



TTC - MESTRADO EM MICROBIOLOGIA APLICADA
IE - MESTRADO EM MATEMÁTICA APLICADA ECONOMIA & GESTÃO
ITT – ENGENHARIA BIOMÉDICA E BIOFÍSICA
IE/EMP - OPCIONAL PARA 2º CICLO/3º CICLO

FCUL – 2017/2018

AULA 1
19 FEV 2018

Programa (1)

- 19/FEV- Apresentação da disciplina. Expectativas e Objectivos. Métodos de avaliação ao longo do semestre. O Método de Alex Osterwalder – Business Model Canvas. K2BTEAMS – *learn by doing*. Escolha dos projectos K2B e grupos de trabalho.
- 26/FEV- Emprego versus negócio. Empreendedorismo versus Inovação/TTC. A valorização económica do conhecimento técnico-científico. A indústria versus a Universidade. Conceitos e definições base. Ferramentas de gestão e técnico-científicas. Soft skills e vantagem no mercado actual.
- 05/MAR-Inovação e o processo de desenvolvimento de novos produtos. O processo *from bench to market*. Alex Osterwalder e o *Business Model Canvas* – o Método e as diferentes parcelas. O Cliente, o Utilizador e o Influenciador. A Competição.
- 12/MAR- BM canvas: A Proposta de valor. Conceito de valor na exploração/comercialização de novos produtos. Avaliação da atractividade de oportunidades de negócio. Protecção da propriedade intelectual/patentes.

Programa (2)

- ⦿ **19/MAR - Caso de Estudo: FreshTEC: Revolutionizing Fresh Produce. Apresentação, debate e conclusão***
- ⦿ 09/ABR - BM Canvas: Os Canais e Relações. Comunicação com o cliente. Principais métodos. Marketing Mix. Análise de Mercado. Mercado e nicho de mercado. Análise da Indústria. Análise SWOT: apresentação do conceito e casos de estudo. Debate sobre uma SWOT de um negócio actual.
- ⦿ **16/ABR-1ª Apresentação das propostas de valor das K2BTeams. (10 min).**
- ⦿ 23/ABR- Visão e Missão. Plano de acção: objectivos – pressupostos – milestones. BM Canvas: Capacidades e competências. Actividades e Recursos Chave. Parcerias. Trabalho no 2º Draft do BM Canvas.

Programa (3)

- 23/ABR- BM Canvas: Principais fontes de Custos. Fontes de receita. Projeções financeiras. Risco versus benefícios. Fontes de capital: 3Fs, business angels, capital de risco, banca. O Plano de negócios – decisão final. *Pitching*. A arte de “convencer”.
- **07/MAI- 2ª apresentação K2B: Estratégia *from bench-to-market* das K2BTeams (10 min)**
- **14/MAI- A capacidade de vender um sonho: Pitch individual sobre tema à escolha (2 min). (25/Nov)**
- 21/MAI– Seminário (a anunciar)
- **28/MAI- Pitch final das K2BTEAMS (5 min). EXECUTIVE SUMMARY & BM Canvas Final. Conclusões e encerramento da disciplina.**

HOW WILL WE TEACH YOU?

- ⦿ *LEARNING BY DOING* Methodology
- ⦿ Story Telling & Inspirational Teaching
- ⦿ Challenges & Gamification (yep, competition will occur!)

**YOU = MINI ENTREPRENEURIAL IMMERSIVE
EXPERIENCE (K2B)**

BOOKS YOU SHOULD CHECK

- **Clark, T., Osterwalder, A. e Pigneur, Y (2009), “Business Model Generation”. Self Published. ISBN:978 2 8399 0580 0.**
- **Osterwalder, A., et al. (2014), “Value Proposition Design”**
- Clark, T., Osterwalder, A. e Pigneur, Y (2012), “Business Model You”
- Steve Blank. (2013). The four steps to Epiphany. Self Published. ISBN: 0 989 200 507.
- Eric Ries. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business, USA. ISBN 978-0-307-88789-4.
- Biodesign Website: <http://www.stanford.edu/group/biodesign/cgi-bin/ebiodesign/>
- Ambrose, G. e Harris, P. (2009), “Basics Design 08: Design Thinking”, AVA Publishing SA
- Blank, S. e Dorf, Bob (2012), “The Startup Owner’s Manual: The Step-By-Step Guide for Building a Great Company”, K & S Ranch
- Campinos, A., et al. (2010), “Código da Propriedade Industrial - Anotado”, Almedina
- Entrepreneurship Monitor – GEM Portugal 2014
- Ernest & Young (2011), “Nature or nurture DNA”
- Gleib, Jocelyn K. (2014), “Make your Mark: The Creative’s guide to building a business with impact”, Amazon Publishing
- Hoffman, R. e Casnocha, B. (2012), “The startup of you: Adapt to the Future, Invest in Yourself, and Transform your Career”, The Alliance
- Kawasaki, G. (2004) “The Art of the Start: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything”
- Kelley, T., Littman, J. e Peters, T. (2001), “The Art of Innovation - Lessons in Creativity from IDEO, America's Leading Design Firm”, Profile Business
- Mota, A., e Custódio, C. (2006), “Finanças das Empresas”, Booknomics
- Rede ETC - Universidade de Lisboa (2014), "Princípios Gerais e Carta de Boas Práticas"
- Regulamento de Propriedade Intelectual da Universidade de Lisboa
- Rocha, M. e Carreiro, H. (2005), "Guia da Lei do Direito de Autor na Sociedade da Informação", Centro Atlântico
- Smith, J. e R. Smith (2004, 2ª Ed.), “Entrepreneurial Finance”, Willey
- Summers, J. E Smith, B. (2009), “Communication Skills Handbook”, John Willey & Sons Ltd
- Timmons, J., A. Zacharakis e S. Spinelli (2004), “Business Plans that Work”, McGraw-Hill
- Tzu, S. (1997), “The Art Of War”
- Vários Autores (2013), “A Alma do Negócio: Um guia prático para os empreendedores em Portugal”, Sabedoria Alternativa
- WSI (2013), “Digital Minds: 12 Things Every Business Needs to Know about Digital Marketing”, Friesenpress
- Young, S. (2012), “The Badass Book of Social Media and Business Communication”, Get in Front Communications, Inc.

