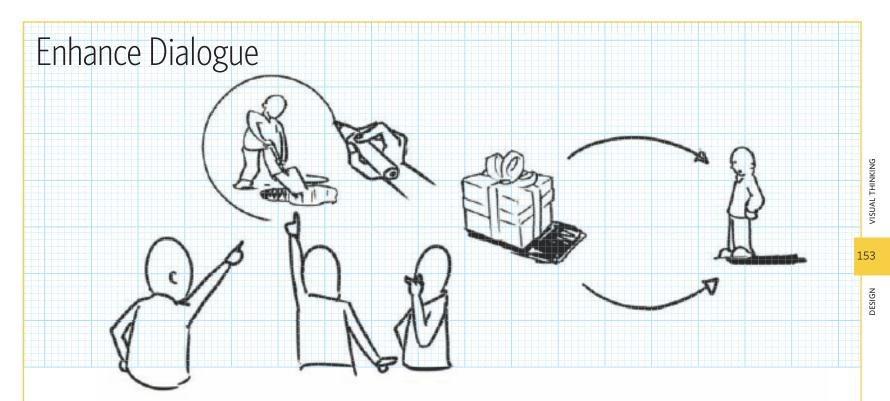
The Business Model Canvas poster is a conceptual map that functions as a visual language with corresponding grammar. It tells you which pieces of information to insert in the model, and where. It provides a visual and text guide to all the information needed to sketch out a business model.

#### CAPTURING THE BIG PICTURE

By sketching out all the elements of the Canvas you immediately give viewers the big picture of a business model. A sketch provides just the right amount of information to allow a viewer to grasp the idea, yet not too much detail to distract him. The Business Model Canvas visually simplifies the reality of an enterprise with all its processes, structures, and systems. In a business model like Rolls-Royce's, where jet engine units are leased by the hour rather than sold, it is the big picture, rather than the individual pieces, that is compelling.

#### SEEING RELATIONSHIPS

Understanding a business model requires not only knowing the compositional elements, but also grasping the interdependencies between elements. This is easier to express visually than through words. This is even more true when several elements and relationships are involved. In describing the business model of a low-cost airline, for example, drawings can effectively show why a homogenous fleet of airplanes is crucial to keeping maintenance and training costs low.



#### **COLLECTIVE REFERENCE POINT**

We all hold tacit assumptions in our heads, and posting an image that turns those implicit assumptions into explicit information is a powerful way to improve dialogue. It makes a business model into a tangible and persistent object, and provides a reference point to which participants can always return. Given that people can hold only a limited number of ideas in short-term memory, visually portraying business models is essential to good discussion. Even the simplest models are composed of several building blocks and interrelationships.

#### SHARED LANGUAGE

The Business Model Canvas is a shared visual language. It provides not only a reference point, but also a vocabulary and grammar that helps people better understand each other. Once people are familiar with the Canvas, it becomes a powerful enabler of focused discussion about business model elements and how they fit together. This is particularly valuable in organizations with matrix reporting structures where individuals in a working group or task force may know little about each other's functional areas. A shared visual business model language powerfully supports idea exchange and increases team cohesiveness.

#### JOINT UNDERSTANDING

Visualizing business models as a group is the most effective way to achieve shared understanding. People from different parts of an organization may deeply understand parts of a business model but lack a solid grasp of the whole. When experts jointly draw a business model, everybody involved gains an understanding of the individual components and develops a shared understanding of the relationships between these components. DESIGN

#### **IDEA TRIGGER**

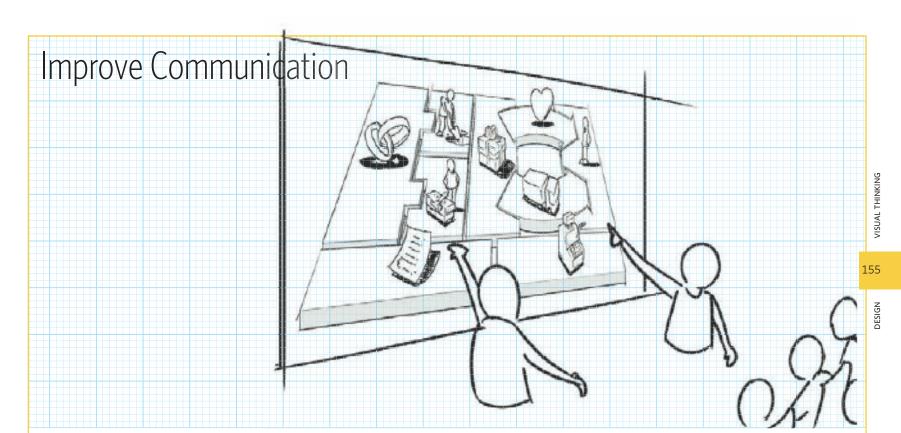
Explore Ideas

The Business Model Canvas is a bit like an artist's canvas. When an artist starts painting, he often has a vague idea—not an exact image—in mind. Rather than starting in one corner of a canvas and executing sequentially, he starts wherever his muse dictates and builds the painting organically. As Pablo Picasso said, "I begin with an idea and then it becomes something else." Picasso saw ideas as nothing more than points of departure. He knew they would evolve into something new during their explication.

Crafting a business model is no different. Ideas placed in the Canvas trigger new ones. The Canvas becomes a tool for facilitating the idea dialogue—for individuals sketching out their ideas and for groups developing ideas together.

#### PLAY

A visual business model also provides opportunity for play. With the elements of a model visible on a wall in the form of individual Post-it<sup>™</sup> notes, you can start discussing what happens when you remove certain elements or insert new ones. For example, what would happen to your business model if you eliminated the least profitable Customer Segment? Could you do that? Or do you need the unprofitable segment to attract profitable customers? Would eliminating unprofitable customers enable you to reduce resources and costs and improve services to profitable customers? A visual model helps you think through the systemic impact of modifying one element or another.



#### **CREATE COMPANY-WIDE UNDERSTANDING**

When it comes to communicating a business model and its most important elements, a picture is truly worth a thousand words. Everybody in an organization needs to understand its business model, because everybody can potentially contribute to its improvement. At the very least, employees need a shared understanding of the model so they can move in the same strategic direction. Visual depiction is the best way to create such a shared understanding.

#### SELLING INTERNALLY

In organizations, ideas and plans often must be "sold" internally at various levels to garner support or obtain funding. A powerful visual story reinforcing your pitch can increase your chances of winning understanding and backing for your idea. Using images rather than just words to tell the story makes your case even stronger, because people identify immediately with images. Good imagery readily communicates your organization's current status, what needs doing, how it can be done, and what the future might look like.

#### SELLING EXTERNALLY

Just as employees must "sell" ideas internally, entrepreneurs with plans based on new business models must sell them to other parties, such as investors or potential collaborators. Strong visuals substantially increase chances of success.

### Different Types of Visualization for Different Needs

VISUAL THINKING

Visual representations of business models call for different levels of detail depending on one's goal. The sketch of Skype's business model on the right drives home the 156 key differences between its business model and that of a traditional telecommunications carrier. The goal is to point out the striking differences between Skype's business model building blocks and those of a traditional carrier, even though both offer similar services.

The right-hand page sketch depicting the young Dutch company Sellaband has a different goal and is therefore more detailed. It aims to paint the big picture of a completely new music industry business model: that of a platform enabling crowd-funding of independent musical artists. Sellaband uses the drawing to explain its innovative business model to investors, partners, and employees. Sellaband's combination of images and text has proven to be far more effective than words alone at accomplishing this task.

 Skype's Key Resources and Activities resemble those of a software company, because its service is based on software that uses the Internet to carry calls. Given its 400 million+ user base, the company enjoys very low infrastructure costs. In fact, it does not own or operate a telecommunications network at all.

 From day one, Skype was a alobal voice carrier because its service is delivered through the Internet, unrestricted by traditional telecommunications networks. Its business is highly scalable.

