

Shaping the Strategy by Designing Business Model Prototypes

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Design isn't just about making things beautiful; it's also about making things work beautifully—Prof. Roger Martin

The first step towards designing the firm's future strategy has been made by defining its strategic focus, that is, selecting the high-level direction along which the firm wants to compete and differentiate. The designing step of the business model layer writes the play to perform on the strategic stage. Designing is about generating novel ideas and combining existing knowledge in a novel way to describe how the firm will conduct its business and compete in the future. Designing is about creating options for the future around the firm's strategic focus. Designing is also about transforming those options into detailed business model prototypes that can be validated. The designing step is where the crucial creativity happens during the strategy design process. It is the most challenging step. Many ideas initially look encouraging, but most are a challenge to transform into prototypes. Just because an idea or a prototype of an idea looks promising to its designers, does not mean it will be accepted by customers or prospects.

Successful ideation is more about the quality of ideas than it is about the quantity, especially when aiming at disrupting. Only mediocre strategists focus primarily on quantity. Ensuring qualitatively superior ideas requires

- *creative people* with diverse backgrounds and interests that are open-minded and embrace the challenge of questioning the status-quo, and
- *strong collaboration* between creative people with a common goal of designing the next great strategy.

Strategy designers must not perceive time as an enemy. Creativity is not time constrained. Creativity is not about speed. There does not exist a correlation, let alone a causality, between time spent on identifying novel ideas and their quality. This is valid both ways, spending too little or too much time.

Designing ideas and prototypes of the firm's future detailed business model is about the firm and not about competitors. Although strategy is inherently a relative

game in a competitive landscape, the designing step takes an absolute and firm-focused approach. A novel idea on how a firm can be desirable, deliver feasible products or services, and secure financial viability, itself lays the foundation for a competitive advantage in the target industry. Focusing on competition during ideation results in mediocre, incremental strategies. It also leads to benchmark thinking rather than differentiation. Potential adjustments to the business model for competition occur during the competition layer of the strategy design process (see Chap. 12).

10.1 Designing Objectives

The goal of the designing step of the strategy design process is to develop multiple testable prototypes of the firm's target detailed business model. Designing focuses on what is new and/or what is different relative to the firm's current detailed business model. Designing is exploratory and relies on divergent thinking. It is based on the two activities *ideating* and *prototyping*.

$$\text{business model} = \text{ideas} + \text{prototypes}$$

In strategy design, ideation and prototyping are so intertwined that it makes little sense to consider them as separate process steps, as is the case in design thinking applied to generic problem solving or product development. Prototyping in strategy is a mental activity, while in other areas of design thinking application, prototyping relates to physically building prototypes or mock-ups. Ideation is mostly about combining existing ideas to create something new or innovative.

Example Consider the idea of using the cash register of a 24/7-attended gas station as a human operated ATM available round the clock. Neither the cash register, nor the concept of an ATM, is new. However, the resulting idea of using the cash register as a human operated ATM is innovative. It gives bank customers access to cash on their account without the bank having to install additional expensive ATM hardware or branches open 24/7. In addition, by being human operated, it increases the trust factor and reduces the fear of customers being robbed. Finally, it provides value to the gas station owner because it reduces the amount of cash in the register, thus diminishing the cost of transporting cash to the bank and the risk of being robbed.

Designing starts by looking for novel ideas or new combinations of existing knowledge that business can transform into prototypes which deliver value to customers and the firm. The equation

$$\begin{aligned} \text{innovation} &= \text{new idea or new combination of existing knowledge} \\ &+ \text{value resulting from willingness to pay} \end{aligned}$$

applies.

10.2 The Designing Process

The designing process D centers around four key activities:

- (1) *Describing the existing detailed business model* as starting point for innovation (if the goal is to develop a disruptive strategy or a strategy for a start-up, this first step can be left out).
- (2) *Generating multiple novel ideas or new combinations of existing and/or novel ideas*, targeting the strategic focus elements of the detailed business model.
- (3) *Building prototypes* of both the strategic focus and the offerings (OVP and OPS) elements of the detailed business model.
- (4) *Completing the remainder of the detailed business model*, driven by desirability, and addressing feasibility, and viability.

Similar to the interaction between observing (O) and learning (L), validating should follow each designing activity, that is, executing the validating process V, described in Chap. 11. It is best practice to build and validate distinct prototypes for testing the desirability, feasibility, and viability of the ideas at hand. Depending on the outcome of validation, the prototypes, or even the underlying ideas, may need adjustment, amendment, or even be discarded. To avoid non-value adding activities, strategy designers should prioritize ideas, prototyping of strategic focus-based elements, and full prototype designs, by focusing on

- the *expected contribution to success* of the strategy, in decreasing order, and
- the *complexity of validation*, starting with concepts that are easy to validate.