LINKS YOU SHOULD CHECK

- ◉ <http://www.businessmodelgeneration.com/canvas/bmc> Tools for Business Model Canvas
- ◉ <https://www.entrepreneur.com/magazine> Entrepreneur Magazine
- ◉ <http://www.forbes.com/entrepreneurs/#5ae45ac06ce7> Forbes Magazine Entrepreneur Section
- ◉ <http://www.eofire.com/podcast/> ENTREPRENEUR ON FIRE PODCAST
- ◉ <patentscope.wipo.int/search/en/search.jsf> Patente Scope (base de dados do WIPO)
- ◉ <worldwide.espacenet.com/?locale=en> EP Espacenet (base de dados do EPO)
- ◉ www.iapmei.pt Instituto de Apoio às Pequenas e Médias Empresas e Inovação
- ◉ www.inpi.pt Instituto Nacional da Propriedade Industrial (INPI)

HOW WILL WE EVALUATE YOU?

- ⦿ Well... This is still a class and this is still College so we need grades!
- ⦿ Continuous (really!) evaluation = Compulsory presence
- ⦿ Soft skills development – Communication, participation, argumentation & evolution

- ⦿ **K2B Project – 3 PITCHs (team)**
- ⦿ **Individual PITCH (2 min/free subject)**
- ⦿ **Business SWOT**
- ⦿ **Case study**
- ⦿ **Personal SWOT**
- ⦿ **K2B materials to deliver**

K2B PROJECTS

- ⦿ Groups of 4-5 students (different backgrounds advised)
- ⦿ Project focused on your own ideas! (yes, start thinking!)
- ⦿ Goal is to validate idea w/ market directly!
- ⦿ We will use Business Model Canvas Method & Pivoting
- ⦿ Final proposal will be a valid & structured idea with a clear go to market strategy!

K2B projects

- ⦿ Initial Pitch (10 min)

(value proposition, business concept, clarity/focus, passion, innovation, time)

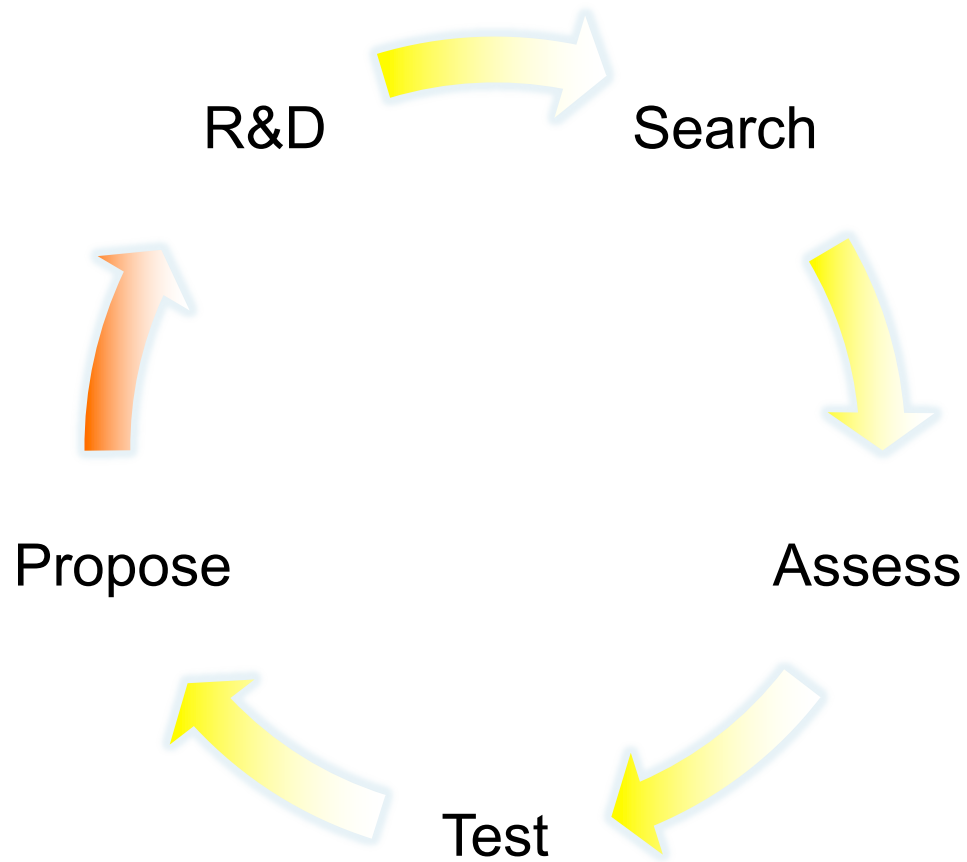
- ⦿ Deliver *Value proposition* (on closed envelope)

