



CAMBRIDGE CAMBRIDGE CENTRE  
CARES FOR ADVANCED RESEARCH AND  
EDUCATION IN SINGAPORE LTD.

# Business Planning and Creation of Startups

This document provides information that will be useful for Cambridge CARES PIs, co-PIs, Research Fellows, Research Assistants and PhD students to quickly learn about i) how to write business plans, and ii) resources available in the NTU, NUS and Singapore eco-systems for researchers embarking on their start-up journey or attempting to commercialise their research findings and technologies.

The information provided here would also be useful to researchers and PIs from other CREATE centres/projects.

We have attempted to curate the information provided here so that the document is short enough that researchers can quickly identify relevant resources. This is a live document, and we will update the contents as we learn about new resources. However, in order to keep the document short and accessible we have not listed every available resource, so your resource may not be mentioned; do tell us. The objective is to have curated information available quickly rather than being a comprehensive document.

If you have comments or suggestions, please send them to [olivia.lee@cares.cam.ac.uk](mailto:olivia.lee@cares.cam.ac.uk).

Prepared by the C4T IRP-BB Team  
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## **Business Planning and Innovation for Start-ups**

### **1. Web-based courses to learn about writing business plans for start-ups**

#### **A. Open course Sloan - Nuts and Bolts of Business Plans (Video + PDF)**

These available videos and PDF files cover the following topics.

- A. Part 1: Introduction and Overview of Business Plans  
Part 2: Refining and Presenting Your Venture Idea
- B. Part 1: Marketing and Sales  
Part 2: Business Models
- C. Part 2: Financial Projections of Business Plan
- D. Part 1: Founder's Journey  
Part 2: Legal Issues

Link: <https://ocw.mit.edu/courses/sloan-school-of-management/15-s21-nuts-and-bolts-of-business-plans-january-iap-2014/>

Refer to the Appendix for details of the course.

#### **B. Coursera - Entrepreneurship Specialization (offered by Wharton)**

This covers the conception, design, organization, and management of new enterprises and is designed to take you from opportunity identification through launch, growth, financing and profitability with guidance from Wharton's top professors, along with insights from current Wharton start-up founders and financiers.

Link: <https://www.coursera.org/specializations/wharton-entrepreneurship>

#### **C. Coursera - Innovation: From Creativity to Entrepreneurship Specialization**

This specialization addresses how to recognize and question assumptions and constraints to identify and capitalize on opportunities. It will be of value to both aspiring and practicing entrepreneurs as well as employees in established firms who are interested in becoming innovative leaders in an interconnected world.

Link: <https://www.coursera.org/specializations/innovation-creativity-entrepreneurship>

**D. Coursera – Innovation for Entrepreneurs: From Idea to Marketplace:  
(Offered by University of Maryland)**

Key questions answered within the course include: What are the key indicators of innovation opportunities? What steps are critical for entrepreneurs to bring innovations to the marketplace? What innovation strategies are valuable for new ventures to establish and maintain a competitive advantage?

Link: <https://www.coursera.org/learn/innovative-entrepreneur>

**E. Database of Sample Business Plans**

Several samples/examples of business plans are available in the NTU entrepreneurship database available from NTU library. These can be accessed with an NTU account.

Link: <https://libguides.ntu.edu.sg/c.php?g=918078&p=6619185>

## 2. Resources for Startups and Research Commercialisation

### A. NTU Resources

#### NTUitive

It provides mentor and funding information.

- What you get: <https://www.ntuitive.sg/entrepreneur/incubation-support/services>

You can find information about legal services, early stage funding, incubation managers, etc. on the incubation support page.

- Mentor information: <https://www.ntuitive.sg/entrepreneur/incubation-support/team-of-mentors>

They offer services including: marketing and communications, IP management, go-to-market strategies and connections to help start-ups launch their products. They also provide link to industry for market entry and sustainable growth, access to industry networks to complement the technical expertise of entrepreneurs.