Depending on the strategic focus, validating desirability (customer and offering strategic focus), feasibility (capabilities strategic focus), or viability (financials strategic focus) should be prioritized.

Process D—Designing

- D.1 Documenting the current detailed business model (optional, when aiming for a disruptive strategy or in the start-up context)
- D.2 Iteratively selecting a target population identified during the observing (O) and learning (L) steps on which to focus the design (target populations should be prioritized in decreasing order of their expected relevance to the strategy to be designed)
- D.3 Based on the knowledge created during the learning process (L), combined with the outcome of the environmental analysis (E), generating novel ideas and/or combining existing knowledge in novel ways, by concentrating on the strategic focus elements of the target detailed business model
- V *Validating the ideas generated by confronting them to the real world*

- D.4 Designing prototypes related to the strategic focus and offerings elements (OVP and OPS) of the detailed business model
 - V *Validating the designed prototypes*
- D.5 Completing the prototypes by designing the remaining elements of the detailed business model
 - V *Validating the completed detailed business model prototypes*
- D.6 Aggregating the designed prototypes from multiple target populations, if sound
 - V *Validating the aggregated detailed business model prototypes*

10.3 Documenting the Current Detailed Business Model

Unless the goal is to develop a disruptive strategy or a strategy for a start-up, that is, a firm that does not yet exist, the first step of the designing process is describing the firm's current detailed business model. This activity can be subdivided into two parts, that is,

- *describing each element* of the firm's detailed business model, being as neutral as possible, and
- *documenting the relationships and causalities* between the different elements of the firm's detailed business model.

Example Figure 10.1 illustrates a possible outcome from the first step (D.1) of the designing process for a domestic news agency, such as the Australian Associated Press, Deutsche Presse-Agentur, Kyodo News, Schweizer Depeschenagentur, or The Canadian Press.

If a firm implements its current strategy through multiple separate business units, a detailed business model should be used for describing each distinct business unit. Each business units may be considered a separate firm with its own business model and strategy.

Describing the detailed business model of a firm is teamwork, best performed in a classical workshop setting using Post-it[®] notes or Stattys on a pin-wall with a detailed business model poster attached to it. Strategy designers may use filament, colored needles, notes with distinct colors, or color marks to document relationships.

One challenge faced during the detailed business model documentation step is identifying the appropriate degree of detail. Although there is no single right answer to this question, less is usually more. Experience has show that an A0-sized poster

<p>Customer Segments (CS)</p> <ul style="list-style-type: none"> ▪ Daily print newspapers ▪ Online news sites ▪ Search engines ▪ Communication departments of firms, associations, and governments 	<p>Customer Relationship (CR)</p> <ul style="list-style-type: none"> ▪ Dedicated sales representative ▪ 24/7 news desk reachable via various channels (phone, e-mail, chat, etc.) 	<p>Value Proposition (OVP)</p> <ul style="list-style-type: none"> ▪ Objectively written news ▪ Fast delivery ▪ Global coverage through partner network ▪ Fee related to circulation, rather than news gathering effort 	<p>Competitive Advantage Activities (KAC)</p> <ul style="list-style-type: none"> ▪ Exclusive partnerships with foreign news agencies 	<p>Cost Advantage Activities (KAC)</p> <ul style="list-style-type: none"> ▪ Broad domestic coverage 	<p>Outsourced Activities (KAO)</p> <ul style="list-style-type: none"> ▪ Foreign news coverage ▪ System integration into customer's news system
<p>Customer Jobs-to-Be-Done (CJ)</p> <ul style="list-style-type: none"> ▪ Inform readers about latest newsworthy events ▪ Be the first to report the news ▪ Ensure global news coverage ▪ Save costs by avoiding own presence at news events ▪ Direct traffic to online platform 	<p>Customer Delivery (CD)</p> <ul style="list-style-type: none"> ▪ Automatic feed into customer's news system ▪ Access through protected web site 	<p>Products & Services (OPS)</p> <ul style="list-style-type: none"> ▪ Written news ready to be published 	<p>Perishable Resources (KRP)</p> <ul style="list-style-type: none"> ▪ News 		<p>Capital Resources (KRC)</p> <ul style="list-style-type: none"> ▪ News handling and distribution IT system
<p>Revenues (FR)</p> <ul style="list-style-type: none"> ▪ Subscription fee based on circulation/access 			<p>Cost Structure (FC)</p> <ul style="list-style-type: none"> ▪ Journalists, news editors, and sales representatives salaries ▪ News handling and distribution IT system development and maintenance ▪ Fee for distributing partner news agencies' content 		

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Fig. 10.1 Detailed business model of a domestic news agency

of the detailed business model, combined with typical 4 × 3 inch (or 10 × 7 cm) notes, is sufficient to document most firms' detailed business models.

