

Business Model Mapping: A New Tool to Encourage Entrepreneurial Activity and Accelerate New Venture Creation

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This paper describes business modeling—a simple, yet powerful, approach to model and evaluate alternative business opportunities. A compelling argument can be made that employing this approach can accelerate the concept development and assessment process and increase the quality of business propositions carried forward to the business planning stage. Moreover, business modeling is broadly applicable, being relevant to entrepreneurs, investors, business advisors and non-profit organizations, as well as existing firms considering new lines of business.

INTRODUCTION

“You don’t have a business, unless you have a business plan!”

How many times have we heard (or said) this statement? Preparing a business plan seems to have taken on the aura of a “rite of passage” along the path to launching a new venture. But what does an aspiring entrepreneur still exploring the world of possibilities do?

Does it make sense to invest the time and effort to develop a business plan for every option? Of course, not; nor does it make sense to make an educated guess which direction to pursue without a thorough examination of the alternatives and their implications. There must be something in between.

For those caught in this dilemma, an answer can be found in Business Modeling—a process of documenting the key assumptions of a particular business approach across a broad set of strategic and tactical components. The resulting Business Model¹ should be sufficient to compare and contrast competing opportunities and make a determination as to which alternative is best to carry forward to the Business Planning stage. With a little practice, a number of very comprehensive Business Models can be developed over the course of several hours, instead of the several weeks or months required to develop a detailed Business Plan.

Formal Business Modeling methods are relatively new. This paper introduces Business Model Mapping. This method allows even novice entrepreneurs to quickly grasp the wide range of business opportunities and, within a very short period of time, assess a number of them to determine which (if any) is worthy of further development. Despite its simplicity, however, it is equally appropriate for experienced entrepreneurs, seasoned investors, and existing firms considering new lines of business.

BUSINESS MODELING

The purpose of a business model is to describe efficiently, yet comprehensively, “the rationale of how an organization creates, delivers and captures value (Osterwalder, 2010).” It is not intended to capture *all* the detail and depth expected in a business plan, but it should be sufficient to communicate a fairly clear vision of how an idea might be translated into a business and the implications thereof. That is, it would be sufficient to compare, contrast and critique competing approaches (e.g., an on-line retailer versus a physical retail storefront) and clearly highlight their differences.

Business modeling is a relatively new concept, only being formalized in the past few years. Based on his 2004 doctoral thesis, Osterwalder developed the Business Model Canvas business modeling methodology around 2008 and published a practitioners’ guide in 2010. Prior to Osterwalder’s Canvas concept, business models tended to be assigned to general categories and designated by a simple catchphrase (e.g., bricks and clicks, on-line content provider, low-cost producer, razor and blades, etc.). The Business Model Canvas framework exchanges these aggregate terms and defines a business model in terms of the nine “building blocks” listed in Figure 1.

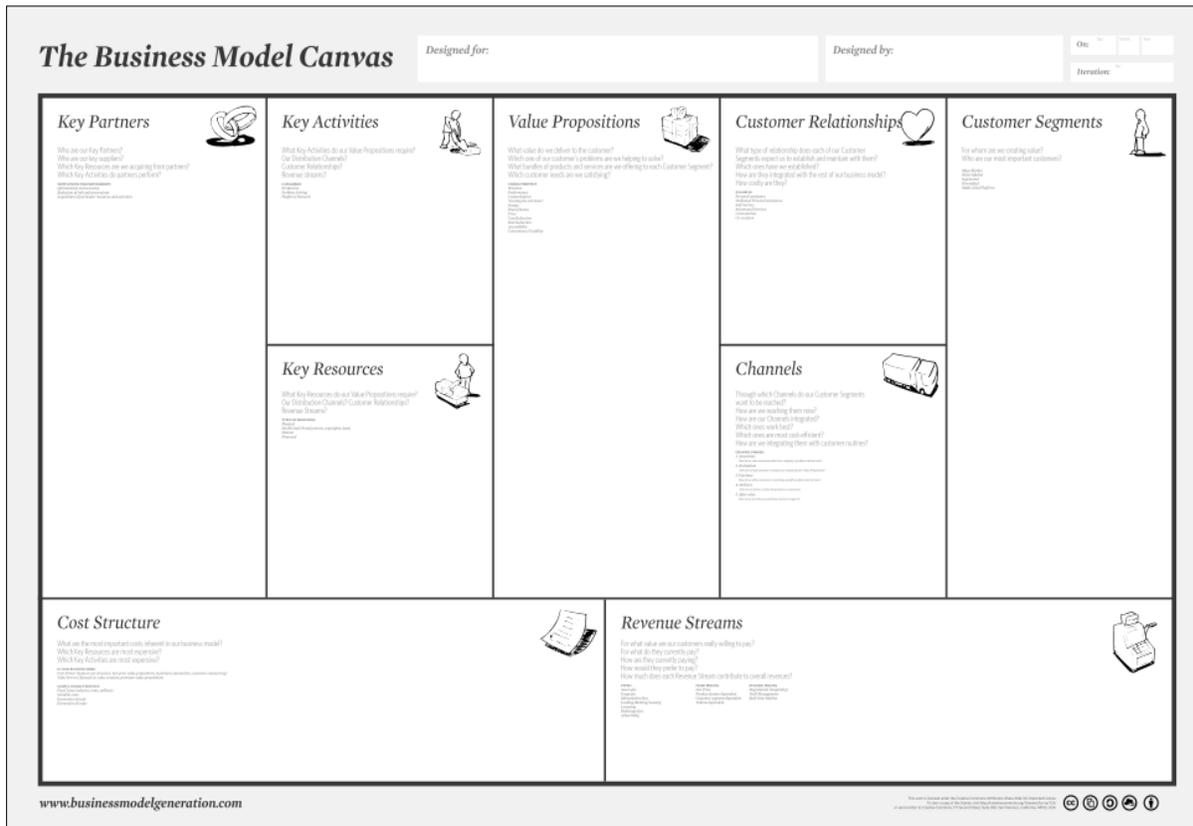
FIGURE 1
THE 9 BUSINESS MODELING BUILDING BLOCKS (Osterwalder, 2010)

