How to Create A Business Plan

UNIVERSITY STARTUP DEVELOPMENT WEBINAR SERIES
SPEAKERS

Tony Stanco, JD, LL.M.
NCET2 Executive Director
Former U.S. Securities and Exchange Commission Senior Attorney

Robert D. Hisrich, PhD
NCET2 Startups Development Officer
Bridgestone Chair of International Marketing
Associate Dean of Graduate and International Program
Kent State University
BACKGROUND ON THE STARTUP DEVELOPMENT PROGRAM
Commercialization Model Timeline

- 2015: Congress seeks to understand commercialization of $B137 annual R&D in Fed Labs / Universities
- 2015: NCET2 Congressional Commercialization Summit – Corporate Sub-committee Formed
- 2016: First Model Proposed
- 2016: Model Vetting Roadshows: CA; PA; NY
- 2016: Congressional Briefs
- (Pilot) First Demo Day
- Second Demo Day
- 2017: Startup Development Officers Pgm Announced
- 2017: IP2 Startup Pgm Announced
Startup Development Program

• Help university faculty, researchers, and students create, develop and fund market aligned university startups

• We have experienced Startups Development Officers (SDOs) that is market-aligned
Researcher Entrepreneur Workforce Development

• The Startup Development Program
  – Early management teams of graduating students and faculty with SDO support
    • Business plan, proof-of-concept, prototyping, early product devt
  – “Commercialization Experiments”
    • Get to work with Fortune 500 companies looking for entrepreneurial researchers to hire or to bring in through startups
Benefits

• Startups/Faculty/Researchers/Students
  – Access to professional SDO talent to help create, develop, and fund your startup

• Universities
  – Moving IP to market for significant market impacts
  – Graduating students into startups and working with Fortune 500
HOW TO CREATE A BUSINESS PLAN
# Aspects of a Business Plan

## SECTION 1
- Title Page
- Table of Contents
- Executive Summary

## SECTION 2
### 1.0 Description Of Business
- Description of the Venture
- Product(s) and/or Service(s)
- Type of Industry
- Mission Statement
- Business Model

### 2.0 Description Of Industry
- Future Outlook and Trends
- Analysis of Competitors
- Industry and Market Forecasts

### 3.0 Technology Plan
- Description of Technology
- Technology Comparison
- Commercialization Requirements

### 4.0 Marketing Plan
- Market Segment
- Pricing
- Distribution
- Promotion
- Product or Service
- Sales for First 5 Years
Mercury Biomed, based in Cleveland, Ohio, is led by a team of world-leading experts in perioperative warming, medically induced hypothermia, bio heat transfers and human thermoregulation. Mercury was formed to design, manufacture, market and sell innovative and cost-competitive medical solutions for the rapidly growing, $2.8 billion, therapeutic patient temperature management market.

PRODUCTS/TECHNOLOGIES:

- **A Smart Temperature Management Platform** is supported by 2 issued U.S. patent as well as 6 patent pending internationally. Our novel platform and unique approach represent a smarter, safer and more seamless way of moving heat into and out of the body than what currently exists. The system taps into, and utilizes the body's most efficient, intrinsic means of moving heat into and out of the body, whereas the competition relies on inefficient and/or brute force methods of heat transfer. We work with the body rather than against it.

- **WarmSmart**, an FDA Class II device launching in early 2017, will maintain normal body temperature and prevent hypothermia resulting from the administration of general anesthesia. The result is a reduction in infection risk to the patient, providing greater surgical site access, enhancing usability and making the O.R. more comfortable for surgeons and staff.

Mercury has partnered with Innovative Medical Equipment (IME) (owner of the ThermaZone technology) and has licensed the rights to use and modify IME’s market proven Thermal therapy technology platform, its supply chain and existing manufacturing processes, as well as its expertise in Quality and Regulatory.