Seasoned line managers and strategy designers should jointly be able to document the detailed business model of the firm or an independent business unit in no more than one to two days of collaborative work.

10.4 Generating Innovative Ideas

Generating innovative ideas is at the core of the creativity phase of the strategy design process. Successful ideation is difficult, and successful innovation even more. Innovations are ideas that customers are interested in and willing to pay for.

10.4.1 Selecting a Target Population

Ideation starts by selecting a target population. A target population, in the traditional sense of design thinking, is a persona related to a customer segment, and one or more jobs-to-be-done. For example, a coffee shop may select the persona Jenney, a young mother wanting to socialize with acquaintances, as a target population to consider. In design thinking for strategy, the target population may alternatively be a technology, such as, blockchain or artificial neural networks, or a specific capability, such as a cost-efficient implementation of passive mutual funds or supply chain management. Strategy designers identify target populations to consider

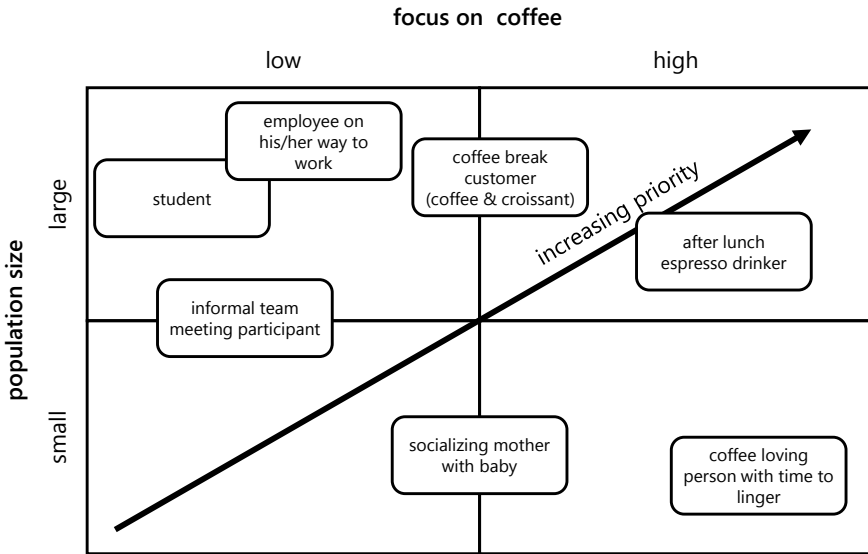


Fig. 10.2 Characterization and prioritization of possible target populations related to a customer focused coffee shop strategy

during the observing (O) and learning (L) processes. If new target populations are identified during the designing step, the processes O and L should be performed on them before moving to using them in designing. Target populations should be prioritized before being considered. Prioritizing is a key skill that any strategy professional must exhibit.

Example Figure 10.2 illustrates a possible prioritization for a typical customer-centric coffee shop strategy, focusing on relevance and coverage.

10.4.2 Ideation

After having selected a target population, ideation focuses on knowledge related to the target population, gained during the learning step (L) (Chap. 9) and the insights identified by the environmental analysis process (E) (Chap. 6), to come up with novel ideas or novel combinations of knowledge along the firm’s strategic focus. The current detailed business model, documented during step D.1, serves as the basis to define ideas in terms of change from the status-quo, rather than in a greenfield way. Innovations are based either on novel ideas or new combinations of existing ideas and knowledge. More often than not do innovations come from re-combining existing knowledge, rather than from something completely different and new.

Experience shows that the first idea is usually not the best one and is often even a quite poor one. Initial ideas can be improved upon by applying one or more of the following transformation techniques, that is,

- *magnifying*, thinking bigger and/or smaller,
- *multiplying*, extracting value from scaling,
- *inverting*, trying out the opposite of the original idea,
- *stretching*, extending one specific property of the original the idea,
- *compacting*, reducing the impact of one specific property of the original idea, and
- *decomposing* the idea into its components and deriving sub-ideas of value from one or more components.

The focus of ideation differs depending on the firm's chosen strategic focus.

Customers strategic focus Ideation focuses on identified jobs-to-be-done and designing novel value propositions and associated offerings that address them. The emphasis is on existing or potential needs to alleviate felt pains or generate sought after gains.

Offerings strategic focus Ideation focuses on what is traditionally called inventions. It aims at creating new needs or addressing existing jobs-to-be-done in a novel and superior way. Inventions may be novel technologies, new user experiences, new models, or new processes, that create needs that do not yet exist.

Capabilities strategic focus Ideation focuses on how firms can use existing capabilities, such as, skills, resources, processes, or capital, to create novel offerings and provide novel value to customers.

Financials strategic focus Ideation based on a financials strategic focus means looking at willingness-to-pay, cash-flows and their timing, as well as costs.