Link: <http://www.ntuitive.sg/>

### B. NUS Resources

#### NUS Enterprise

##### I. The NUS Industry Liaison Office

The NUS Industry Liaison Office provides a range of services and solutions to support research activities – from putting in place non-disclosure agreements to research collaboration agreements and from patent protection to funding and entrepreneurship support.

#### NUS GRIP by NUS Industry Liaison Office

NUS GRIP (Graduate Research Innovation Program) is aimed specifically to support deep tech-based start-up with good market and business potential.

Link: <http://nus.edu.sg/grip/>

## **II. Lean Launch Pad (LLP) Singapore Program**

This 10-week program helps research scientists and engineers turn their inventive technologies into commercially viable products and feasible business ventures. LLP Singapore focuses on helping teams discover and validate the commercialisation potential of their innovation and aims to enhance the pipeline of early stage technologies through the form of commercially viable products, licensed technologies and high-tech spin-offs.

Link: <https://leanlaunchpad.nus.edu.sg/>

## **III. NUS Start-Up Runway**

This is a university-based incubation / acceleration program in Singapore, tailored to support start-ups from any point of their entrepreneurial journey.

Link: <https://enterprise.nus.edu.sg/supporting-entrepreneurs/nus-start-up-runway/growth-stage/support-services/>

Application link: <https://nusenterprise.org/query/apply>

### 3. Funding Opportunities for Start-ups Commercialisation

#### A. EDB: Research Incentive Scheme for Companies (RISC)

The Research Incentive Scheme for Companies (RISC) encourages the development of research and development capabilities and technologies through the support of projects in the areas of science and technology.

#### B. EDB: Intellectual Property (IP) Development Incentive (IDI)

The IP Development Incentive (IDI) aims to encourage the use and commercialization of intellectual property rights arising from research and development (R&D) activities.

Link: <https://www.edb.gov.sg/en/how-we-help/incentives-and-schemes.html>

#### C. Singapore government-accredited Startup Incubators

**Action Community for Entrepreneurship (ACE):** works with startups working in all sectors.

**JCS Venture Lab:** works with startups in advanced manufacturing and engineering.

The above are examples of government-accredited incubators. An exhaustive list of incubators and funding sources in Singapore is available at this link:

<https://www.startupdecisions.com.sg/singapore/incentives/startup-funding-sources/>

#### D. Startup SG (Enterprise Singapore)

**Startup SG Founder:** Startup SG Founder provides mentorship and startup capital grant to first-time entrepreneurs with innovative business ideas. Enterprise Singapore will match \$3 for every \$1 raised by the entrepreneur.

Link: <https://www.startupsg.net/programmes/4894/startup-sg-founder>

**Startup SG Tech:** Through Startup SG Tech, companies may receive early-stage funding for the commercialization of proprietary technology.

Link: <https://www.startupsg.net/programmes/4897/startup-sg-tech>

**Startup SG Loan:** Companies with 10 or fewer employees that have products or services on the market may access working capital financing of up to S\$100,000 to support their day-to-day business operations.

Link: <https://www.enterprisesg.gov.sg/Financial-Assistance/Loans-and-Insurance>

**E. Early-Stage Venture Funding (by NRF)**

Under this initiative, the National Research Foundation (NRF) Singapore invests up to S\$10 million on a matching basis, to seed corporate venture capital (VC) funds that invest in Singapore-based early stage high-tech companies.

Link: <https://www.nrf.gov.sg/funding-grants/early-stage-venture-fund>

**F. NTU Research Hub**

NTU research hub provides various research support. The grant support information can be found at this link:

<https://research.ntu.edu.sg/researchgrant/Pages/index.aspx>

**G. SMART Innovation Grant**

This grant promotes SMART researchers as well as faculty from other Singapore universities and research institutes, to transform their lab results to marketplace.

