BUSINESS CONCEPTS FOR LIFE SCIENTISTS

A FREE ONLINE COURSE IN BUSINESS STRATEGY, FINANCE AND BUSINESS DEVELOPMENT

Business Concepts for Life Scientists: Strategy

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Value Proposition

The enterprise’s technology and market context

Organizational Context

Capabilities, structure and funding of the enterprise

Strategy
The Organizational Context defines the situational confines of the enterprise

Organizational Context

• Where in the development cycle is the enterprise?
• What is the structure of the enterprise?
• What resources are available to achieve the objectives?
The developmental stage of the enterprise shapes the strategy

Product development follows a cycle from concept to the clinic to market, and the enterprise short and long term strategy will vary based on the number of products underway, and their place in the product development cycle.
The organizational structure shapes the direction of growth.

- Fully integrated therapeutics company
- Contract Research Organization
- Virtual Drug Development
- Clinical Development Partnership
The resources available to the enterprise effect the strategy

Funding and organizational capabilities constrain the actions of the enterprise and influence the strategy.

- Budget constrains near term actions and investment in growth.

Organizational capability is the capacity of the enterprise to reach the goals and objectives.

- Organizational capabilities effect the speed and type of work that can be accomplished by the enterprise.
Recap: The Organizational Context defines the situational confines of the enterprise

Organizational Context

- Where in the development cycle is the enterprise?
- What is the structure of the enterprise?
- What resources are available to achieve the objectives?
Organizational Context
Capabilities, structure and funding of the enterprise

Value Proposition
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Strategy
The strategy reflects both the long term and short term organizational goals

Long-term Strategy (5+ years):
• Aspiration

Mid-term Strategy (3-5 years):
• Preparatory, Directional

Short-term Strategy (1-2 years):
• Tactical, Focused, Incremental

Annual goals and objectives
Catalyst in Year 1

VALUE PROPOSITION

Treat significant diseases with novel proteases against targets not amenable to antibody therapeutics.

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

ORGANIZATIONAL CONTEXT

1. Developmental Stage: Pre-clinical discovery / Basic research
2. Organizational structure: Fully integrated biotherapeutics company
3. Funding: $10.2 MM Series A financing
4. Organizational capability: 10 employees focused on protease biology, cell-based assays and establishing animal studies
Catalyst Biosciences Year 1 Strategy

Short-term Strategy (1-2 years):
Through internal and partnered discovery research, advance compounds out of pre-clinical discovery.

Goals and Objectives:
• Show proof of concept in cell-based and animal models for one disease target
• Build out the pre-clinical development infrastructure and engineering process
• One pre-clinical partnership

Mid-term Strategy (3-5 years):
Build a portfolio of products and partnerships at the clinical stage to prove the technology in patients.

Long-term Strategy (5+ years):
Build to become a publicly-traded, fully integrated therapeutics company with direct, measurable patient impact.
Large companies often follow an annual strategic planning cycle using strategic decisions to drive the goals and objectives for the coming year.
New leadership can drive a change in enterprise strategy

- 2007 – Founded, a “WHAT” company based on induced pluripotent stem cell (iPSC) technology
- 2011 – Patent protecting the utility of human iPSC technology; senior staff fired and shifts focus.
- 2012 – Back to drug discovery basics, pivot to a “WHY” company focused on developing novel therapies for neurodegenerative disease, specifically discovering monoclonal antibodies
- 2013 – iPierian spins out True North Therapeutics- founded to develop orphan drug indications.
- 2014 – BMS buys Ipierian for $175 MM down and up to $550 MM in milestone payments. Nancy Stagliano continues at the helm at True North.
Advanced Topics: Developing Strategy Requires

Analysis of the following areas:

- Competitive landscape
- Market opportunity assessment
- Market segmentation

Use of the following skills sets:

- Budgeting
- Forecasting
  - Enterprise growth planning
- Metrics
- Portfolio plan
- Commercial planning
- Program management
Parallels with Academia

- What is the development cycle of projects in your lab?
- How many projects do you have in each part of the cycle?
- What are organizational capabilities of your lab?

- Tell us about your near and long term strategies for your lab?
Wrap Up

Resources to learn business strategy

- University courses
- Coursera, EdX, or iTunes University
- Harvard Business Review (HBR)
- FierceBiotech daily newsletter (or sister publications)
- Earnings calls from public companies of interest.