Aligning Business Architecture with Business Design

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Global Boeing

- Customers and customer support in 150 countries
  - Total revenue in 2014: $90.8 billion
  - 70 percent of commercial airplane revenue historically from customers outside the United States
- Manufacturing, service, and technology partnerships with companies around the world
  - Contracts with 21,500 suppliers and partners globally
- Research, design, and technology-development centers and programs in multiple countries
- More than 165,000 Boeing employees in more than 65 countries
#1 INNOVATOR IN AEROSPACE AND DEFENSE

For eight years running, Boeing is the No.1 Innovator in Aerospace and Defense.

Agenda

- Overview
- What is Business Design?
- Application to Business Architecture
- Key Model Views and Related Mappings
- Establishing a Design-Oriented Business Architecture Practice
- Looking Ahead
- Summary
What is Business Design?

“Business design is a human-centered approach to creative problem solving. It applies design methods and mindsets to business challenges.

- Business design can be effectively used to
  - Help better understand customers
  - Create new experiences and
  - Design innovative business strategies and models”
    – University of Toronto, Rotman School of Management*

- Design thinking is fundamental to business design

Design Thinking

“Design Thinking is a discipline that uses a designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.”

– Tim Brown, IDEO*

Design Thinking for Business Architects

- **Empathetic**
  - Outside-in customer/stakeholder perspective
  - Observe users to identify hidden needs

- **Integrative**
  - Think holistically
  - Design for integration

- **Optimistic**
  - Ask “what’s possible?”
  - Embrace risk, uncertainty, and constraints

- **Experimental**
  - Iterative design/build (build to think)
  - Validate, learn and adjust

- **Collaborative**
  - Co-creation
  - Open process (everyone can participate)
Visualization is Important

- Key roles
  - Graphic recording
  - Graphic facilitation
  - Envisioning
  - Holistic innovation

- Key competencies
  - Empathetic listening
  - Real time sketch
  - Production art
  - Domain knowledge
  - Design thinking / systems thinking
Business Architecture with Design Focus

Design Phases

- Initial Discussions
- Information Gathering
- Conceptual Design/Feasibility
- Design Development

Building Architecture

- Vision, goals
- External influencers
- Market analysis
- As-Is business design/architecture
- Customer experience design
- Business model innovation
- Operating model design
- Business architecture blueprints


1 A Guide to the Business Architecture Body of Knowledge (BIZBOK®). 2015
Conceptual Design Artifacts and Business Architecture Blueprints

Business Models and Operating Model Sketches

Conceptual Design Artifacts

Detail Architecture Blueprints

embodied in

Capability Map

Organization Map

Information Map

Value Map
Strategy to Execution (Traditional)

- Driven by annual cycles
- Siloed processes
- Non-integrated initiatives
- Waterfall methods
- Heavy decision gates
Innovation Required

“We don’t have a traditional strategy process, planning process like you’d find in traditional technical companies. It allows Google to innovate very, very quickly…”

– Eric Schmidt, Google
Another Way (Designed Focused)…

- Iterative learning processes with dynamic feedback loops
- Responsive to change
- Design-oriented
- Collaborative
- Adaptable, flexible

Business architecture is performed early to support strategy development & integrated planning

Activity cycles based on Lean Startup* principle #5: Build, Measure, Learn (http://theleanstartup.com/principles)

Customer Experience Design

Business Model Innovation & Strategy

Business Architecture Design & Planning

Product & Service Innovation

Solution Development

Deploy & Scale

Target market entry

Business Model Lifecycle (shrinking)
Business Model Innovation

- Business model innovation is a design-oriented approach to strategic planning whereby new opportunities and ways to create, deliver, and capture value are explored to achieve a sustainable competitive advantage.

- Business model frameworks include:
  - Business Model Canvas, Alexander Osterwalder et al., 2010
  - Business Model Cube, Peter Lindgren and the EU Neffics project, 2012
“A business model describes the rationale of how an organization creates, delivers, and captures value”*

“A value proposition describes the benefits customers can expect from your products and services”*

…and how those products and services are differentiated from your competitor’s

Operating Model (OM)

An operating model describes the intended level of integration and standardization of an organization across its key activities, organization, and technology domains.

Business Model Aspects

The OM describes how an organization’s business models are implemented.

Business Model
Innovation & Strategy

The Business Model Canvas

- Key Partners
- Key Activities
- Value Propositions
- Customer Relationships
- Customer Segments
- Key Resources
- Channels
- Cost Structure
- Revenue Streams

Operating Model Aspects
Operating Model Design

Business Model
Innovation & Strategy

- OMs can be described in one page sketches
- Example OM design sketches include:

Operating Model Sketch

Core Diagram*

Business Model to OM Mapping (Example)

- Current OM constrains target business models
- OM designed to realize target business models

Business Model Canvas

Operating Model Sketch

Derived OM Views

Business Model Canvas

Core Diagram
Customer experience (CX) is the sum of all experiences a customer has with a supplier of goods and/or services, over the duration of their relationship with that supplier*

Customer Experience Lifecycle**


Customer Experience (CX) Design

- Customer experience design methods model key aspects of the customer experience: Customer, interactions, artifacts/systems, and perceptions.
- Example CX design methods include:

  - Customer Experience Model (CEM) (J. Teixeira et al)**
  - CX Journey Map (Oracle)*
  - CX Design Canvas (Oracle)*


CX Design to Business Model Mapping (Example)

Customer Experience Design

Value Proposition Canvas

Business Model Innovation & Strategy

Business Model Canvas
Business architecture design results in “a blueprint of the enterprise that provide a common understanding of the organization and is used to align strategic demands of the business with tactical needs.”

The architecture blueprint includes:

- **Strategy Map**
- **Capability Map**
- **Organization Map**
- **Value Map**

Business architecture maps not shown:
- Initiative map
- Policy map
Business/Operating Model to Business Architecture Mapping (Example)

- Examine each model view to ensure all mapping elements have been identified
- Validate against the CX model

**Business Model**
- Innovation & Strategy

**Business Architecture**
- Design & Planning

**Operating Model Sketch**

**Business Model Canvas**

**Value Map**

**Product Map**

**Initiative and policy maps not shown**

**Direct Mapping**

**Select Derived Mapping**

**Organization Map**

**Capability Map**

**Information Map**

**Strategy Map**

**Stakeholder Map**
Other Considerations

- Additional inputs
  - Business motivation
  - Business environment
- Analytical methods
- Strategic business scenarios & alternatives
- Requirements
- Integration and quality checks
Establishing a Design-Oriented BA Practice

- Personal readiness
- Expertise development
- Practice
- Sharing your learnings
- Networking
- Organizational readiness
Looking Ahead

- Open frameworks and methods needed
- Improved business and operating model methods
- BMI/OM/Strategy integration
- Model interoperability
- Visual methods with BI/Analytic support
- Simulation methods and tools
Summary

- Disruptive change is the norm – and it’s accelerating
- Innovation will become necessary to remain competitive
- Business design is in its infancy
- Key mindsets and skills are critical
- Use sketch models and visualization techniques for conceptual design
- Map conceptual design to business architecture
- Stay close to the customer experience
Discussion