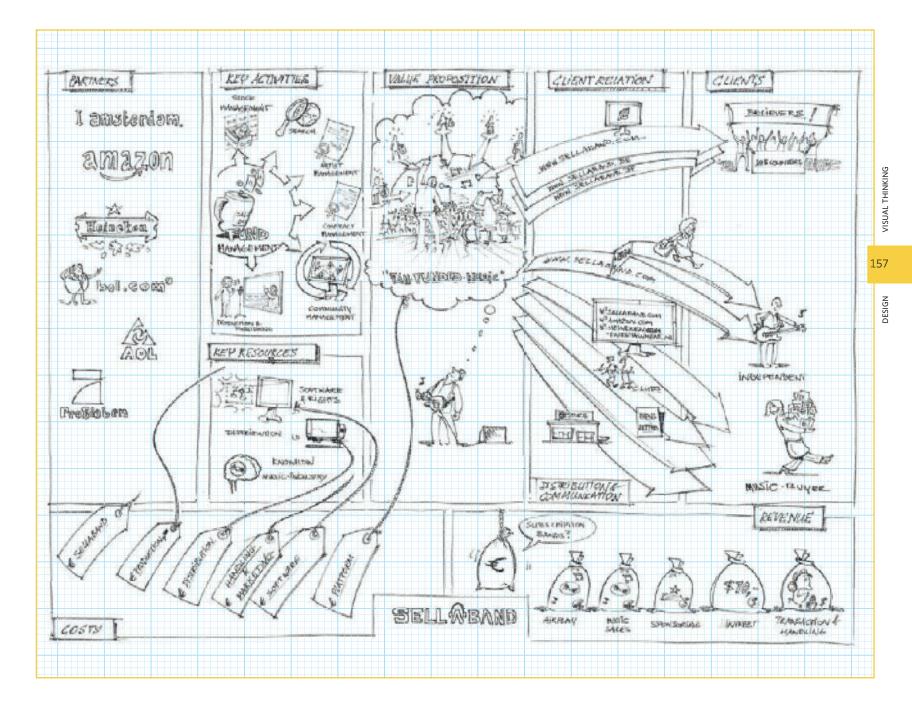


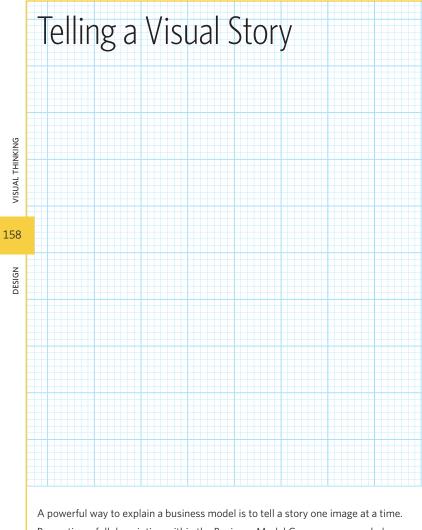
COST

STRUCTURE

 Though it provides a telecommunications service, Skype's business model features the economics of a software company rather than a telecommunications network operator.

 Ninety percent of Skype users never pay. Only an estimated 10 percent of users are paying customers. Unlike traditional telecommunication carriers, Skype's Channels and Relationships are highly automated. They require almost no human intervention and are therefore relatively inexpensive.





A powerful way to explain a business model is to tell a story one image at a time. Presenting a full description within the Business Model Canvas can overwhelm an audience. It's better to introduce the model piece by piece. You could do this by drawing one piece after another, or by using PowerPoint. An appealing alternative is to pre-draw all the elements of a business model on Post-it<sup>™</sup> notes, then put them up one after another as you explain the model. It allows the audience to follow the build-up of the model, and the visuals complement your explanation.



### Visual Storytelling Activity



MAP YOUR BUSINESS MODEL

· Begin by mapping out a simple, text-

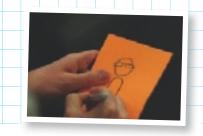
Write each business model element

on an individual Post-it<sup>™</sup> note.

• Mapping can be done individually

or with a group.

based version of your business model.



#### DRAW EACH BUSINESS MODEL ELEMENT

- One at a time, take each Post-it<sup>™</sup> note and replace it with a drawing representing the content.
- Keep the images simple: omit detail.
- Drawing quality is unimportant as long as the message is conveyed.

### 3

#### DEFINE THE STORYLINE

- Decide which Post-it<sup>™</sup> notes you will put up first when telling your story.
- Try different paths. You might start with Customer Segments, or maybe the Value Proposition.
- Basically, any starting point is possible if it effectively supports your story.

#### 4

#### TELL THE STORY

 Tell your business model story one drawn Post-it<sup>™</sup> picture at a time.

Note: Depending on the context and your personal preferences, you may want to use PowerPoint or Keynote. Slideware, though, is unlikely to produce the positive surprise effect of the Post-it™ approach.



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DESIGN

Technique\_No. 4

# Prototyping

With a look bordering on panic, Weatherhead School of Management Professor Richard Boland Jr. watched as Matt Fineout, an architect with Gehry & Associates, casually tore up plans for a new school building ...

... Boland and Fineout had been struggling for two full days to remove some 5,500 square feet from the floor plan designed by star architect Frank Gehry, while leaving room needed for meeting spaces and office equipment.

At the end of the marathon planning session, Boland had breathed a sigh of relief. "It's finally done," he thought. But at that very moment, Fineout rose from his chair, ripped the document apart, and tossed the scraps into a trash bin, not bothering to retain a single trace of the pair's hard labor. He responded to Professor Boland's shocked expression with a gentle shrug and a soft remark. "We've shown we *can* do it; now we need to think of *how* we want to do it."

Looking back, Boland describes the incident as an extreme example of the relentless approach to inquiry he experienced while working with the Gehry group on the new Weatherhead building. During the design phase, Gehry and his team made hundreds of models with different materials and of varying sizes, simply to explore new directions. Boland explains that the goal of this prototyping activity was far more than the mere testing or proving of ideas. It was a methodology for exploring different possibilities until a truly good one emerged. He points out that prototyping, as practiced by the Gehry group, is a central part of an inquiry process that helps participants gain a better sense of what is missing in the initial understanding of a situation. This leads to completely new possibilities, among which the right one can be identified. For Professor Boland, the experience with Gehry & Associates was transformative. He now understands how design techniques, including prototyping, contribute to finding better solutions for the entire spectrum of business problems. Together with fellow professor Fred Collopy and other colleagues, Boland is now spearheading the concept of Manage by Designing: the integration of design thinking, skills, and experiences into Weatherhead's MBA curriculum. Here, students use tools of design to sketch alternatives, follow through on problem situations, transcend traditional boundaries, and prototype ideas.

### Prototyping's Value

Prototyping is a powerful tool for developing new, innovative business models. Like visual thinking, it makes abstract concepts tangible and facilitates the exploration of new ideas. Prototyping comes from the design and engineering disciplines, where it is widely used for product design, architecture, and interaction design. It is less common in business management because of the less tangible nature of organizational behavior and strategy. While prototyping has long played a role at the intersection of business and design, for example in manufactured product design, in recent years it has gained traction in areas such as process design, service design, and even organization and strategy design. Here we show how prototyping can make an important contribution to business model design.

Although they use the same term, product designers, architects, and engineers all have different understandings of what constitutes a "prototype." We see prototypes representing potential future business models: as tools that serve the purpose of discussion, inquiry, or proof of concept. A business model prototype can take the form of a simple sketch, a fully thought-through concept described with the Business Model Canvas, or a spreadsheet that simulates the financial workings of a new business. It is important to understand that a business model prototype is not necessarily a rough picture of what the actual business model will actually look like. Rather, a prototype is a thinking tool that helps us explore different directions in which we could take our business model. What does it mean for the model if we add another client segment? What are the consequences of removing a costly resource? What if we gave away something for free and replaced that Revenue Stream with something more innovative? Making and manipulating a business model prototype forces us to address issues of structure, relationship, and logic in ways unavailable through mere thought and discussion. To truly understand the pros and cons of different possibilities, and to further our inquiry, we need to construct multiple prototypes of our business model at different levels of refinement. Interaction with prototypes produces ideas far more readily than discussion. Prototype business models may be thought-provoking-even a bit crazy—and thus help push our thinking. When this happens, they become signposts pointing us in as-yet unimagined directions rather than serving as mere representations of to-be-implemented business models. "Inquiry" should signify a relentless search for the best solution. Only after deep inquiry can we effectively pick a prototype to refine and execute-after our design has matured.

Businesspeople are likely to display one of two reactions to this process of business model inquiry. Some might say, "Well, that is a nice idea, if we only had the time to explore different options." Others might say that a market research study would be an equally good way to come up with new business models. Both reactions are based on dangerous preconceptions.

The first supposes that "business as usual" or incremental improvements are sufficient to survive in today's competitive environment. We believe this path leads to mediocrity. Businesses that fail to take the time to develop and prototype new, groundbreaking business model ideas risk being sidelined or overtaken by more dynamic competitors—or by insurgent challengers appearing, seemingly, from nowhere.

The second reaction assumes that data is the most important consideration when designing new strategic options. It is not. Market research is a single input in the long and laborious process of prototyping powerful new business models with the potential to outperform competitors or develop entirely new markets.

Where do you want to be? At the top of the game, because you've taken the time to prototype powerful new business models? Or on the sidelines, because you were too busy sustaining your existing model? We're convinced that new, game-changing business models emerge from deep and relentless inquiry.



### Design Attitude

"If you freeze an idea too quickly, you fall in love with it. If you refine it too quickly, you become attached to it and it becomes very hard to keep exploring, to keep looking for better. The crudeness of the early models in particular is very deliberate."

#### Jim Glymph, Gehry Partners

As businesspeople, when we see a prototype we tend to focus on its physical form or its representation, viewing it as something that models, or encapsulates the essence of, what we eventually intend to do. We perceive a prototype as something that simply needs to be refined. In the design profession, prototypes do play a role in pre-implementation visualization and testing. But they also play another very important role: that of a tool of inquiry. In this sense they serve as thinking aids for exploring new possibilities. They help us develop a better understanding of what could be.

This same design attitude can be applied to business model innovation. By making a prototype of a business model we can explore particular aspects of an idea: novel Revenue Streams, for example. Participants learn about the elements of a prototype as they construct and discuss it. As previously discussed , business model prototypes vary in terms of scale and level of refinement. We believe it is important to think through a number of basic business model possibilities before developing a business case for a specific model. This spirit of inquiry is called design attitude, because it is so central to the design professions, as Professor Boland discovered. The attributes of design attitude include a willingness to explore crude ideas, rapidly discard them, then take the time to examine multiple possibilities before choosing to refine a few—and accepting uncertainty until a design direction matures. These things don't come naturally to businesspeople, but they are requirements for generating new business models. Design attitude demands changing one's orientation from making decisions to creating options from which to choose.