Business Model Canvas Building Blocks	Description
Value Propositions	the goods and services offered and their distinguishing advantage
Key Activities	the most important activities in executing the value proposition
Key Resources	the resources necessary to create value for the customer
Partner Network	relationships considered essential to accomplishing the value proposition
Customer Segments	the specific target market(s) intended to be served
Channels	the proposed channels of distribution
Customer Relationship	the type of relationship the firm wants with its customers
Cost Structure	characteristics of the cost and expense structure
Revenue Streams	the way the firm will make money, how it is paid, and pricing

Based on his field research of the business development process in a number of organizations, Osterwalder concluded that these nine dimensions encompass the business decisions to sufficiently describe how a firm might approach a business opportunity, hence, providing a framework for developing, documenting and evaluating alternative approaches. Osterwalder suggests using the Canvas as a practical, hands-on tool to foster understanding, creativity, discussion, and analysis; for example, enlarging the Canvas to a wall-sized poster (depicted in Figure 2) to be annotated by teams of people with sticky notes or markers.

In practice, it is not unrealistic for a small group of experienced people to outline multiple business models in a very short period of time. Consider the situation of commercializing a new invention; it is not difficult to imagine a small team documenting multiple business models (e.g., licensing, partnering, outsourcing, in-house production, wholesaling, retailing or selling the intellectual property outright) in the matter of a few hours. In this way, a firm can efficiently answer the questions: “How can we ...?” and “What if we ...?” and build a solid foundation upon which a thorough evaluation process can begin.

**FIGURE 2
BUSINESS MODEL CANVAS BUSINESS MODELING FRAMEWORK**



THE BUSINESS MODEL MAP

The need for a Canvas-like framework arose while teaching an introductory entrepreneurship course for students with little prior business knowledge. Students from all disciplines—communications, health and wellness, interior design, the fine and performing arts, as well as business—were encouraged to enroll. The traditional “business plan” framework was inappropriate for this audience; their limited background required something equally comprehensive, but simple, high level and easy to construct. It was also important that the new framework integrated the pre-business planning activities of idea generation and concept development, as well as the aspect of “the entrepreneur as an individual.” After several iterations, an independently conceived model incorporating Osterwalder’s work emerged.

16 Components

The Business Model Map introduced in this paper extends Osterwalder’s work, adding some new building blocks and dividing others into more distinct parts. The Map identifies sixteen “components” of a Business Model. Entirely new components include Entrepreneurial Fit, Role/Position in the Value Chain and Intellectual Property while others like Operating Activities and Marketing Activities represent a more precise delineation among Osterwalder’s Key Activities. Figure 2 shows how the Business Model Map components correspond to the Business Model Canvas building blocks.