Not all generated ideas make it to the idea prototyping step D.4. However, this does not mean that they should be discarded right away. A list of unused, but not fully discarded, ideas should be kept on the sideline for future reference. At the end of the ideation step D.3, ideas retained for step D.4 are validated by confronting them with the real world.

10.4.3 Typical Examples of Ideas

Rather than looking backward and presenting case studies on how firms successfully innovated in the past or failed to do so, this section presents a sample set of building block ideas, partially formulated as questions, which can be used for

bootstrapping design. Ideas are approached in a generic, rather than target industry or target population specific, way. It is the strategy designers' role to identify those ideas that matter in their specific context and use the transformation approaches described, to generate new ideas and transform them into innovations. The individual ideas are classified along the four possible strategic focuses of a firm.

10.4.3.1 Customers and Their Jobs-to-Be-Done

Ideation around customers and their jobs-to-be-done is related to better understanding what attributes of a strategy they consider of value to them. Four main areas of ideation can be identified.

Properties What are the properties that customers focus on when aiming at addressing their jobs-to-be-done? Are they related to price, that is, getting a fair solution at a cheap price? Or do customers value time and wish to get their jobs-to-be-done done as quickly as possible? How do customers value the need for flexibility, getting similar jobs done using the same offering? Or, do customers value the ease of use, for example, by not having to read a user's guide? Different answers to these questions will lead to different customer segments that firms can best address with diverse strategies and associated value propositions.

Decision takers More often than not, the end users and the decision takers or check writers are not the same person. They have related, but different, jobs-to-be-done on their minds. This is especially the case in a business-to-business environment. The decision taker, writing the check, may aim at competitively priced solutions satisfying a pre-agreed upon catalogue of functionalities, whereas the end user focuses on product quality and unique features supporting their specific jobs-to-be-done. Innovation, in this case, is related to identifying a compromise that maximizes the combined utilities of the different parties involved.

Communication channels Customer-centric ideation should consider opportunities around communication channels used to interact with customers before, during, and after sales. Typical buzzwords in this context are multi-channel and omni-channel. The creativity challenge is identifying and designing the right channels for the targeted customers and avoiding those channels that customers do not value. More is not always better. A key mistake to avoid is assuming that a digital channel satisfies all customers at all time and is the only medium of interaction needed.

Delivery An offering is only as good as its delivery. When offering physical goods, firms may consider different delivery mechanisms, like home delivery, pick-up at a specific location convenient for the customer, or leveraging third-party locations for delivery. Not all products need to be sold in stores. Stores may be only used for showcasing. When the offering is intangible, like a service, firms could design legal structures or technology-based delivery channels around specific jobs-to-be-done. Not every service delivery needs a physical presence. For example, a maintenance service may be delivered using video and audio to advise the end-user on how to solve a given problem.

10.4.3.2 Products- and Services-Focused Ideation

In many strategies, even those not primarily focusing on offerings, products and services characteristics play an important role.

Usage Typically, an offering may be used once, like a frozen pizza, or multiple times, like a drill. One-off use offerings may lead to recurring purchases. They may also lead to cheaper production, increasing competitiveness, especially, if customers have a given job-to-be-done to address only once.

Types of jobs-to-be-done Are customers looking for an offering that addresses a specific jobs-to-be-done, that is potentially unique, or are they considering a generic jobs-to-be-done such that a single offering may address multiple similar jobs-to-be-done?

Choice When looking for a solution to their jobs-to-be-done, customers may value options. Are the customers looking for an offering that solves a specific job-to-be-done in the best possible way or do they prefer a more generic offering that can address multiple similar jobs-to-be-done? Perhaps the customers prefer to adapt the offering for a specific job-to-be-done themselves, for example, a drill that can be re-configured as a screwdriver? The customers may prefer buying a portfolio of tools at a discount. Alternatively, the customers may be interested in an offering configured for their specific needs and preferences, like computers bought configured to the customer's specific wishes. Do the customers want to be offered the best solution for a job-to-be-done or prefer a choice between multiple reasonable solutions? How much do the customers want to be involved in choosing versus outsourcing the choice to the vendor?

Support Firms may take different approaches to after-sales support. It could be part of the offering or be sold separately as a one-time service or on an annual subscription basis. Alternatively, firms can offer case-based support and charge a fix price or on a time basis. Support coverage may be included in the ideation around and after-sales service. Return policies are another area of support that can result in innovative strategies, such as subscription-based business models in which customers can exchange a product each time their need changes.

Substitutes Customers have a preference for how to get their jobs done based on their experience. For example, a customer wanting to buy a home, their job-to-be-done, but lacking sufficient funds, may look for a mortgage. Really innovative offerings-based strategies are designed around disruptive alternatives to solve a given job-to-be-done. A home leasing offering could result in an innovative strategy in a competitive homeowner market.