DESIGN

### Prototypes at Different Scales

In architecture or product design, it is easy to understand what is meant by prototyping at different scales, because we are talking about physical artifacts. Architect Frank Gehry and product designer Philippe Starck construct countless prototypes during a project, ranging from sketches and rough models to elaborate, full-featured prototypes. We can apply the same scale and size variations when prototyping business models, but in a more conceptual way. A business model prototype can be anything from a rough sketch of an idea on a napkin to a detailed Business Model Canvas to a field-testable business model. You may wonder how all of this is any differ-

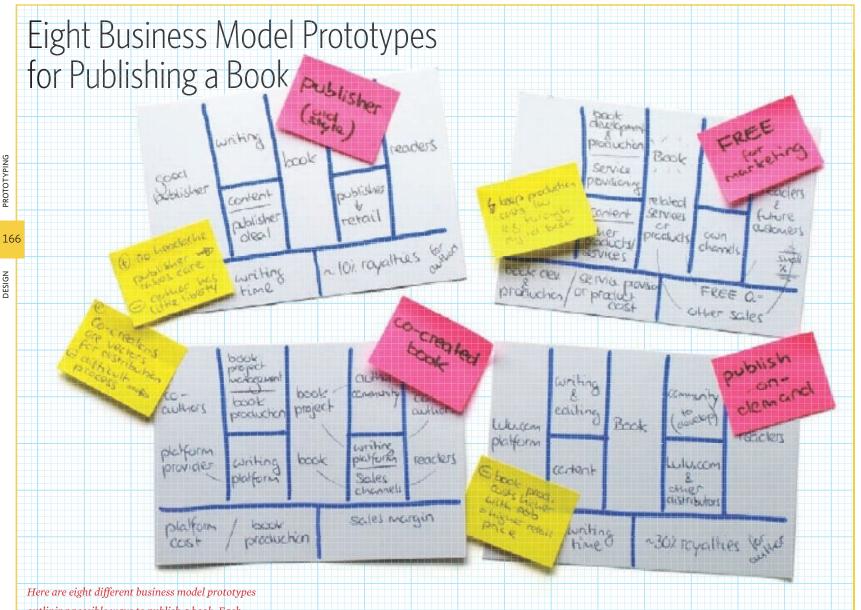
ent from simply sketching out business ideas, something any businessperson or entrepreneur does. Why do we need to call it "prototyping"?

There are two answers. First, the mindset is different. Second, the Business Model Canvas provides structure to facilitate exploration.

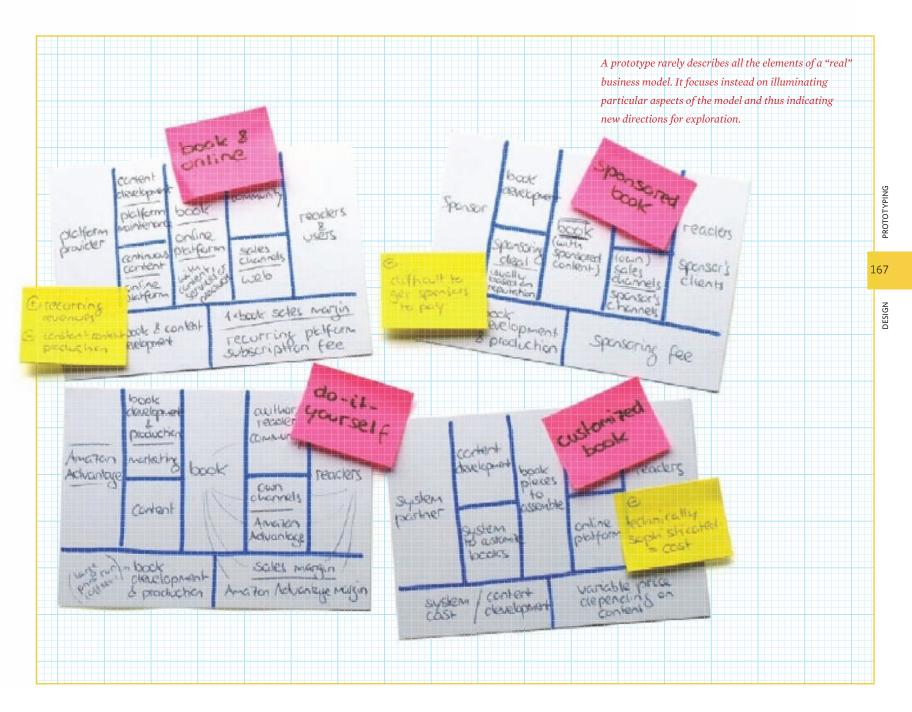
Business model prototyping is about a mindset we call "design attitude." It stands for an uncompromising commitment to discovering new and better business models by sketching out many prototypes —both rough and detailed—representing many strategic options. It's not about outlining only ideas you really plan to implement. It's about exploring new and perhaps absurd, even impossible ideas by adding and removing elements of each prototype. You can experiment with prototypes at different levels.

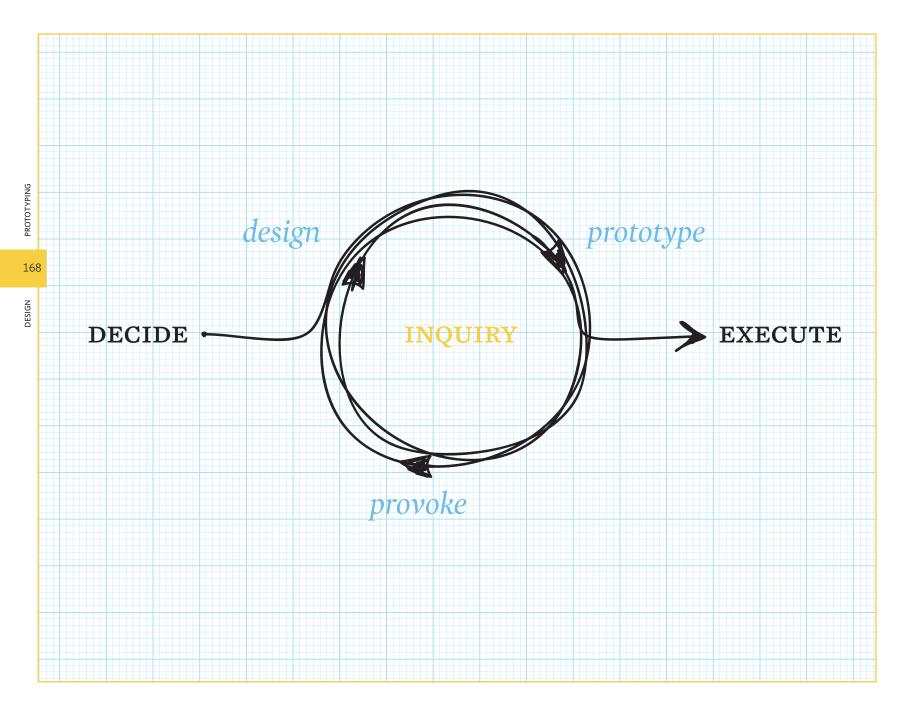
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NAPKIN SKETCH	ELABORATED CANVAS	BUSINESS CASE	FIELD-TEST
OUTLINE AND PITCH A ROUGH IDEA	EXPLORE WHAT IT WOULD TAKE TO MAKE	EXAMINE THE VIABILITY OF THE IDEA	INVESTIGATE CUSTON ACCEPTANCE AND
DRAW A SIMPLE BUSINESS	THE IDEA WORK	TURN THE DETAILED	FEASIBILITY
MODEL CANVAS. DESCRIBE	DEVELOP A MORE ELABO-	CANVAS INTO A SPREAD-	YOU'VE DECIDED ON
THE IDEA USING ONLY KEY	RATE CANVAS TO EXPLORE	SHEET TO ESTIMATE	A POTENTIAL NEW
ELEMENTS.	ALL THE ELEMENTS	YOUR MODEL'S EARNING	BUSINESS MODEL, AN
Outline the idea	NEEDED TO MAKE THE	POTENTIAL.	NOW WANT TO FIELD
Include the Value	BUSINESS MODEL WORK.	Create a full Canvas	TEST SOME ASPECTS.
Proposition	Develop a full Canvas	Include key data	<ul> <li>Prepare a well-justifie</li> </ul>
	Think through your		business case for the
Include the main	business logic	Calculate costs and	new model
Revenue Streams	Estimate the market	revenues	Include prospective
	<ul> <li>Estimate the market</li> <li>potential</li> </ul>	<ul> <li>Estimate profit potential</li> </ul>	or actual customers
	Understand the relationships between Building Blocks	Run financial scenarios	in the field test
		based on different	Test the Value Propos
		assumptions	tion, Channels, pricin
			mechanism, and/or
	Do some basic	┝┼┼┨┤┼┼┼┼┨┼┤┼┼┼┼┨┼┼┤	other elements in the
	fact-checking		marketplace

DESIGN



outlining possible ways to publish a book. Each prototype highlights different elements of its model.





John, 55 Founder & CEO Strategy Consultancy 210 employees

#### 1

#### **OUTLINE BIG ISSUES**

- Think of a typical strategyconsulting client.
- Pick the Customer Segment and industry of your choice.
- Describe five of the biggest issues related to strategy consulting. Refer to the Empathy Map (see p. 131).