FIGURE 3
COMPARISON OF MAP COMPONENTS TO CANVAS BUILDING BLOCKS

Business Model Map Components	Business Model Canvas Building Blocks (Osterwalder, 2010)
1. Value Proposition a. Essential Means b. Essential Need	Value Proposition
2. Entrepreneurial Fit a. Current Position b. Personal/Technical/Strategic Fit c. Exit Alternatives	
3. Role/Position in the Value Chain	
4. Target Market/Customer	Customer Segments
5. Products/Services	Value Proposition
6. Channels of Distribution	Channels
7. Revenue Streams	Revenue Streams
8. Costs and Expenses	Cost Structure
9. Operating Activities	Key Activities
10. Key Suppliers and Partners	Partner Network
11. Resources and Assets	Key Resources
12. Intellectual Property	
13. Marketing Activities	Key Activities
14. Customer Relationships	Customer Relationship
15. Product Alternatives	
16. Industry/Economic Environment	

The added components call on the modeler to consider a more complete set of issues. Entrepreneurial Fit demands reflection on the entrepreneur’s personal strengths and limitations, ambitions and goals, personal values and lifestyle objectives. Since the process of building a business is both a personal as well as a professional journey, it is critical that “the entrepreneur as an individual” be included in the assessment. Similarly, if the model is intended to expand an existing business, it is important to consider the firm’s prior history, current strategy, and competencies.

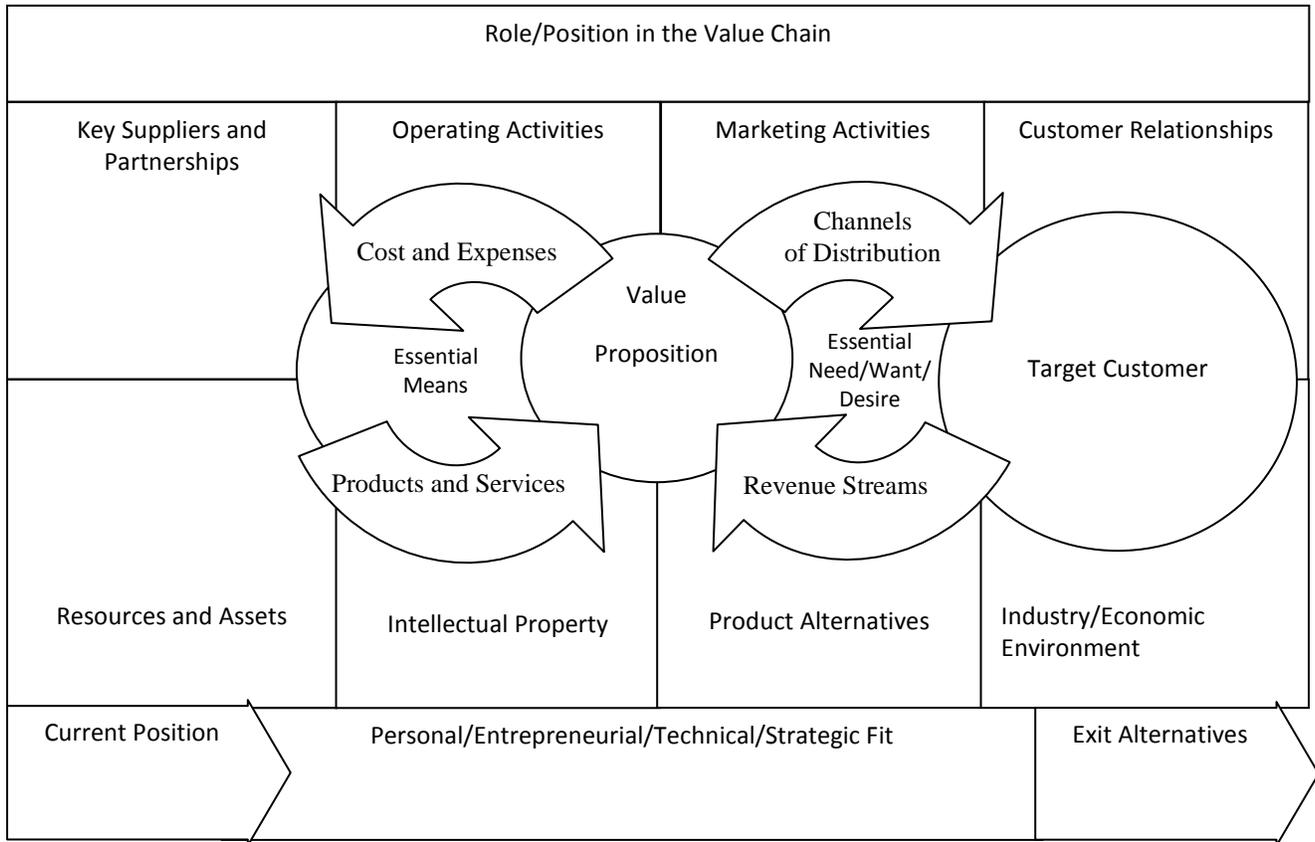
Describing the Role/Position in the Value Chain is important for perspective. By noting where the value proposition falls within the overall value chain, the modeler can not only define better the value added, products and services, channels, target market and other components, but also see where this particular opportunity fits into the larger scheme of value creation. Perhaps this higher-level perspective may lead to identifying a new alternative at a different value-adding stage. For example, an entrepreneur initially intent on opening a retail coffee shop might consider the alternatives of being a wholesaler, roaster, franchisee, or importer, any of which may, in fact, be more profitable, lower risk, or a better entrepreneurial fit.