PRIMARY TARGET MARKET:

WarmSmart targets the perioperative warming market in hospitals, specifically the operating room. In the US alone, there are over 50 million inpatient surgical operations performed every year. Mercury's technology is a smarter, more effective and safer way of maintaining normothermia perioperatively. WarmSmart is associated with world-renowned thought-leaders in patient warming and is poised to take advantage of the new private payer and Medicare reimbursement requirements for perioperative temperature control (reduced payment if patient temperature is not above 35°C out of the OR). The Company's beachhead markets for the warming application include orthopedic and cardiovascular surgeries, operations involving implantable devices and ultra-clean surgical environments where surgical site infections result in devastating outcomes. Forced-air warming technologies, the current standard of care, are uniquely vulnerable in these market segments (particularly in orthopedic implant cases) because of the infection risk to the patient, as well as several other logistical drawbacks.

COMPETITION:

The Bair Hugger forced-air warming technology (acquired by 3M for $810M in 2010) and Mistral Air (Stryker) are our primary competitors in the patient warming space. Forced air warming has several drawbacks, including: disrupting air-flow patterns in the OR, allegedly increasing infections rates; a reliance on covering large surface areas of the body during surgery, which is not practical; and utilizing convective heat transfer via circulating air, one of the most inefficient means of heat transfer.

USE OF FUNDS:

The Company is seeking funds to complete clinical trials, finalize product development, attain 510k clearance, conduct post-market studies, develop sales, marketing and operational efforts in the U.S., and prepare for manufacturing.

**Table 2.3**

<table>
<thead>
<tr>
<th><strong>Business Plan</strong></th>
<th><strong>(Executive Summary) – Mercury Biomed, LLC</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCEPTION DATE</strong></td>
<td>February 2015</td>
</tr>
<tr>
<td><strong>PATENT PORTFOLIO</strong></td>
<td>2 issued, 6 pending</td>
</tr>
<tr>
<td><strong>EXISTING FUNDING SOURCES</strong></td>
<td>Brad Pulver, Bahman Guyuron, Terry Ozan, The State of Ohio – 3rd Frontier CALF LOAN</td>
</tr>
<tr>
<td><strong>PRE SEED FUNDS RAISED</strong></td>
<td>$1M ($300K convertible note, $700K CALF loan)</td>
</tr>
<tr>
<td><strong>SERIES A FUNDS SOUGHT</strong></td>
<td>$2M</td>
</tr>
</tbody>
</table>

**DISCLAIMER:** This does not constitute the sale or the offer of sale of any securities. Any such offer or solicitation will be made only by means of a subscription agreement and other documentation to be entered into between IME and an Investor (the “Fund Documents”), which Fund Documents should be read in their entirety, including the risk factors and potential conflicts of interest described therein.
The Problem

Higher Education institutions are faced with increasing scrutiny to track and demonstrate employment and degree outcomes for students in proportion to increased tuition.

Career services offices are operating in the dark ages (excel, local databases, pencil/paper), to coordinate thousands of students.

Student retention is ‘the new enrollment, with millions in tuition revenue at risk on every campus. Universities and vendors only know how to accurately address financial aid gaps, but have not successfully addressed the second largest factor, belonging.

The Solution

- On-demand advisory board of successful alumni mentors
- Mobile-first SaaS solution for Universities
- Profile-matching & LinkedIn API connectivity
- Boosts post-graduate success, retention, and alumni giving

Founders

Kate Volzer, CEO
- 5 Years Admissions & Career Services Leadership, overseeing UChicago increased applications by 84% and yield by 34%
- VP Business Dev at DecisionDesk; first 7-figure client contract and partnerships with Salesforce, Oracle, Parchment and Hyland
- Chicago Booth MBA in Economics, Entrepreneurship, and Strategic Management

John Knific, President/COO
- CEO/Co-Founder at DecisionDesk
- Oversaw growth rates between 50-110%; managed 25+ employees; Raised $7m+ angel, venture, and state capital
- Entrepreneur in Residence at Oberlin College

Addressable Market

- Seed/Beachhead | Ivy + and Coalition Cohort: 600, $15
- Series A | Higher Education (4 Year/Grad): 4,700, $500m
- Series B | Corporate Education: 10,000+, $1b+