#### **GENERATE POSSIBILITIES**

- Take another close look at the five customer issues you selected.
- Generate as many consulting business model ideas as you can.
- Pick the five ideas you think are best (not necessarily the most realistic). Refer to the Ideation Process (see p. 134).

### Wanted: A New Consulting Business Model

John Sutherland needs your help. John is the founder and CEO of a midsized global consulting firm that focuses on advising companies on strategy and organizational issues. He is looking for a fresh, outside perspective on his company because he believes that his business needs to be re-envisioned.

John built his company over two decades and now employs 210 people worldwide. The focus of his consultancy is helping executives develop effective strategies, improve their strategic management, and realign their organizations. He competes directly with McKinsey, Bain, and Roland Berger. One problem he faces is being smaller than his top-tier competitors, yet much larger than the typical niche-focused strategy consultancy. But John is not preoccupied with this issue, since his company is still doing reasonably well. What really troubles him is the strategic consulting profession's poor reputation in the marketplace, and growing client perception that the prevalent hourly and project-based billing model is outdated. Though his own firm's reputation remains good, he has heard from several clients that they think consultants overcharge, underdeliver, and show little genuine commitment to client projects.

#### PROTOTYPE THE BUSINESS MODEL

- Choose the three most diverse ideas of the five generated.
- Develop three conceptual business model prototypes by sketching the elements of each idea on different Business Model Canvases.
- Annotate the pros and cons of each prototype.

Such comments alarm John, because he believes his industry employs some of the brightest minds in business. After much thought, he has concluded that this reputation results from an outdated business model, and he now wants to transform his own company's approach. John aims to make hourly and project billing a thing of the past, but isn't quite sure how to do so.

Help John by providing him with some fresh perspectives on innovative consulting business models. DESIGN

# Storytelling

17 10 -15

It is already far past midnight as Anab Jain watches the latest video footage she shot during the day ...

... She's working on a series of small films for Colebrook Bosson Saunders, a designer and manufacturer of award-winning office furniture accessories. Anab is a storyteller and designer, and the films she is working on are part of a project to help Colebrook Bosson Saunders make sense of how the future of work and the workplace could look. To make this future tangible, she invented three protagonists and projected them into 2012. She gave them new jobs based on research into new and emerging technologies and the impact of demographics and environmental risks on our future lives. The films then show this near future. But rather than describing 2012, Anab takes the role of the storyteller, visiting this future environment and interviewing the three protagonists. They each explain their work and show objects they use. The films are real enough to cause viewers to suspend their disbelief and become intrigued by the different environment. That is exactly what companies that hire Anab Jain, like Microsoft and Nokia, are looking for: stories to make potential futures tangible.

# Storytelling's Value

As parents, we read stories to our kids, sometimes the same ones we heard as children ourselves. As colleagues, we share the latest organizational gossip. And as friends, we tell one another stories of our personal lives. Somehow, it is only in our roles as businesspeople that we avoid using stories. This is unfortunate. When was the last time you heard a story used to introduce and discuss a business issue? Storytelling is an undervalued and underused art in the world of business. Let's examine how storytelling can serve as a powerful tool to make new business models more tangible.

By their very nature, new or innovative business models can be difficult to describe and understand. They challenge the status quo by arranging things in unfamiliar ways. They force listeners to open their minds to new possibilities. Resistance is one likely reaction to an unfamiliar model. Therefore, describing new business models in a way that overcomes resistance is crucial. Just as the Business Model Canvas helps you sketch and analyze a new model, storytelling will help you effectively communicate what it is all about. Good stories engage listeners, so the story is the ideal tool to prepare for an in-depth discussion of a business model and its underlying logic. Storytelling takes advantage of the explanatory power of the Business Model Canvas by suspending disbelief in the unfamiliar.

### **Introducing the New**

New business model ideas can pop up anywhere in an organization. Some ideas may be good, some may be mediocre, and some may be, well, completely useless. But even outstanding business model ideas can have a tough time getting past layers of management and finding their way into an organization's strategy. So effectively pitching your business model ideas to management is crucial. This is where stories can help. Ultimately, managers are interested in numbers and facts, but having the right story can win their attention. A good story is a compelling way to quickly outline a broad idea before getting caught up in the details.

### **Pitching to Investors**

If you are an entrepreneur, chances are you will pitch your idea or business model to investors or other potential shareholders (and you already know that investors stop listening the instant you tell them how you will become the next Google). What investors and other shareholders want to know is: How will you create value for customers? How will you make money doing so? That's the perfect setting for a story. It's the ideal way to introduce your venture and business model before getting into the full business plan.

### **Engaging Employees**

When an organization transitions from an existing business model to a new business model, it must convince collaborators to follow. People need a crystal clear understanding of the new model and what it means for them. In short, the organization needs to powerfully engage its employees. That is where traditional text-based Power-Point presentations usually fail. Introducing a new business model through an engaging story-based presentation (delivered with PowerPoint, drawings, or other techniques) is far more likely to connect with listeners. Capturing people's attention and curiosity paves the way for in-depth presentations and discussions of the unfamiliar.



### Make the New Tangible

Explaining a new, untested business model is like explaining a painting with words alone. But telling a story of how the model creates value is like applying bright colors to canvas. It makes things tangible.

### Clarification

Telling a story that illustrates how your business model solves a customer problem is a clear way to introduce listeners to the idea. Stories give you the "buy-in" needed to subsequently explain your model in detail.

### **Engaging People**

People are moved more by stories than by logic. Ease listeners into the new or unknown by building the logic of your model into a compelling narrative.

# Making Business Models Tangible?

The goal of telling a story is to introduce a new business model in an engaging, tangible way. Keep the story simple and use only one protagonist. Depending on the audience, you can use a different protagonist with a different perspective. Here are two possible starting points.

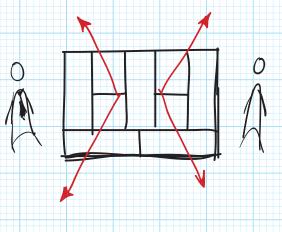
# 174

DESIGN

### **COMPANY** *perspective*

### **Employee Observer**

Explain the business model in the form of a story told from an employee's perspective. Use the employee as the protagonist who demonstrates why the new model makes sense. This may be because the employee frequently observes customer problems that the new business model solves. Or it may be that the new model makes better or different use of resources, activities, or partnerships compared to the old model (e.g. cost reduction, productivity improvement, new revenue sources, etc.). In such a story, the employee embodies the inner workings of an organization and its business model and shows the reasons for transitioning to a new model.



### customer perspective

### **Customer Jobs**

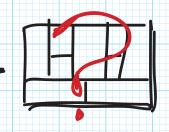
The customer perspective provides a powerful starting point for a story. Cast a customer as the protagonist and tell the tale from her point of view. Show the challenges she faces and which jobs she must get done. Then outline how your organization creates value for her. The story can describe what she receives, how it fits into her life, and what she is willing to pay for. Add some drama and emotion to the story, and describe how your organization is making her life easier. Ideally, weave in how your organization gets these jobs done for the customer, with which resources and through which activities. The biggest challenge with stories told from a customer perspective is keeping them authentic and avoiding a facile or patronizing tone.

# Making the Future Tangible

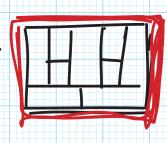
Stories offer a wonderful technique for blurring the lines separating reality and fiction. Thus stories provide a powerful tool for imparting tangibility to different versions of the future. This can help you challenge the status quo or justify adopting a new business model.

CURRENT BUSINESS MODEL

WHAT FUTURE BUSINESS MODEL?



PLANNED FUTURE BUSINESS MODEL



### Provoke Ideas

Sometimes a story's sole purpose is to challenge the organizational status quo. Such a story must bring vividly to life a future competitive environment in which the current business model is severely challenged or even obsolete. Telling a story like this blurs the lines between reality and fiction and catapults listeners into the future. This suspends disbelief, instills a sense of urgency, and opens the audience's eyes to the need to generate new business models. Such a story can be told from either an organization or a customer perspective.

DESIGN

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### Justify Change

Sometimes an organization has strong ideas about how its competitive landscape will evolve. In this context, a story's purpose is to show how a new business model is ideally suited to help an organization compete in the new landscape. Stories temporarily suspend disbelief and help people imagine how the current business model should evolve to remain effective in the future. The story's protagonist could be a customer, an employee, or a top manager.

# **Developing the Story**

The goal of telling a story is to introduce a new business model in an engaging, tangible way. Keep the story simple and use only one protagonist. Depending on the audience, you can use a different protagonist with a different perspective. Here are two possible starting points.

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DESIGN

Ajit, 32, Senior IT Manager, Amazon.com

**Company Perspective** 

Ajit has worked for Amazon.com as an IT manager for the past nine years. He and his colleagues have pulled countless all-nighters over the years to deliver the world-class IT infrastructure that serves and maintains the company's e-commerce business.

Ajit is proud of his work. Along with its fulfillment excellence (1, 6), Amazon.com's powerful IT infrastructure and software development capabilities (2, 3) form the heart of its success at selling everything from books to furniture online (7). Amazon.com (8) delivered over half a billion page impressions to online shoppers (9) in 2008, and spent over a billion dollars for technology and content (5), notably to run its e-commerce operations.