Intellectual Property is important to consider if there are substantial intangible assets currently in place or required for the model to be successful. Explicitly noting a wealth or dearth of intellectual property complements the assessment of Fit. It can also suggest examining alternative business models such as licensing, consulting or selling property rights.

Adding Product Alternatives and Industry/Economic Environment components to the Map fill out the analysis by incorporating four major elements of business strategy: product substitutes, rivals, other threats, and dynamics in the external environment.

A graphical representation of the Business Model Map is shown in Figure 4. A table with working definitions and question prompts for each of the sixteen components is included as an Appendix.

**FIGURE 4
BUSINESS MODEL MAP (GRAPHICAL FORMAT)**



Like the Business Model Canvas, this Map can be enlarged and printed out for an entrepreneur or business development team to mark up or apply notes. Alternatively, the sixteen components can be presented in a table format. The tabular format is very effective for summarizing the results in an efficient and compact way, as demonstrated in the following example.

An Illustrative Example: Business Model Mapping for a Coffee Shop

The corner coffee shop is a very familiar business context and serves as an appropriate example to illustrate the Business Model Mapping tool. The process begins by capturing the essential idea – a coffee shop—then annotating the Map with short bullet points describing key assumptions, intentions or implications for each component.

There is no prescribed sequence to business modeling—it is a non-linear, iterative process; however, working through the components in the general order presented in Figure 5 has a logical flow and most likely speeds the process. In this case, the entrepreneur has identified two approaches for entering the coffee business: a small café and an outdoor kiosk.

FIGURE 5
BUSINESS MODELS MAPS: COFFEE CAFÉ VS. KIOSK (TABULAR FORMAT)