Pilot Customers

Late-Stage Pipeline

2016 Go-To-Market

- Annual Subscription. Targeting $30,000, 2-year term
- Inside sales rep (ISR) driven sales. Anticipated 3-4 month sales cycle
- 5 Pilot Development Partners. Pre-pay for 2016 launch and access to product advisory board
- User Conference Launch. UChicago sponsored user summit exclusively for initial tranche of customers

Fundraise

$750k-$1m Seed Round

Milestones:

- Recruit CTO/Lead Dev
- Initial 2-5 hires
- Successful launch 5 pilot customers
- Book -30 new customers by year-end 2017 projecting $1m revenue
- Validate sales process in preparation for Series A

Advisors

Jason Palmer
Deputy Director
Bill & Melinda Gates Foundation

Meredith Daw
AVP & Exec Director of Career Advancement
The University of Chicago

Deb Mills-Scofield
Management Consultant
Mills-Scofield, LLC
# Aspects of a Business Plan

<table>
<thead>
<tr>
<th>SECTION 1</th>
<th>SECTION 2</th>
<th>SECTION 3</th>
<th>SECTION 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Title Page</td>
<td>1.0 Description Of Business</td>
<td>3.0 Technology Plan</td>
<td>4.0 Marketing Plan</td>
</tr>
<tr>
<td>• Table of Contents</td>
<td>• Description of the Venture</td>
<td>• Description of Technology</td>
<td>• Market Segment</td>
</tr>
<tr>
<td>• Executive Summary</td>
<td>• Product(s) and/or Service(s)</td>
<td>• Technology Comparison</td>
<td>• Pricing</td>
</tr>
<tr>
<td></td>
<td>• Type of Industry</td>
<td>• Commercialization Requirements</td>
<td>• Distribution</td>
</tr>
<tr>
<td></td>
<td>• Mission Statement</td>
<td></td>
<td>• Promotion</td>
</tr>
<tr>
<td></td>
<td>• Business Model</td>
<td></td>
<td>• Product or Service</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Sales for First 5 Years</td>
</tr>
</tbody>
</table>
## Market Segmentation by Type of Market

<table>
<thead>
<tr>
<th>SEGMENTATION CRITERIA</th>
<th>BASIS FOR TYPE OF MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSUMER</strong></td>
<td><strong>INDUSTRIAL</strong></td>
</tr>
<tr>
<td>DEMOGRAPHIC</td>
<td>age, family size, education level, family life cycle, income, nationality, occupation, race, religion, residence, sex, social class</td>
</tr>
<tr>
<td>GEOGRAPHIC</td>
<td>region of country, city size, market density, climate</td>
</tr>
<tr>
<td>PSYCHOLOGICAL</td>
<td>personality traits, motives, lifestyle</td>
</tr>
</tbody>
</table>
# Market Segmentation by Type of Market

<table>
<thead>
<tr>
<th>SEGMENTATION CRITERIA</th>
<th>BASIS FOR TYPE OF MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONSUMER</td>
</tr>
<tr>
<td>BENEFITS</td>
<td>durability, dependability, economy, esteem enhancement, status from ownership, handiness</td>
</tr>
<tr>
<td>VOLUME OF USE</td>
<td>heavy, medium, light</td>
</tr>
<tr>
<td>CONTROLLABLE MARKETING ELEMENTS</td>
<td>sales promotion, price, advertising, guarantee, warranty, retail store purchased service, product attributes, reputation of seller</td>
</tr>
</tbody>
</table>
Marketing Mix

- **Product Mix**
  - quality
  - assortment
  - breadth and depth of line
  - guarantee
  - service
  - package

- **Price Mix**
  - price/consumer reactions relationships
  - price/cost relationships
  - price/competitive reactions relationships

- **Distribution Mix**
  - Distribution Channels
    - retailers
    - wholesalers
    - representatives
  - Physical Distribution
    - storage
    - inventory
    - transportation
    - warehousing