But now Ajit is even more excited, because Amazon. com is traveling far beyond its traditional retail offers. It's in the process of becoming one of the most important infrastructure providers in e-commerce.

With a service called Amazon Simple Storage Systems (Amazon S3) (11) the company is now using its own IT infrastructure to provide online storage to other companies at rock-bottom prices. This means that an online video hosting service can store all customer videos on Amazon's infrastructure rather than buying and maintaining its own servers. Similarly, Amazon Elastic Computing Cloud (Amazon EC2) (11) offers Amazon. com's own computing capability to outside clients.

Ajit knows that outsiders might view such services as distracting Amazon.com from its core retail operations. From the inside, though, the diversification makes perfect sense.

Ajit remembers that four years ago, his group spent much time coordinating the efforts of the network engineering groups, which managed IT infrastructure, and the applications programming groups, which managed Amazon.com's many Web sites. So they decided to build so-called application programming interfaces (APIs) (12) between these two layers, which would allow the latter to easily build on the former. Ajit also remembers exactly when they started to realize that this would be useful to external as well as internal customers. So under Jeff Bezos's leadership, Amazon.com decided to create a new business with the potential to generate a significant revenue source for the company. Amazon.com opened up its infrastructure APIs to provide what it calls Amazon Web Services to outside parties on a fee-for-service basis (14). Since Amazon.com had to design, create, implement, and maintain this infrastructure anyway, offering it to third parties was hardly a distraction.

 1T INFRASTRUC 

 2 DEVELOPMENT &

 MAINTENANCE

 3 IT INFRASTRUC 

 TURE & SOFTWARE

 4 FULFILLMENT

 INFRASTRUCTURE

FULFILLMENT

TECHNOLOGY & CONTENT 6 FULFILLMENT (MARKETING)

# *E-commerce*



### Customer Perspective Randy, 41, Web Entrepreneur

Randy is a passionate Web entrepreneur. After 18 years in the software industry he is now running his second startup, providing enterprise software through the Web. He spent 10 years of his career in large software companies and eight years in start-ups.

Throughout his career, one constant struggle has been getting infrastructure investments right. To him, running servers to provide services was basically a commodity business, but a tricky one due to the enormous costs involved. Tight management was crucial; when you're running a start-up you can't invest millions in a server farm.

But when serving the enterprise market, you'd better have a robust IT infrastructure in place. That's why Randy was intrigued when a friend at Amazon.com told him about the new IT infrastructure services his company was launching. That was the answer to one of Randy's most important in-house jobs: running his services on a world-class IT infrastructure, being able to scale quickly, and all the while paying only for what his company was actually using. That was exactly what Amazon's Web Services (11) promised. With Amazon Simple Storage Systems (Amazon S3), Randy could plug into Amazon's infrastructure through a so-called application programming interface (API)(**12**) and store all the data and applications for his own services on Amazon.com's servers. The same went for Amazon's Elastic Computing Cloud (Amazon EC2). Randy didn't have to build and maintain his own infrastructure to crunch the numbers for his enterprise application service. He could simply plug into Amazon and use its computing power in return for hourly usage fees (**14**).

He immediately understood why the value was coming from the giant e-tailer rather than from IBM or Accenture. Amazon.com was providing and maintaining IT infrastructure (2, 3, 5) to serve its online retail business (7) every day on a global scale. This was its core competency. Taking the step to offer the same infrastructure services to other companies (9) was not much of a stretch. And since Amazon.com was in retail, a business with low margins (11), it had to be extremely costefficient (5), which explained the rock-bottom prices of its new Web Services.

# Techniques

Telling an engaging story can be done in different ways. Each technique has advantages and disadvantages and is better suited for certain situations and audiences. Choose a suitable technique after you understand who your audience will be and the context in which you will present.

**Video Clip** Talk & Image

DESCRIPTION Tell the story of a protagonist and his environment using one or several images

> Group or conference presentation

TIME & COST Low

WHEN?

Medium to high

financial implications

Low

Have people play the roles

**Role Play** 

of a story's protagonists to make the scenario real and tangible Workshops where par-

ticipants present newly developed business model ideas to each other

nist and his environment using text and one or several images

Reports or broadcasts to large audiences

Low to medium

**Comic Strip** 

gible way



Use a series of cartoon

images to tell the story

Reports or broadcasts

to large audiences

of a protagonist in a tan-





Tell the story of a protago-

nist and his environment

using video to blur lines

Broadcast to large audi-

ences or in-house use for

decisions with important

between reality and fiction



**Text & Image** 

Tell the story of a protago-

Low

STORY TELLING

178 DESIGN

# SuperToast, Inc. Business Model

Start practicing your business model storytelling skills with this simple, slightly silly exercise: The business model of SuperToast, Inc. outlined in the Canvas below. You can start anywhere you like: with Customers, the Value Proposition, Key Resources, or elsewhere. Invent your own story. The only constraints are the nine images that outline SuperToast Inc.'s business model. Try telling the story several times, starting from different Building Blocks. Each starting point will give the story a slightly different twist and emphasize different aspects of the model.

By the way, this is a wonderful approach to introducing the Business Model Canvas to the "uninitiated" in a simple and engaging way—with a story.

ΑCTIVITY 179 DESIGN relationships key activities ND partmens Key resources Innnel & CUSTOMERS revenue flows cost structure

Technique\_No. 6 Scenarios

### FEBRUARY, 2000

**Professor Jeffrey** Huang and Muriel Waldvogel seem lost in thought as they ponder scale models of the Swisshouse, the new Swiss consulate facility to be built in Boston, Massachusetts...

... Huang and Waldvogel were brought in to conceive the architectural design of the building, which, rather than issuing visas, will serve as a networking and knowledge exchange hub. The two are studying several scenarios of how people will use the Swisshouse, and have constructed both physical models and screenplay-like texts designed to make tangible the purpose of this unprecedented government facility.

One scenario describes Nicolas, a brain surgeon who has just moved to Boston from Switzerland. He visits the Swisshouse to meet likeminded scientists and other members of the Swiss-American community. A second scenario tells the story of a Professor Smith, who uses the Swisshouse to present his MIT Media Lab research to Boston's Swiss community and to academics at two Swiss universities, using a high-speed Internet connection.

These scenarios, while simple, are the result of intensive research into roles the new type of consulate might play. The stories illustrate the Swiss government's intentions and serve as thinking tools to guide the building's design. Ultimately, the new facility effectively accommodated the applications imagined and fulfilled its objectives.

Today, almost a decade after its conception, the Swisshouse enjoys an outstanding reputation for helping build stronger international ties in greater Boston's science and technology communities. Under the banner of the Swiss Knowledge Network, or swissnex, the Swisshouse has inspired "colleague" facilities in Bangalore, San Francisco, Shanghai, and Singapore. DESIGN

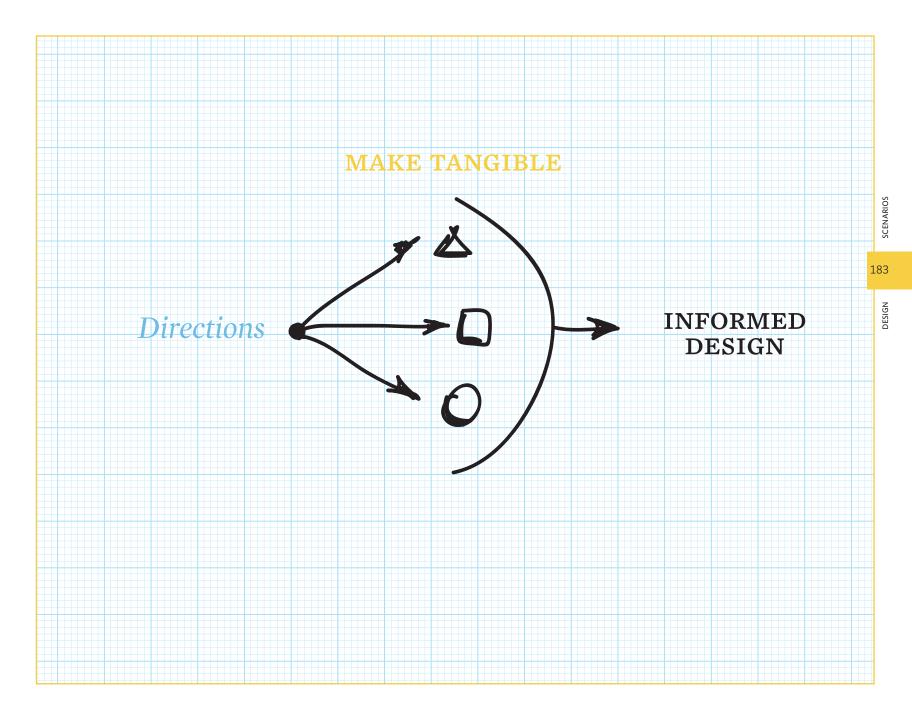
# Scenario-Guided Business Model Design

Scenarios can be useful in guiding the design of new business models or innovating around existing models. Like visual thinking (p. 146), prototyping (p. 160), and storytelling (p. 170), scenarios render the abstract tangible. For our purposes, their primary function is to inform the business model development process by making the design context specific and detailed.