Many more options to innovate around offerings exist. When ideating about new products and service, it is important not to forget the overall strategic context. Ideation must relate to all aspects of a firm's strategy, from being desirable, through ensuring feasibility and viability, to exhibiting a positioning advantage allowing to prosper in a given industry environment.

10.4.3.3 Leveraging Capabilities

The third area for innovation involves the firm's capabilities. Rather than inventing new capabilities, ideation is mostly framed around recombining existing capabilities, in an innovative way.

Skills Firms can strategically leverage their capabilities in four primary areas, that is,

- *technologies*, such as computer science technologies or technologies around production, like synthesizing substances used in the pharma industry,
- *business processes*, like procurement, supply-chain management, or after-sales support,
- *knowledge*, like patents, intellectual property, or in-depth subject matter expertise, and
- *access to customers*, in which the firm relies on its unique capabilities to connect with customers, such as through eco-systems or platforms.

Usage of skills When ideating about how to re-configure existing skill to design a new or modernize an existing strategy, firms can use any of the following four approaches:

- (1) Identify *new target populations* for which the firm can use its existing capabilities to address customer jobs-to-be-done.
- (2) Identify *new jobs-to-be-done in existing target populations* that the firm can successfully address by using existing capabilities in a novel way.
- (3) Develop *new features to add to existing offerings* to better leverage existing capabilities.
- (4) Exploit *opportunities for selling more existing offerings to existing customers* by leveraging existing capabilities to reduce costs and/or increase rational and emotional value for customers.

Although more specific, capabilities-based ideation should also consider how the firm can leverage its ability to satisfy regulatory and legal constraints to offer additional customer value. Customers may perceive the firm satisfying regulatory constraints by 120%, rather than 100%, as providing differentiating value.

10.4.3.4 Ideation Around Financials

Recent years saw many innovations around pricing and pricing models. Ideation in pricing is related to aligning revenues with customers' perception of them. Some firms have built their strategy solely around innovative—which needs not mean cheap—pricing. There exist at least five key areas in which pricing ideation can lead to value for both the firm and the customer.

Frequency of payments Should payments be one-off or recurring? When aiming for recurring payments, are they down-payments or do they offer a true subscription value? What are the advantages, from a customer perspective, in the offered models?

Timing of payments The timing of payments is important, for the firm and from a customer perspective. Timing has a significant impact on the firm's working capital requirements. From a customer perspective, timing may impact the perceived trust in the firm and its offerings. Typically, payments may be made at the time of purchase, after use, or on a pay-as-you-go basis.

Units of value An often poorly understood concept in pricing innovation is the concept of unit of value. Different customer segments may prefer different units of value for the same offering. Typical units of value are lump sums, quantity- or volume-based, time-based, cost-based, usage-based, performance-based, or as degressive units.

Payer As noted previously, the end user is not always the paying customer. Firms can exploit this distinction by designing pricing models that explicitly differentiate in the payment model between different stakeholders. The most common such model is an advertisement-based model. In another model, airport shops pay the passenger landing taxes, either with or without requiring a purchase, because the airport generate valuable leads for the shops.

In addition to classical efficiency-based ideation, innovating around costs can consider the surrounding environment to generate value and differentiation by

- exploiting available purchasing power with suppliers,
- leveraging economies of scale by perfecting and/or centralizing purchasing processes, or
- joining forces or outsourcing procurement to obtain better conditions.

The ideas presented are only crumbs, of which many more exist, especially those targeted to specific industries. Successful strategy designers excel at

- identifying novel ideas based on observing and learning,
- combining ideas to create innovations,
- putting innovations into a business model context and a subsequent strategy, and
- understanding that only a small fraction of ideas will make it into a successful strategy.

10.4.4 Ideation Tools

There exist many tools for steering the ideation process. The most popular one is brainstorming (Osborn 1963). It helps generate many ideas to evaluate and prioritize. A key characteristic of brainstorming is avoiding commenting on and criticizing ideas during the generation process, which proponents identify as a high-value property.

Tool—Brainstorming

Brainstorming is an old ideation tool. It was first proposed in 1942 by Osborn (1963), who argued that one of the main barriers to creative productivity was that most ideation sessions failed because their primary focus was on evaluation. He described the problem as *driving with the brakes on*. Brainstorming aims at addressing this flaw by focusing in a first step solely on producing lists of ideas which can be subsequently evaluated and further processed. Osborn defined brainstorming as an ideation method based on four guiding principles:

- (1) *Criticism is ruled out*. Adverse judgment of ideas is to be withheld until after the brainstorming session.
- (2) *Freewheeling is welcome*. Brainstorming encourages diverse approaches to generate innovative ideas, allowing wild and unusual ideas.
- (3) *Quantity is preferred*. Brainstorming is based on the premise that the more ideas are formulated, the greater the likelihood of useful ideas being among them.
- (4) *Combinations of ideas are appreciated*. Brainstorming explicitly encourages combining previously formulated ideas to turn them into better ideas. Brainstorming sessions often incorrectly prohibit this last guiding principles because it may be perceived as criticism, although constructive criticism.