Business Model Mapping Components	Café	Kiosk
1. Value Proposition a. Essential Means b. Essential Need	<ul style="list-style-type: none"> • A café offering fine coffees and espresso-based drinks in a warm welcoming atmosphere 	<ul style="list-style-type: none"> • A kiosk offering fast and convenient hot coffee and espresso drinks for people on the go
2. Entrepreneurial Fit a. Starting Position b. Personal/Technical/Strategic Fit c. Exit Alternatives	<ul style="list-style-type: none"> • No prior restaurant experience • Changing careers • Enjoys meeting people • Enjoy the business then sell in a few years 	<ul style="list-style-type: none"> • No prior restaurant experience • Changing careers • Enjoys meeting people • Enjoy the business then sell in a few years
3. Role/Position in the Value Chain	<ul style="list-style-type: none"> • Final production step and direct delivery to customer 	<ul style="list-style-type: none"> • Final production step and direct delivery to customer
4. Target Market/Customer	<ul style="list-style-type: none"> • People seeking a place to enjoy a conversation and a cup of coffee 	<ul style="list-style-type: none"> • Professionals on the go, on break, between meetings or on an errand
5. Products/Services	<ul style="list-style-type: none"> • Coffee, tea, espresso, smoothies, pastries, bulk coffee, iced drinks, t-shirts and coffee-related gifts 	<ul style="list-style-type: none"> • Hot coffee and espresso drinks, to go snacks, soft drinks and water
6. Channels of Distribution	<ul style="list-style-type: none"> • Café in upscale business district, shopping district or neighborhood 	<ul style="list-style-type: none"> • Kiosk in high traffic location
7. Revenue Streams	<ul style="list-style-type: none"> • Sales of products • Premium pricing • Cash, credit and loyalty cards 	<ul style="list-style-type: none"> • Sale of drinks • Competitive/affordable pricing • Cash and prepaid punch cards
8. Costs and Expenses	<ul style="list-style-type: none"> • Coffee and food, milk, staff, utilities, lease, laundry, insurance, high fixed costs, high margin 	<ul style="list-style-type: none"> • Coffee and food, milk, outdoor space rental, wages, low fixed and variable costs, high margin
9. Operating Activities	<ul style="list-style-type: none"> • Drink preparation, table service, cleaning, maintenance, scheduling, purchasing, stocking inventory and merchandise, opening and closing 	<ul style="list-style-type: none"> • Drink prep, transportation, setup, teardown, cleaning, maintenance, purchasing and stocking kiosk, seasonal prep and shutdown
10. Key Suppliers and Partners	<ul style="list-style-type: none"> • Landlord, coffee supplier, other vendors, health department, neighboring businesses 	<ul style="list-style-type: none"> • Coffee supplier, kiosk vendor, equipment maintenance firm, licensing and permitting agencies
11. Resources and Assets	<ul style="list-style-type: none"> • Personal Savings, furniture, fixtures and equipment, inventory • Significant external funding 	<ul style="list-style-type: none"> • Kiosk and brewing equipment • Personal savings (small amount of external funding)
12. Intellectual Property	<ul style="list-style-type: none"> • Brand, name and trademark, logo, knowledge of coffee, location, specialty drinks, menu, atmosphere, décor, barista skills 	<ul style="list-style-type: none"> • Location, coffee making, barista skills, customer service skills, specialty drinks
13. Marketing Activities	<ul style="list-style-type: none"> • Signage, print media, website, promotions, events, advertising, sponsorships, coupons 	<ul style="list-style-type: none"> • Signage, word of mouth, coupons, social media promotions
14. Customer Relationships	<ul style="list-style-type: none"> • Personal, loyal, face to face, professional, yet friendly, repeat customers, sense of affinity to café 	<ul style="list-style-type: none"> • Personal, friendly, face to face, repeat customers
15. Product Alternatives	<ul style="list-style-type: none"> • Home brewing, nearby cafes, non-coffee beverages 	<ul style="list-style-type: none"> • Home brewing, office break rooms, nearby cafes, soft drinks
16. Industry/Economic Environment	<ul style="list-style-type: none"> • Coffee culture, limited disposable income 	<ul style="list-style-type: none"> • Coffee as a pick-me-up, faster pace of life

This example illustrates the relatively low level of detail and specificity necessary to effectively capture the key characteristics of each approach. The implications of each business approach are clear and the differences are made apparent. In just a short time (constructing this example took 45 minutes), an entrepreneur can comprehensively capture the implications of pursuing a business opportunity in a particular way and make a more than reasonably informed assessment of its potential risk and reward.

Other Applications

The same process can be applied by established firms. Business Model Maps can be prepared to evaluate introducing a new product or line, entering a new market or adding another channel. Mapping could be used to examine the implications of entering a business at different stages of the value chain (i.e., manufacturer or seller). It can also be used to deconstruct an existing business into its component business models and help management to see more clearly and exploit synergies and economies between new or existing opportunities.

This notion—that a firm can be conceptualized as multiple overlays of various business models—is particularly useful to the new entrepreneur looking ahead to developing a business plan. Having a set of alternative approaches to entering a market, the entrepreneur is capable of creating a plan in which the enterprise grows over time by incrementally laying on additional models. This approach makes business planning more flexible (and realistic) in the sense that the implementation plan can be presented in terms of incrementally introducing business model segments and achieving certain milestones, rather than a continuous and prescribed implementation of a single aggregated business model. This contingency approach allows the plan to be implemented as events transpire and opportunities present themselves without necessarily needing to prepare a new business plan.

The same benefits apply to other participants in the business development process. Investors, lenders and economic development agencies can better advise clients and assess risk.

SUMMARY

Business Modeling and its accompanying Business Model Map can be a powerful tool in developing and evaluating business opportunities before a formal business plan is prepared. The methodology is broadly applicable—for new ventures or established business, for non-profit and for-profit organizations, for incremental adjustments to business strategy or major departures into new markets.

Business Model Mapping can rapidly document and evaluate a large number of opportunities making it vital to firms in fast-moving markets or high-technology environments. Every participant has the opportunity to present their ideas, share them with others, and feel satisfied that it has received a fair hearing. After all maps are completed, leadership can begin the process of sifting through alternatives, setting priorities, laying out implementation stages and determining resource requirements over a realistic planning horizon.