Here we discuss two types of scenarios. The first describes different customer settings: how products or services are used, what kinds of customers use them, or customer concerns, desires, and objectives. Such scenarios build on customer insights (p. 126), but go a step further by incorporating knowledge about customers into a set of distinct, concrete images. By describing a specific situation, a customer scenario makes customer insights tangible.

A second type of scenario describes future environments in which a business model might compete. The goal here is not to predict the future, but rather to imagine possible futures in concrete detail. This exercise helps innovators reflect on the most appropriate business model for each of several future environments. The strategy literature discusses this practice in detail under the topic of "scenario planning." Applying scenario planning techniques to business model innovation forces reflection on how a model might have to evolve under certain conditions. This sharpens understanding of the model, and of potentially necessary adaptations. Most important, it helps us prepare for the future.

scenarios



# Explore Ideas

Customer scenarios guide us during business model design. They help us address issues such as which Channels are most appropriate, which relationships would be best to establish, and which problem solutions customers would be most willing to pay for. Once we've generated scenarios for different Customer Segments,

we can ask ourselves whether a single business model is sufficient to serve them all—or if we need to adapt the model to each segment.

Here are three different scenarios describing location-based services that make use of Global Positioning Systems (GPS). They inform the business model design, but are deliberately left open to allow for specific questions around the Value Proposition, Distribution Channels, Customer Relationships, and Revenue Streams. The scenarios are written from the standpoint of a mobile telephone service operator working to develop innovative new business models.

### THE HOME DELIVERY SERVICE

Tom has always dreamed of running his own small busi-184 ness. He knew it would be difficult, but earning a living by living his passion was definitely worth working more and earning less.

Tom is a film buff whose knowledge of movies is encyclopedic, and that's what customers of his homedelivery DVD movie service appreciate. They can query him about actors, production techniques, and just about anything else film-related before ordering movies for delivery to their doorsteps.

Given the formidable online competition, it's hardly an easy business. But Tom's been able to boost his productivity and improve customer service with a new GPS-based delivery planner acquired from his mobile phone operator. For a small fee he equipped his phone with software that easily integrated with his Customer Relationship management program. This software won back much of Tom's time by helping him better plan delivery routes and avoid traffic. It even integrated with the cell phones used by two aides who help out on weekends when demand for his service peaks. Tom knows his little business will never make him rich, but wouldn't trade his situation for any corporate job.

### THE TOURISTS

Dale and Rose are traveling to Paris for an extended weekend. They are excited because they haven't visited Europe since their honeymoon 25 years ago. The couple organized this mini-escape from everyday work and family life just two weeks before departure, leaving their three kids with parents back in Portland. Lacking time and energy to plan the trip in detail, they decided to "wing it." As a consequence, they were intrigued to read an article in the inflight magazine about a new GPSbased tourist service that uses mobile phones. Dale and Rose, both technology fans, rented the recommended handset upon arrival at Charles de Gaulle airport. Now they're happily strolling around Paris on a customized tour proposed by the compact device—all without having consulted a single traditional tourist guide. They particularly appreciate the built-in audio guide that suggests various story and background information options as they approach particular sites. On the return flight, Dale and Rose muse about relocating to Paris after retiring. Laughing to themselves, they wonder whether the handy device would be enough to help them adapt to French culture.

### THE WINE FARMER

Alexander inherited vineyards from his father, who in turn inherited them from Alexander's grandfather, who emigrated from Switzerland to California to grow wine. Carrying on this family history is hard work, but Alexander enjoys adding small innovations to his family's long wine-growing tradition.

His latest discovery is a simple land management application that now resides on his mobile phone. Though not aimed at vintners, it was designed in such a way that Alexander was easily able to customize it for his own particular needs. The application integrates with his task list, which means he now has a GPS-based to-do list that reminds him when and where to check soil or grape quality. Now he's pondering how to share the application with all of his managers. After all, the tool makes sense only if everyone on the management team updates the soil and grape quality database.

SCENARIOS

### THE TOURISTS

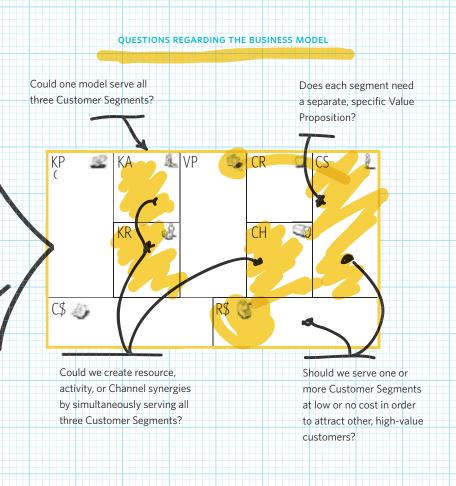
- Should the service be based on a proprietary device or on an application that can be downloaded to customer handsets?
- Could airlines serve as Channel partners to distribute the service/device?
- Which prospective content partners would be interested in being part of the service?
- Which Value Propositions would customers be most willing to pay for?

### THE HOME DELIVERY SERVICE

- Is the value added sufficient to motivate delivery services to pay monthly fees?
- Through which Channels could such Customer Segments most easily be reached?
- With what other devices and/or software would this service need to be integrated?

### THE WINE FARMER

- Is the value added sufficient to motivate a
- landowner to pay a monthly service fee?
- Through which Channels could such Customer Segments most easily be reached?
- With what other devices and/or software would
- this service need to be integrated?



# **Future Scenarios**

DESIGN

The scenario is another thinking tool that helps us reflect on business models of the future. Scenarios kick-start 186 our creativity by providing concrete future contexts for which we can invent appropriate business models. This is usually easier and more productive than free brainstorming about possible future business models. It does require, however, developing several scenarios, which can be costly depending on their depth and realism.

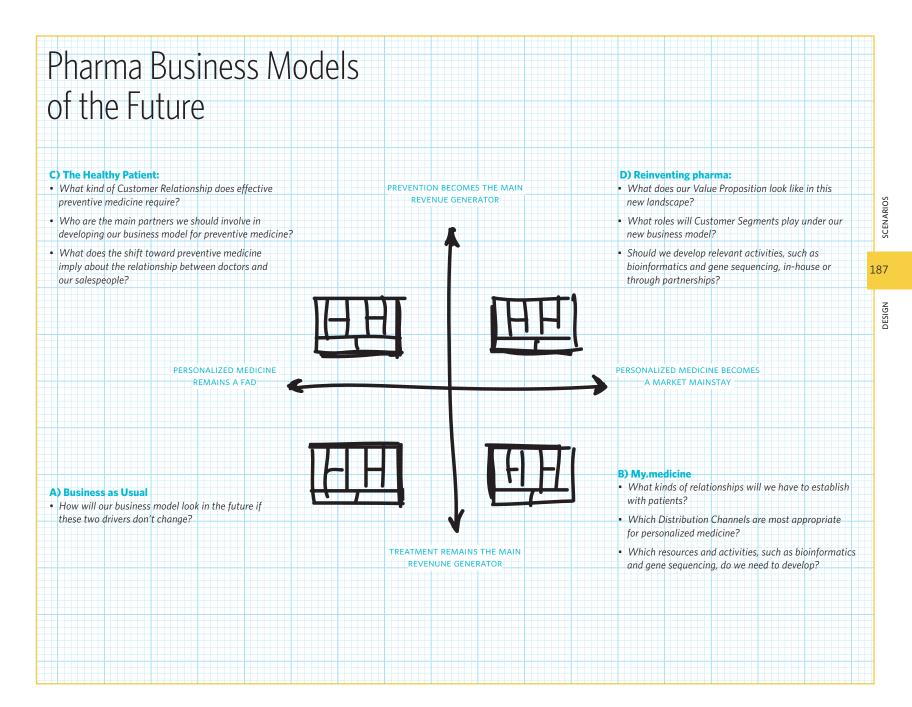
One sector under strong pressure to devise innovative new business models is the pharmaceutical industry. There are a number of reasons for this. Major player research productivity has declined in recent years, and these companies face enormous challenges discovering and marketing new blockbuster drugs-traditionally the core of their businesses. At the same time, patents on many of their cash cow drugs are expiring. This means revenues from those drugs are likely to be lost to generic drug manufacturers. This combination of empty product pipelines and evaporating revenue are just two headaches plaguing incumbent pharmaceutical makers.

In this turbulent context, combining business model brainstorming with the development of a set of future scenarios can be a powerful exercise. The scenarios help trigger out-of-the-box thinking, which is not always easy when trying to develop innovative business models. Here's an overview of how such an exercise might be conducted.

First, we must devise a set of scenarios that paint pictures of the future of the pharmaceutical industry. This is best left to scenario planning specialists equipped with the right tools and methodology. To illustrate, we developed four bare bones scenarios based on two criteria that may shape the evolution of the pharma industry over the next decade. There are, of course, several other drivers and many different scenarios that could be crafted based on deeper research into the industry.