Although deferred judgment is a central element of brainstorming, Osborn made clear that judging ideas is important, but mixing ideation and judgment is not the best way to move forward. Over the years, researches revised, adapted, and sometimes diluted the brainstorming method (Timpe 1987; Furnham and Yazdanpanahi 1995; Dugosh and Baulus 2005; Kohn and Smith 2011; Gregersen 2018). It nevertheless remains the most used ideation technique.

Generating a large number of ideas often creates an adverse selection bias. Therefore, brainstorming is useful for incremental innovation, but does not address the challenges faced by radical innovation (Verganti 2009).

A less well-known alternative to brainstorming better suited for radical innovation is anti-conventional thinking (ACT), developed by Baumgartner (2015). It focuses on depth rather than breadth during ideation.

Tool—Anti-conventional Thinking

As a fervent opponent of brainstorming, Baumgartner (2015) introduced the anti-conventional thinking (ACT) method, based on three critical flaws found in brainstorming sessions:

- (1) Brainstorming focuses on quantity rather than quality. Consequently, brainstorming results in long lists of mediocre and similar ideas.
- (2) Brainstorming prohibits criticism. Criticism is a key tool to disrupt common sense. Thus, the no-judgment rule in brainstorming, leads to most ideas being conventional.
- (3) Brainstorming is a highly structured approach, leading to a tunneled view, often missing disruptive ideas.

ACT is a method for generating highly creative ideas, focusing on depth rather than breadth of thinking. It is modeled after the way creative people, such as artists, writers, or composers, think and collaborate. It is also based on scientific research around how the human brain operates. ACT is a six-step approach:

- (1) *Make a situation transcendental.* Rather than start ideation with a common-sense question, ACT starts with describing the initial question in an unconventional way.
- (2) *Play with the situation.* Before starting with ideation, ACT scrutinizes and rephrases the question in distinct ways. The goal is to gain multiple perspectives of the challenge at hand, from both a rational and an emotional perspective.
- (3) *Formulate an extreme goal.* Rather than focus on a challenge to solve or a question to address, ACT takes a constructive stance and requires formulating an extreme goal, that may or may not be achievable, to address the challenge or question at hand.
- (4) *Build a creative vision.* Only in the fourth step are ideas formulated with the aim to achieve the stated extreme goal. All generated ideas are tested through mind games. Too conventional and non-viable ideas are rejected on the spot. Ideas are criticized constructively with a focus on the boring parts of ideas. Criticism is formulated as questions that encourage discussion and debate. The creative vision is built through trial and error around iterative ideation and mind-validations.
- (5) *Build an action plan.* Although not formally part of ideation, ACT requires that participants formulate an action plan describing what to do with the designed creative vision.

- (6) *Do it.* ACT explicitly includes a step requiring participants to take action based on the ideated vision and design plan.

ACT is preferred as ideation tool when the goal is to generate disruptive rather than incremental ideas. It is also a valid alternative to brainstorming if participants do not believe in the assumption that quantity will lead to quality, or that critiquing inhibits creative thinking.

Another tool for conducting innovation sessions is the LEGO[®] SERIOUS PLAY[®] method (Kristiansen and Rasmussen 2014; Smith and Meyerson 2015; Blair and Billo 2016; Smith et al. 2017). It allows ideating around 3-d models, rather than relying on 1-d voice and text or 2-d drawings. It helps make a 3-d print of the mind in a very efficient way.

Tool—LEGO[®] SERIOUS PLAY[®] Method

The LEGO[®] SERIOUS PLAY[®] method is a facilitated thinking, communication, and problem-solving tool for use with organizations, teams, and individuals. It draws on extensive research in business strategy, organizational development, psychology, and learning. It allows participants to explore and deal with genuine issues and challenges in real time by relying on metaphors, figures of speech, and narratives. Extensive sharing of meanings helps everyone feel ownership of the ideas expressed.

The LEGO[®] SERIOUS PLAY[®] method is a four-step process that supports constructive ideation:

- (1) *Defining challenge.* The facilitator formulates the challenge to address.
- (2) *Building models.* Participants build LEGO[®] models representing their reflections on the challenge, that is, new ideas and new combinations of existing ideas.
- (3) *Sharing meaning.* Participants share the meaning and story behind the models their built.
- (4) *Reflecting insights.* The team reflects on the insights gained from the individual models and stories to derive and prioritizes a list of kept ideas.