- **Promotion Mix**
  - advertising
  - personal selling
  - publicity
  - sales promotion
  - social media

Firm’s Controllable Marketing Elements

Firm’s Total Offering

Target Market
## Aspects of a Business Plan

<table>
<thead>
<tr>
<th>SECTION</th>
<th>5.0 Financial Plan</th>
<th>6.0 Production Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Pro Forma Income Statement</td>
<td>• Manufacturing Process (Amount Subcontracted)</td>
</tr>
<tr>
<td></td>
<td>• Pro Forma Cash Flow Statements</td>
<td>• Physical Plant</td>
</tr>
<tr>
<td></td>
<td>• Pro Forma Balance Sheet</td>
<td>• Machinery and Equipment</td>
</tr>
<tr>
<td></td>
<td>• Break-even Analysis</td>
<td>• Suppliers of Raw Materials</td>
</tr>
<tr>
<td></td>
<td>• Sources and Applications of Funds Statement</td>
<td>• Outsourcing Aspects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION</th>
<th>7.0 Organization Plan</th>
<th>8.0 Marketing Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Form of Ownership</td>
<td>• Description of Company's Operation</td>
</tr>
<tr>
<td></td>
<td>• Identification of Partners and/or Principal Shareholders</td>
<td>• Flow of Orders and Goods</td>
</tr>
<tr>
<td></td>
<td>• Authority of Principals</td>
<td>9.0 Summary</td>
</tr>
<tr>
<td></td>
<td>• Management-Team Background</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Roles and Responsibilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• of Members of Organization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Organizational Structure</td>
<td></td>
</tr>
</tbody>
</table>
Financial Statements

- Sources and Uses of Funds Statement
- Pro Forma Income Statement – 5 year summary
- Pro Forma Income Statement – first year by month
- Pro Forma Income Statement – second year by quarter
- Pro Forma Income Statement – third year by quarter
- Pro Forma Cash Flow Statement – 5 year summary
- Pro Forma Cash Flow Statement – first year by month
- Pro Forma Cash Flow Statement – second year by quarter
- Pro Forma Cash Flow Statement – third year by quarter
- Pro Forma Balance Sheet – Years 1, 2, 3, 4 and 5
## Aspects of a Business Plan

<table>
<thead>
<tr>
<th>SECTION 2</th>
<th>5.0 Financial Plan</th>
<th>6.0 Production Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Pro Forma Income Statement</td>
<td>• Manufacturing Process (Amount Subcontracted)</td>
</tr>
<tr>
<td></td>
<td>• Pro Forma Cash Flow Statements</td>
<td>• Physical Plant</td>
</tr>
<tr>
<td></td>
<td>• Pro Forma Balance Sheet</td>
<td>• Machinery and Equipment</td>
</tr>
<tr>
<td></td>
<td>• Break-even Analysis</td>
<td>• Suppliers of Raw Materials</td>
</tr>
<tr>
<td></td>
<td>• Sources and Applications of Funds Statement</td>
<td>• Outsourcing Aspects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7.0 Organization Plan</th>
<th>8.0 Marketing Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Form of Ownership</td>
<td>• Description of Company's Operation</td>
</tr>
<tr>
<td>• Identification of Partners and/or</td>
<td>• Flow of Orders and Goods</td>
</tr>
<tr>
<td>• Principal Shareholders</td>
<td></td>
</tr>
<tr>
<td>• Authority of Principals</td>
<td></td>
</tr>
<tr>
<td>• Management-Team Background</td>
<td></td>
</tr>
<tr>
<td>• Roles and Responsibilities</td>
<td></td>
</tr>
<tr>
<td>• of Members of Organization</td>
<td></td>
</tr>
<tr>
<td>• Organizational Structure</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9.0 Summary</th>
</tr>
</thead>
</table>

---

**NCET2 National Council of Entrepreneurial Tech Transfer**

**3rd UNIVERSITY STARTUPS DEMO DAY**

WASHINGTON, D.C. • OCTOBER 16-17, 2017