The two drivers we've selected are (1) the emergence of personalized medicine and (2) the shift from treatment toward prevention. The former is based on advances in pharmacogenomics, the science of identifying underlying causes of diseases based on a person's DNA structure. Someday, this may result in completely personalized treatment, using customized drugs based on a person's genetic structure. The shift from treatment to prevention is driven in part by pharmacogenomics, in part by advances in diagnostics, and in part by renewed costconsciousness amid growing awareness that prevention is less expensive than hospitalization and treatment. These two drivers suggest trends that may or may not materialize and thus provide four scenarios illustrated in the figure opposite. These are:

- BUSINESS AS USUAL: Personal medicine fails to materialize despite its technological feasibility (e.g. for privacy reasons, etc.) and treatment remains the core revenue generator.
- MY.MEDICINE: Personal medicine materializes, but treatment remains the core revenue generator.
- THE HEALTHY PATIENT: The shift toward preventive medicine continues, but personal medicine remains a fad despite technological feasibility.
- **REINVENTING PHARMA:** Personal and preventive medicine comprise the new growth areas of the drug industry.



# Scenario D: **Reinventing Pharma** मिम

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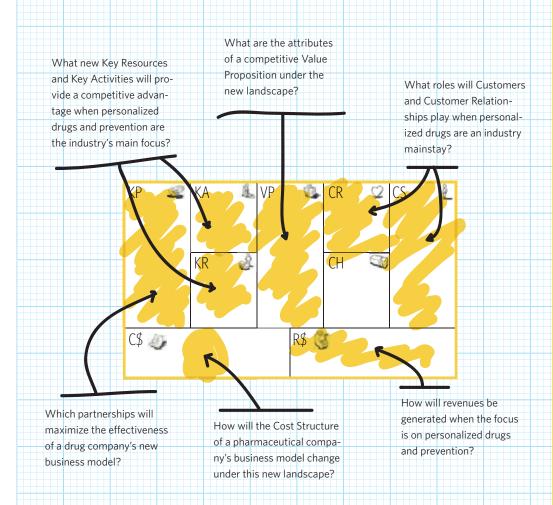
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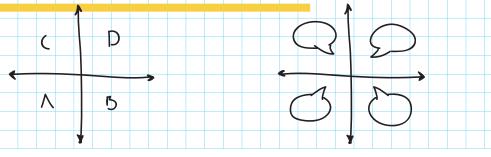
The landscape of the pharmaceutical industry has completely changed. Pharmacogenomic research has fulfilled its promise and is now a core part of the industry. Personalized drugs tailored to individual genetic profiles account for a large portion of industry revenues. All this has increased the importance of prevention—and is partially replacing treatment, thanks to substantially improved diagnostic tools and a better understanding of the links between diseases and individual genetic profiles.

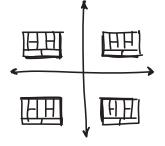
These two trends—the rise of personalized drugs and the increasing importance of prevention—have completely transformed the traditional pharmaceutical manufacturing business model. The twin trends have had a dramatic impact on pharma's Key Resources and Activities. They've transformed the way drug makers approach customers and provoked substantial changes in how revenue is generated.

The new pharma landscape has taken a heavy toll on incumbents. A number were unable to adapt quickly enough and disappeared or were acquired by more agile players. At the same time, upstarts with innovative business models were able to acquire significant market share. Some were themselves acquired and integrated into the operations of larger but less nimble companies.



# Future Scenarios and New Business Models





DEVELOP A SET OF FUTURE SCENARIOS BASED ON TWO OR MORE MAIN CRITERIA. DESCRIBE EACH SCENARIO WITH A STORY THAT OUTLINES THE MAIN ELEMENTS OF THE SCENARIO

### WORKSHOP

DEVELOP ONE OR MORE APPROPRIATE BUSINESS MODELS FOR EACH SCENARIO

The goal of combining scenarios with business model innovation efforts is to help your organization prepare for the future. This process engenders meaningful discussion about a difficult topic, because it forces participants to project themselves into concrete "futures" underpinned by hard (though assumed) facts. When participants describe their business models they must be able to make a clear case for their choices within the context of the specific scenario.

Scenarios should be developed before the business model workshop begins. The sophistication of the "screenplays" will vary depending on your budget. Keep in mind that once you develop scenarios, they may be usable for other purposes as well. Even simple scenarios help jumpstart creativity and project participants into the future.

Ideally you should develop between two and four different scenarios based on two or more criteria in order to run a good business model scenario workshop. Each scenario should be titled and described with a short, specific narrative outlining the main elements.

Begin the workshop by asking participants to review the scenarios, then develop an appropriate business model for each. If your objective is to maximize a group's understanding of all the potential futures, you might want everyone to participate in a single group and let them collectively develop different business models for each scenario. If you are more interested in generating a set of very diverse future business models, you might decide to organize participants into different groups that work in parallel on separate solutions for the various scenarios. DESIGN

# Further Reading on Design and Business

### **Design Attitude**

### Managing as Designing

by Richard Boland Jr. and Fred Collopy (Stanford Business Books, 2004) A Whole New Mind: Why Right-Brainers Will Rule the Future by Daniel H. Pink (Riverhead Trade, 2006)

The Ten Faces of Innovation: Strategies for Heightening Creativity by Tom Kelley (Profile Business, 2008)

### **Customer Insights**

**Sketching User Experiences: Getting** the Design Right and the Right Design by Bill Buxton (Elsevier, 2007) **Designing for the Digital Age: How to Create Human-Centered Products and Services** by Kim Goodwin (John Wiley & Sons, Inc. 2009) Ideation

The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm by Tom Kelley, Jonathan Littman, and Tom Peters (Broadway Business, 2001) **IdeaSpotting: How to Find Your Next** Great Idea by Sam Harrison (How Books, 2006)

### **Visual Thinking**

The Back of the Napkin: Solving Problems and Selling Ideas with Pictures by Dan Roam (Portfolio Hardcover, 2008) **Brain Rules: 12 Principles for Surviving** and Thriving at Work, Home, and School by John Medina (Pear Press, 2009) (pp. 221-240)

### Prototyping

Serious Play: How the World's Best **Companies Simulate to Innovate** by Michael Schrage (Harvard Business Press, 1999) **Designing Interactions** 

by Bill Moggridge (MIT Press, 2007) (ch. 10)

### Storytelling

The Leader's Guide to Storytelling: Mastering the Art and Discipline of Business Narrative by Stephen Denning (Jossey-Bass, 2005) Made to Stick: Why Some Ideas Survive and Others Die by Chip Heath and Dan Heath (Random House, 2007)

### **Scenarios**

The Art of the Long View: Planning for the Future in an Uncertain World by Peter Schwartz (Currency Doubleday, 1996) Using Trends and Scenarios as Tools for Strategy Development by Ulf Pillkahn (Publicis Corporate Publishing, 2008)









Do you have the guts to start from scratch?

# 194

In my work with non-profit organizations, the biggest obstacles to business model innovation are **1.** inability to understand the existing business model, **2.** lack of a language to talk about business model innovation, and **3.** counterproductive constraints on imagining the design of new business models. Jeff De Cagna, United States

The management of an SME (wood manufacturing industry-WMI) did not begin changing its business model until the bank no longer wanted to give them credit. The biggest obstacle to business model innovation (in the WMI case and likely every case) is the people who resist any changes until problems appear and need corrective actions. Danilo Tic, Slovenia

# **EVERYONE** LOVES **INNOVATION UNTIL IT AFFECTS** The biggest obstacle to business

model innovation is not technology: it is we humans and the institutions we live in. Both are stubbornly resistant to experimentation and change. Saul Kaplan, United States

I have found that the management and key employees in many SME companies lack a common framework and language for discussing business model innovation. They do not have the theoretical background, but they are essential to the process because they are the ones who know the business. Michael N. Wilkens, Denmark

MFTRI OF SUCCESS: They can direct the scope and ambition of behavior. At best they can allow for the agility that brings truly disruptive innovation; at worst they reduce vision

to near term iterative cycles of evolution that fail to take opportunity from changing environments. Nicky Smyth, U.K.

Fear to take risks. As a CEO you need courage to take a business model innovation decision. In 2005, Dutch telecom provider KPN decided to migrate proactively to IP and thus to cannibalize its traditional business. KPN is now internationally recognized as an outperformer in the telco industry. Kees Groeneveld, Netherlands

In my experience with a large archive, the biggest hurdle was to make them understand that even an archive has a business model. We overcame this by starting a small project and showed them this would affect their current model.

Harry Verwayen, Netherlands

**GET EVERYBODY** invoived. and keep up the speed of change. For our disruptive meeting concept Seats-2meet com we trained the staff almost daily for a period of four months just on communicating this new business model to all stakeholders. Ronald van Den Hoff, Netherlands

1. Organizational antibodies that attack a project as resources drawn from their area conflict with their business objectives. 2. Project management processes that can't deal with risks/ uncertainties associated with bold ideas so leaders decline or claw ideas back to existing comfort zones. John Sutherland, Canada

The biggest obstacle is a belief that models must contain every detail experience shows that clients ask for a lot but settle for simplicity once they have insight into their business. David Edwards, Canada

 Not knowing: What is a business model? What is business model innovation?
 Not able: How to innovate a business model?
 Not willing: Why should I innovate my business model? Is there a sense of urgency?
 Combinations of the above. Ray Lai, Malaysia

In my experience, the biggest obstacle is failure to change the thinking process from the traditional linear way to holistic and systemic.

Entrepreneurs need to make a concerted effort to develop the capability to envision the model as a system whose parts interact with each other and affect each other in a holistic and non-linear manner. Jeaninne Horowitz Gassol, Spain As an Internet marketer for 15 years I've seen new business models live and die. The key for the winners was that the major stakeholders completely understood

and advanced

Stephanie Diamond, United States

the model.