Coupled with the resources and new programs promoting and supporting entrepreneurs and entrepreneurship, Business Modeling, in general, and Business Model Mapping, in particular, have the potential to speed development and shorten the time between conception and launch. Business Modeling is not a substitute for business planning—training and education in business planning is still necessary—but Business Modeling should also be part of an entrepreneur’s education. For example, Small Business Development Centers supported by the SBA, schools of business and other providers could include Business Modeling in their course offerings, even making it a pre-requisite to Business Planning.

ENDNOTE

1. “Business model” in this paper is distinguished from a “revenue model.” A business model is comprehensive, encompassing all major facets of a firm, whereas, a revenue model is focused more narrowly on how the firm makes money (e.g., sale of merchandise, subscriptions, fees, advertising, etc.).

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APPENDIX BUSINESS MODEL MAPPING COMPONENT DESCRIPTIONS

Business Model Mapping Components	Component Descriptions
1. Value Proposition a. Essential Means b. Essential Need	<ul style="list-style-type: none"> • What is the nature of the value provided for which the customer is willing to pay? <ul style="list-style-type: none"> ○ What are essential characteristics of the means or method employed? ○ What are the defining needs, wants or desires being met?
2. Entrepreneurial Fit a. Starting Position b. Personal/Technical/Strategic Fit c. Exit Alternatives	<ul style="list-style-type: none"> • What is current situation? • Fit with the entrepreneur’s or existing business’s... <ul style="list-style-type: none"> ○ Ambitions and goals? Attributes and competences? Management expertise? Technical and managerial experience? • What are the exit and harvest options?
3. Role/Position in the Value Chain	<ul style="list-style-type: none"> • What is the value adding activity? <ul style="list-style-type: none"> ○ Extraction? Processing? Fabrication? Transportation? Wholesale? Retail?
4. Target Market/Customer	<ul style="list-style-type: none"> • Who is the target customer or market? <ul style="list-style-type: none"> ○ Demographics? Needs? Wants? Desires? Sources of pain? • What is the customer’s buying behavior? <ul style="list-style-type: none"> ○ Order-winning criteria? Order-qualifying criteria?
5. Products/Services	<ul style="list-style-type: none"> • What products and/or services are offered? <ul style="list-style-type: none"> ○ Differentiating characteristics? Mix? Functions and features? • What research and design infrastructure is required?
6. Channels of Distribution	<ul style="list-style-type: none"> • What are the channels for distributing the product or service? <ul style="list-style-type: none"> ○ Retail? Wholesale? Distributors? Online Storefronts?
7. Revenue Streams	<ul style="list-style-type: none"> • How will the business make money (revenue model)? • How is the product priced? • How is the transaction executed?
8. Costs and Expenses	<ul style="list-style-type: none"> • What are the major cost and expense components? <ul style="list-style-type: none"> ○ What categories are unique to this model? Require close management?
9. Operating Activities	<ul style="list-style-type: none"> • What operating activities are critical to this business model? <ul style="list-style-type: none"> ○ Product design? Logistics? Production? Transaction processing? ○ Quality? Flexibility? Cost? Speed?
10. Key Suppliers and Partners	<ul style="list-style-type: none"> • Who are the key suppliers and upstream partners? <ul style="list-style-type: none"> ○ Joint ventures? Contractual relationships? Vendors? Networks?
11. Resources and Assets	<ul style="list-style-type: none"> • What resources or assets are critical to implementing the business model? <ul style="list-style-type: none"> ○ Plant and equipment? Human capital? Infrastructure?
12. Intellectual Property	<ul style="list-style-type: none"> • What intellectual property is essential to the business model? <ul style="list-style-type: none"> ○ Distinctive competencies? Patents? Trade Secrets? • How much additional research and development is required? <ul style="list-style-type: none"> ○ Critical milestones? Resources required? Timeframe?

13. Marketing Activities	<ul style="list-style-type: none"> • How are the products and/or services to be marketed? <ul style="list-style-type: none"> ○ Product Features and Attributes? Pricing, Placement and Positioning? • Selling methods and strategy? <ul style="list-style-type: none"> ○ Advertising and Promotion? Media? Branding?
14. Customer Relationships	<ul style="list-style-type: none"> • What kind of relationship between the customer and the company is desired?
15. Product Alternatives	<ul style="list-style-type: none"> • What alternatives exist to address the customers' needs, problems or desires?
16. Industry/Economic Environment	<ul style="list-style-type: none"> • What are the relevant industry, market, technological, and cultural trends? • What broad economic trends or factors are relevant?