Participants use LEGO[®] bricks, Duplos, and mini-figures to create visual models that express their thoughts, reflections, and ideas, to address the posed challenge. Storytelling helps participants share meanings and gain insights.

There exist many more ideation tools, some generic, some specific to typical situation or design team structures (Eppler et al. 2014). They all require teamwork. Multiple half-day sessions, ideally away from the day-to-day environment,

Table 10.1 Sample output from a creativity session focusing on the three largest populations of a coffee shop

Target population	Prioritized ideas
Employees on their way to work	(1) Allow pre-ordering through an app (2) Offer coffee on a subscription basis (3) Introduce a loyalty program based on regularity of consumptions rather than on quantity
Coffee break customer (coffee and croissant)	(1) Offer discounts based on occupancy (2) Offer mini-meeting rooms for a fee (3) Offer coffee and croissant as a bundle (4) Offer coffee flavors based on weather
Students	(1) Offer small working spaces including power outlets and internet access (2) Offer discounts for multiple coffees per session (3) Offer discount coupons for use during specific hours (4) Offer cheap lunch packages (5) Design a “bring a friend” offering that includes coffee for two and pastries

especially phones, laptops, and e-mail access, should be conducted to support ideation. Deadlines and time pressure are adversaries to creativity. In addition, it is not possible to command and/or deliver creativity 24/7. Multiple shorter ideation sessions provide far better results than fewer longer sessions do. Strong unbiased moderation is key to supporting the process, allowing for sufficient creativity and idea exchanges while avoiding any derailment.

Example Table 10.1 illustrates a sample output from a creativity session focusing on coffee shops.

10.5 Transforming Ideas into Business Model Prototypes

Transforming ideas into workable business model prototypes proceeds in three iterative steps separated by testing and validation activities.

- (1) The idea is transformed into a description of one or more elements of the detailed business model that relate to the strategic focus and value proposition.
- (2) The remainder of the detailed business model elements are designed and causalities between elements defined.
- (3) Prototypes stemming from different target populations and/or ideas are aggregated and commonalities, especially in the non-strategic focus related elements, identified.

The goal of any prototype is to test the validity of the underlying business model. It is important to design distinct prototypes, depending on whether to validate the

- *desirability*, focusing on customers and their jobs-to-be-done relative to the value propositions and offerings,
- *feasibility*, aiming at validating the required capabilities to deliver upon the promises made in the value proposition, or
- *viability*, targeting financial aspects of the business model ensuring sustained profitability in excess of the costs of capital.

The first step focuses on describing the details of the strategic focus elements, the value proposition (OVP), and products and services (OPS) elements related to the ideas considered.

Example Think of a retail bank that identifies mobile phone addicted young people that just entered the workforce, as a possible target population. Ideation may identify that this target population wants to be able to track their finances whenever and wherever. The prototyped offering elements could be a mobile app showing the customer’s account balances well as a decomposition of recent payments into typical budget categories that allow reviewing spending with minimal hassle. Figure 10.3 shows a typical customers strategic focus-based business model prototype for the described retail bank.

A first consistency check is ensuring that any value proposition characteristic is provided by at least one offerings characteristic. Second, the value proposition characteristics must be related to the strategic focus characteristics. In the case of a customers strategic focus, this means, showing desirability, for a capabilities strategic focus, ensuring feasibility, and for a financials strategic focus, confirming viability. In the case of an offerings strategic focus, all three characteristics, that is, desirability, feasibility, and viability, are part of the first validation step in business model prototyping.

Once the strategic focus-based elements of the designed business model prototype have been validated, the second step of prototyping aims at completing the two, respectively, three remaining components of elements of the detailed business

<p>Customer Segments (CS)</p> <ul style="list-style-type: none"> ▪ Young people (around 18 – 30 years) ▪ Mobile phone addicted ▪ Recently entered workforce, i.e., having limited savings and focusing primarily on consumption 	<p>Customer Relationship (CR)</p> <ul style="list-style-type: none"> ▪ Young and trendy brand ▪ Word-of-mouth referrals for new customers, supported by social media advertisements ▪ Communication via mobile phone only 	<p>Value Proposition (OVP)</p> <ul style="list-style-type: none"> ▪ Customer sees account balances 24/7 on mobile phone app ▪ App automatically clusters booked expenses into typical categories ▪ History based budgeting tool supports controlling spending ▪ Backup communication channel providing human problem solving, supporting trust building
<p>Customer Jobs-to-Be-Done (CJ)</p> <ul style="list-style-type: none"> ▪ Want to have full control over their spending ▪ Want to be able to check 24/7 what their account balance is ▪ Want to understand where they spend their money 	<p>Customer Delivery(CD)</p> <ul style="list-style-type: none"> ▪ Mobile phone app (iPhone and Android) ▪ Backup communication via chat and VoIP using artificial intelligence technology supported by human, in case of problems 	<p>Products & Services (OPS)</p> <p>Mobile phone app offering:</p> <ul style="list-style-type: none"> ▪ Real-time account balance ▪ Expense clustering ▪ Budgeting tool based on past spending, including soft and hard limits ▪ Link to a free credit card ▪ Integrated invoice payment services