THE MENTAL **MODELS** of executives and the board.

The lack of candor and fear of deviating from the status quo sets in groupthink. Executives are comfortable with exploit phase and not 'explore' phase, which is unknown and hence risky. *Cheenu Srinivasan, Australia* 

In my experience as an Internet entrepreneur and investor, the biggest obstacles are lack of vision and bad governance. Without good vision and governance a company will miss the emerging industry paradigm and avoid reinventing the business model in time. *Nicolas De Santis, U.K.*  Within large multinationals it is key to create cross-functional understanding and synergies. Business model innovation does not hold itself to the organizational constraints that the people in it experience. For successful execution it is key to have all disciplines on board and interconnected!

Bas van Oosterhout, Netherlands

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UNCERTAINT

& GRE

business model...

United States

A lack of

of the people vested in the current

Frontier Service Design, LLC,

entrepreneurship

in the organization.

Innovation is about taking risks, wisely.

If there is no room for creative insights

or if people can't think and act outside

the boundaries of the existing model,

don't even try to innovate: you will fail.

Ralf de Graaf, Netherlands

FI

On an organizational level, the biggest obstacle for a large, successful company is a reluctance to risk doing anything that may jeopardize their current model. On a leader/personal level, **their very success was likely a product of the current business model...** 

Jeffrey Murphy, United States

"If it ain't broke, **don't fix it**" thinking. Established companies stick to current ways of doing business until it is obvious that the customers want something else.

Ola Dagberg, Sweden

# **STRENGTH** OF LEADERSHIP

can be an obstacle. Risk management and due diligence color the perceived purpose of many boards. Where innovation is assessed as a risk issue it's easy to relegate it to tokenism, especially within cultural institutions that tend not to have championing cultures. Here innovation often dies the death of a thousand cuts inflicted by entrenched critical business processes, instead of being placed front and center as the fuel for future strategy. *Anne McCrossan, U.K.*  Oftentimes, companies design an innovative business model, but do a poor job of constructing a compensation structure that is properly aligned with the model and its objectives. *Andrew Jenkins, Canada* 

# **CURRENT** SUCCESS

prevents companies from asking themselves how their business model could be innovated. Organizational structures are not typically designed for new business models to emerge. *Howard Brown, United States* 

The companies that are the most successful in continuously improving the efficiency of their current business model often get blinded by "this is the way things

## are done in our business"

and fail to see the emergence of innovative business models. Wouter van der Burg, Netherlands





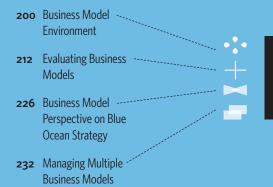
"There's not a single business model... There are really a lot of opportunities and a lot of options and we just have to discover all of them." Tim O'Reilly, CEO, O'Reilly

In previous sections we taught you a language for describing, discussing, and designing business models, described business model patterns, and explained techniques that facilitate the design and invention of new business models. This next section is about re-interpreting strategy through the lens of the Business Model Canvas. This will help you constructively question established business models and strategically examine the environment in which your own business model functions.

The following pages explore four strategic areas: the Business Model Environment, Evaluating Business Models, a Business Model Perspective on Blue Ocean Strategies, and how to Manage Multiple Business Models within an enterprise.



### **Strategy**



# BUSINESS MODEL ENVIRONMENT: CONTEXT, DESIGN DRIVERS, AND CONSTRAINTS

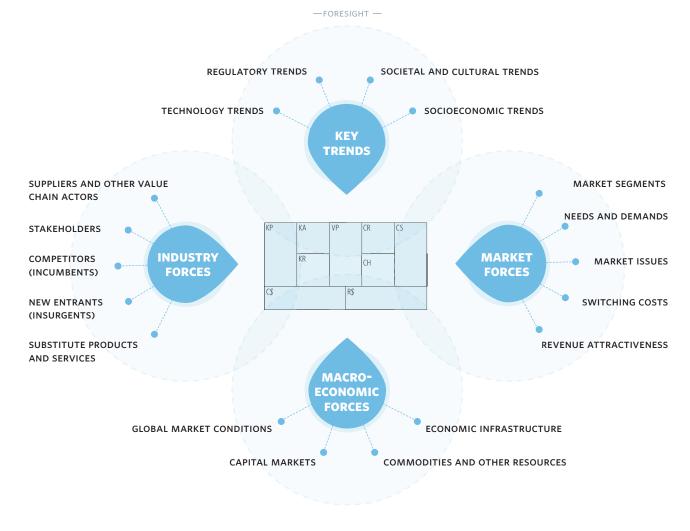
BUSINESS MODELS ARE DESIGNED AND EXECUTED IN SPECIFIC ENVIRONMENTS. Developing a good understanding of your organization's environment helps you conceive stronger, more competitive business models.

Continuous environmental scanning is more important than ever because of the growing complexity of the economic landscape (e.g. networked business models), greater uncertainty (e.g. technology innovations) and severe market disruptions (e.g. economic turmoil, disruptive new Value Propositions). Understanding changes in the environment helps you adapt your model more effectively to shifting external forces.

You may find it helpful to conceive of the external environment as a sort of "design space." By this we mean thinking of it as a context in which to conceive or adapt your business model, taking into account a number of design drivers (e.g. new customer needs, new technologies, etc.) and design constraints (e.g. regulatory trends, dominant competitors, etc.). This environment should in no way limit your creativity or predefine your business model. It should, however, influence your design choices and help you make more informed decisions. With a breakthrough business model, you may even become a shaper and transformer of this environment, and set new standards for your industry.

To get a better grasp on your business model "design space," we suggest roughly mapping four main areas of your environment. These are (1) market forces, (2) industry forces, (3) key trends, and (4) macroeconomic forces. If you'd like to deepen your analysis of the landscape beyond the simple mapping we propose, each of these four areas is backed by a large body of literature and specific analytical tools. In the following pages, we describe the key external forces that influence business models and categorize them using the four areas just mentioned. The pharmaceutical industry, introduced in the previous chapter, is used to illustrate each external force. The pharma sector is likely to undergo substantial transformation in coming years, though it is unclear how the changes will play out. Will biotechnology companies, which are currently copying the pharmaceutical sector's blockbuster drug model, come up with new, disruptive business models? Will technological change lead to transformation? Will consumers and market demand force changes?

We strongly advocate mapping your own business model environment and reflecting on what trends mean for the future of your enterprise. A good understanding of the environment will allow you to better evaluate the different directions in which your business model might evolve. You may also want to consider creating scenarios of future business model environments (see p. 186). This can be a valuable tool for jumpstarting business model innovation work or simply preparing your organization for the future.



- MACROECONOMICS -

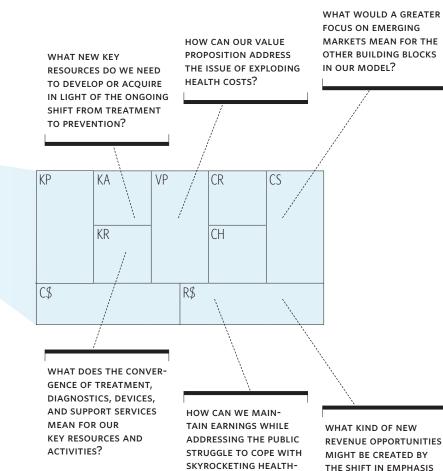
MARKET

ANALYSIS

• MARKET ISSUES	Identifies key issues driving and transforming your market from Customer and Offer perspectives	Main Qs What are the crucial issues affecting the customer landscape? Which shifts are underway? Where is the market heading?
MARKET 202 MARKET FORCES	Identifies the major market segments, describes their attractiveness, and seeks to spot new segments	What are the most important Customer Segments? Where is the biggest growth potential? Which segments are declining? Which peripheral segments deserve attention?
MARKET ANALYSIS -	Outlines market needs and analyzes how well they are served	What do customers need? Where are the biggest unsatisfied customer needs? What do customers really want to get done? Where is demand increasing? Declining?
• SWITCHING COSTS	Describes elements related to customers switching business to competitors	What binds customers to a company and its offer? What switching costs prevent customers from defecting to competitors? Is it easy for customers to find and purchase similar offers? How important is brand?
REVENUE     ATTRACTIVENESS	Identifies elements related to revenue attractiveness and pricing power	What are customers really willing to pay for? Where can the largest margins be achieved? Can customers easily find and purchase cheaper products and services?

### **Pharmaceutical Industry Landscape**

- Skyrocketing healthcare costs
- Emphasis shifting from treatment to prevention
- Treatments, diagnostics, devices, and support services are converging
- Emerging markets becoming more important
- Doctors and healthcare providers
- Governments/regulators
- Distributors
- Patients
- Strong potential in emerging markets
- U.S. remains the predominant global market
- · Strong, with dispersed need for niche treatments
- Need to manage exploding cost of health care
- Large, unsatisfied health care needs in emerging markets and developing countries
- Consumers are better informed
- Monopoly on patent-protected drugs
- Low switching costs for patent-expired drugs replaceable by generic versions
- Growing amount of quality information available online
- Deals with governments, large-scale healthcare providers increase switching costs
- High margins on patent-protected drugs
- Low margins on generic drugs
- Healthcare providers, governments enjoy growing influence over prices
- · Patients continue to have little influence over prices



CARE COSTS?

203

FROM TREATMENT TO

PREVENTION?

