BUSINESS CONCEPTS FOR LIFE SCIENTISTS
A FREE ONLINE COURSE IN BUSINESS STRATEGY, FINANCE AND BUSINESS DEVELOPMENT

Business Concepts for Life Scientists: Strategy

Deb Dauber, PhD, MPH
Healthcare Consultant
UCSF Alum

Sandy Waugh-Ruggles, PhD
Founder and Innovator
UCSF Alum

Content Contributors
Michael Penn, MD, PhD
Anatol Kreitzer, PhD
Kinkead Reiling, PhD
Brad Grueter, PhD
Calli Merkel, MBA, PhD
Strategy course objectives

By the end of class you will be able to:

1. Define strategy and how scientific enterprises use strategy
2. Identify the value proposition of a scientific enterprise
3. Determine key stakeholders for a scientific enterprise
4. Discuss how organizational context impacts budget and resource allocation
Defining strategy

- **Strategy** is how a scientific enterprise plans to conduct activities in order to achieve a set of overarching goals.

- The purpose - to act as a road map that guides decisions and establishes boundaries on the scope of work.

<table>
<thead>
<tr>
<th>In biotechnology…</th>
<th>How the company will achieve clinical vision and corporate growth targets</th>
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<tbody>
<tr>
<td>In academia…</td>
<td>How the lab will decide which research questions and grants to pursue</td>
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Value Proposition
The enterprise’s technology and market context

Organizational Context
Capabilities, structure and funding of the enterprise

Strategy
Value Proposition
The enterprise’s technology and market context

Organizational Context
Capabilities, structure and funding of the enterprise

Strategy
The Value Proposition addresses the value of the technology to key stakeholders

Value Proposition

- WHY is the work important?
- WHAT is unique about the technology or work product?
- WHO has a stake in the outcomes of the work and what do they value?
**WHY** is the work important?

**Market Need**
- Meet an unmet need
- Build a better mousetrap
Akashi therapeutics: a company focused on a specific market need

Company Overview

Akashi Therapeutics is a clinical stage biopharmaceutical company. Our mission is to develop treatments for Duchenne muscular dystrophy and other rare pediatric diseases. Akashi was founded by leading patient organizations and biotechnology industry veterans and is managed by a seasoned team of drug development experts. Akashi is developing a cocktail of medications with the goal of transforming Duchenne from a 100% fatal, aggressive muscle-wasting disease to a chronic, manageable condition.

WHY?
WHAT is unique about the technology?

Technology Attributes

- Efficacy
- Potential for portfolio growth
- Competitive technology
- Barriers to entry for competition
Catalyst Biosciences: Founded based on a unique scientific platform

Natural Protease → Catalyst Proteases → Disease Targets

WHAT?
The path to a robust strategy

Need-based

Technology-based

WHAT?

WHY?
The path to a robust strategy

Need-based

WHY? ➔ WHAT?

Technology-based

WHAT? ➔ WHY?
Two different paths: both incorporate the WHAT and the WHY

1. Expertise in Duchenne Muscular Dystrophy (DMD)
2. Identify and acquire rights to promising compounds
3. Develop drugs for DMD

1. Expertise in protease biochemistry and selection
2. Identify a disease-specific target of interest
3. Create & test novel proteases as treatments for that disease
Understanding key stakeholders is fundamental to creating value

Need-based

WHY? → WHAT? → WHO?

Technology-based

WHAT? → WHY? → WHO?
Academic Stakeholders

**FUNDERS**
- Granting agencies
- Corporations

**COMMUNICATIONS**
- Publishers
- Conference organizers

**RESEARCH PEERS**
- Students
- Post-docs
- Lab managers

**EMPLOYERS**
- Department chairs
- University administration

**EXTERNAL**

**INTERNAL**
Pharma Industry Stakeholders

CUSTOMERS
• Providers (Physician or hospital)
• Patients
• Payers (Insurer, CMS)

INVESTORS

REGULATORS

VENDORS

INFLUENCERS
• Caregivers
• Patient advocacy groups

MANUFACTURERS

EXTERNAL

INTERNAL
Value proposition must take into account differing stakeholder values

**Patients**
- Drug safety & efficacy
- Drug convenience
- Drug cost

**Investors**
- Revenues
- Current portfolio
- Long-term sustainable growth

**Employees**
- Mission and portfolio
- Culture
- Long-term sustainability
Re-cap: Important elements to a value proposition

Value Proposition

- WHY is the work important?
- WHAT is unique about the technology or work product?
- WHO has a stake in the outcomes of the work and what do they value?
Advanced topics

Much work is done in support of the development of the value proposition, including:

- Competitive analysis
- Market research
- Stakeholder or customer mapping
- SWOT analysis

A scientific enterprise’s value proposition drives articulation of:

- Mission and vision
- Product or brand positioning
- Messaging
Parallels with Academia:

- Would you consider your lab to be primarily need-based or technology-based?

- Tell us about how you think about the Why’s and the What’s of your lab’s research program.

- Who are the stakeholders that you think about the most? Can you give an example of how you might address stakeholders differently?