Link: <https://smart.mit.edu/innovation-centre/innovation-centre-grants-programmes>

## Appendix:

### Supplementary for Nuts and Bolts of Business Plans (Video+PDF)

1	<p>Part 1: Introduction and Overview of Business Plans</p> <p><i>Speaker</i> <a href="#"><u>Joe Hadzima (bio)</u></a></p> <p>Part 2: Refining and Presenting Your Venture Idea</p> <p><i>Speaker</i> <a href="#"><u>Stephen Pearse (bio)</u></a></p>	<p><i>Introduction to Business Plans</i> What is it, why do I need it and what is it used for? Practical do's and don'ts in preparing a Business Plan. Things to keep in mind in writing a Business Plan which will improve your chances of obtaining funding and running a successful business.</p> <p><i>Introduction to Virtual Ink</i> During this course we will be referring to the Virtual Ink Business Plan as an example.</p> <p><i>Presenting Your Idea</i> Entrepreneurs are always "selling" their ideas to potential employees, customers, partners and investors. Part of this class will be an interactive session with students and others who are in the process of developing a business plan.</p>	<p><a href="#"><u>Introduction to Business Plans (PDF)</u></a></p> <p><a href="#"><u>How to Make a Pitch (PDF - 1.2MB)</u></a></p>
2	<p>Part 1: Marketing and Sales</p> <p><i>Speakers</i> <a href="#"><u>Bob Jones (bio)</u></a></p>	<p>Many entrepreneurs, especially technology based entrepreneurs, are accused of being too in love with their technology or concept. They rationalize that if they develop a better mousetrap then the product will sell itself. However, a good technology or product idea is a necessary but not a sufficient condition to establishing and growing a successful business venture. Who will buy the product? How will you reach buyers? How much will they pay?</p> <p>If you have an idea for a product or service, how do you determine whether there is a market for it? How do you develop a marketing strategy? How do you turn your idea and market research into sales? What do you need to do to convince potential investors that there is a market and that your idea is viable? If you don't have a specific product or service idea but you see a potential need, how do you turn the need into a product or service?</p> <p>This session will discuss these issues and provide guidance on how to approach the marketing section of your business plan.</p>	<p><a href="#"><u>Finding Your Customer (PDF - 1.1MB)</u></a></p>



	<p>Part 2: Business Models</p> <p><i>Speaker</i> <a href="#">Rich Kivel (bio)</a></p>	<p>You have identified a market. Now the most important question "How Do You Make Money"? This session will discuss Business Models.</p>	<p><a href="#">Business Model Slides (PDF - 1.1MB)</a></p>
3	<p>Part 2: Financial Projections</p> <p><i>Speaker</i> <a href="#">Charlie Tillett (bio)</a></p>	<p>Armed with an understanding of the market for your products how do you figure out what financial resources you will need to bring a product to that market? This portion of the program will introduce some financial projection techniques based on actual business experience.</p>	<p><a href="#">Business Plan Financial Projections (PDF - 1.4MB)</a> <a href="#">Financial Template (XLS)</a> <a href="#">Financial Template (PDF)</a></p>
4	<p>Part 1: Founder's Journey</p> <p><i>Speaker</i> <a href="#">Ken Zolot (bio)</a></p> <p><i>Panel</i> <a href="#">Gihan Amarasiriwardena (bio)</a> <a href="#">Nina Dudnik (bio)</a> <a href="#">John Harthorne (bio)</a></p>	<p>What road are you embarking upon in starting a company, and what obstacles threaten your success? What else and who else will you need? These are the themes that are explored by Ken Zolot in course 6.933 "The Founder's Journey."</p> <p>In this session of Nuts and Bolts, Ken provides an overview of these important questions with a panel of entrepreneurs.</p>	<p>No presentation slides.</p>
	<p>Part 2: Legal Issues</p> <p><i>Speaker</i> Joe Hadzima</p>	<p>Identifying and dealing with legal issues in the Business Plan. Securities laws and the Business Plan – How to avoid Going to Jail without passing Go and without Collecting \$200. Intellectual Property Law-Patents, Copyrights, Trademarks and Tradeseecrets. Major hidden tax traps in starting a business – how to avoid generating phantom income and taxes. General questions and answers on legal issues for the entrepreneur: What you always wanted to know about the law but were afraid to ask/pay for.</p>	<p><a href="#">Legal Issues and Business Plans (PDF - 1.6MB)</a></p>