Fig. 10.3 Customers strategic focus-based business model prototype derived from the idea of servicing mobile phone addicted banking clients

Competitive Advantage Activities (KAC) <ul style="list-style-type: none"> ▪ Branding ▪ App design 		Cost Advantage Activities (KAC) <ul style="list-style-type: none"> ▪ Fully automated app ▪ Artificial intelligence based communication 		Outsourced Activities (KAO) <ul style="list-style-type: none"> ▪ Credit card issuance 	
Perishable Resources (KRP)			Capital Resources (KRC) <ul style="list-style-type: none"> ▪ Mobile phone app ▪ Artificial intelligence communication channel 		
Labor (KRL) <ul style="list-style-type: none"> ▪ Second level support 			Skills (KRS) <ul style="list-style-type: none"> ▪ Mobile app development ▪ Brand management 		
Revenues (FR) <ul style="list-style-type: none"> ▪ Partner fees ▪ Credit card retrocession ▪ Traditional interest rate differential revenues 			Cost Structure (FC) <ul style="list-style-type: none"> ▪ App development ▪ Second level support 		

Fig. 10.4 Capabilities and financial elements of the detailed business model prototype for a retail bank focusing on mobile phone addicted young clients

model. As with the strategic focus-based elements of the business model prototype, the aim is not only on describing the elements of the detailed business model, but also on describing their interdependencies.

Example Figure 10.4 illustrates the remaining elements of the detailed business model of the retail banking example in Fig. 10.3.

Transforming ideas into prototypes is a team activity requiring the participation of strategy designers knowledgeable in the different steps of the value chain. A workshop setting with all team members in one room is recommended. A neutral, usually external, moderator is preferred to avoid conflicts of interest and ensure that everyone gets a say. During prototyping, multiple teams may work in parallel on multiple prototypes. Table 10.2 illustrates a typical timetable for a one-day prototyping workshop focusing on two specific ideas addressing the same target population. Typical prototyping workshops for firms with multiple target audiences last between three and five days. Workshops covering process step D.4, focusing on designing the strategic focus related elements of prototypes, should be separated from workshops focusing on the remaining elements of detailed business model prototypes. The time in-between covering the two topics (process step D.4 and process steps D.5/D.6) should be used for validation. During steps D.5 and D.6, subject matter experts may be invited to the prototyping workshops.

Table 10.2 Sample timetable for a single target population customers strategic focus based prototyping workshop

Activity	Duration	Lead/participants
(1) Presenting the ideas serving as the basis for prototyping	15 min	Moderator
(2) Prototyping the customer elements CS, CJ, CR, and CD, and offerings elements OVP and OPS of the target detailed business model	1 h	Teams of 3–4 strategy designers
(3) Presenting of the prototypes designed by the teams and critiquing by the other participants	10 min each	Each team, plenum
(4) Reviewing and updating of the prototypes, based on the feedback received	30 min	Same teams
(5) Presenting of the revised prototypes and performing a second round of critiques	10 min each	Each team, plenum
(6) Classification of insights related to the different elements of the prototypes into the categories: agreed, to validate, rejected	30 min per prototype	Moderated plenum session
(7) Third round of prototype updating based on the classified insights gained and their mutual understanding	1 h	Different teams
(8) Developing validation experiments for the insights that need validation and assigning the validations to specific team members	1 h	Same team as in third round of prototyping
(9) Agreeing upon the next workshop date, location, participants, and deliveries	10 min	Moderator

10.6 Aggregating Prototypes Stemming from Multiple Ideas

The last step in prototyping detailed business models (D.6) is about aggregating multiple prototypes and identifying commonalities and complementarities. Participants need to ensure consistency throughout the aggregated prototypes. Depending on the design outcomes, multiple competing prototypes may be derived. In this case, the decision on which detailed business model to base the strategy may be taken at a later stage, for example, after the validation step or even after reviewing the prototypes in their competitive environment, as described in Chap. 12. In some cases, it may even be sound to keep multiple detailed business model prototypes and associate them with distinct business units or even distinct legal entities within the same group. A typical multi-strategy situation may occur if one detailed business model prototype focuses on a low-cost based value proposition and another one on a premium value proposition, focusing on complementary customer segments.

Best practice shows that complementary detailed business models should never be merged because this would result in a diluted positioning in the market and diminish the value propositions.

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