- ⦿ Intermediate Pitch (10 min) (problem, value proposition, business concept, business model, market/industry, cost estimation, team, clarity/focus, passion, innovation, time)

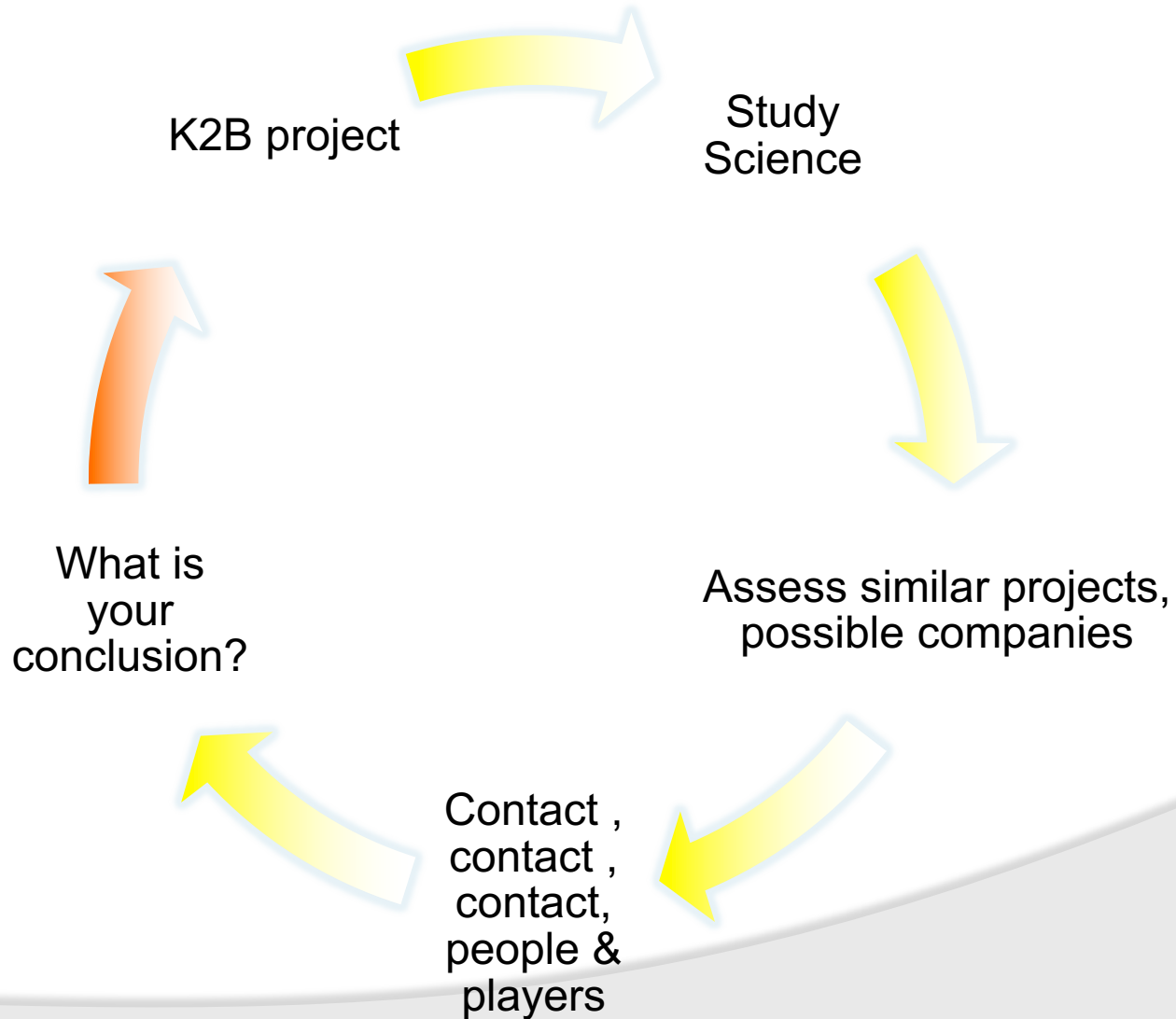
- ⦿ Final Pitch (5 min) (Problem, Value proposition, business concept, business model, market/industry, cost estimation, team, clarity/focus, passion, innovation, time)

- ⦿ Deliver executive Summary (ONLY IE) & BM Canvas variations + final (one week after end of classes)

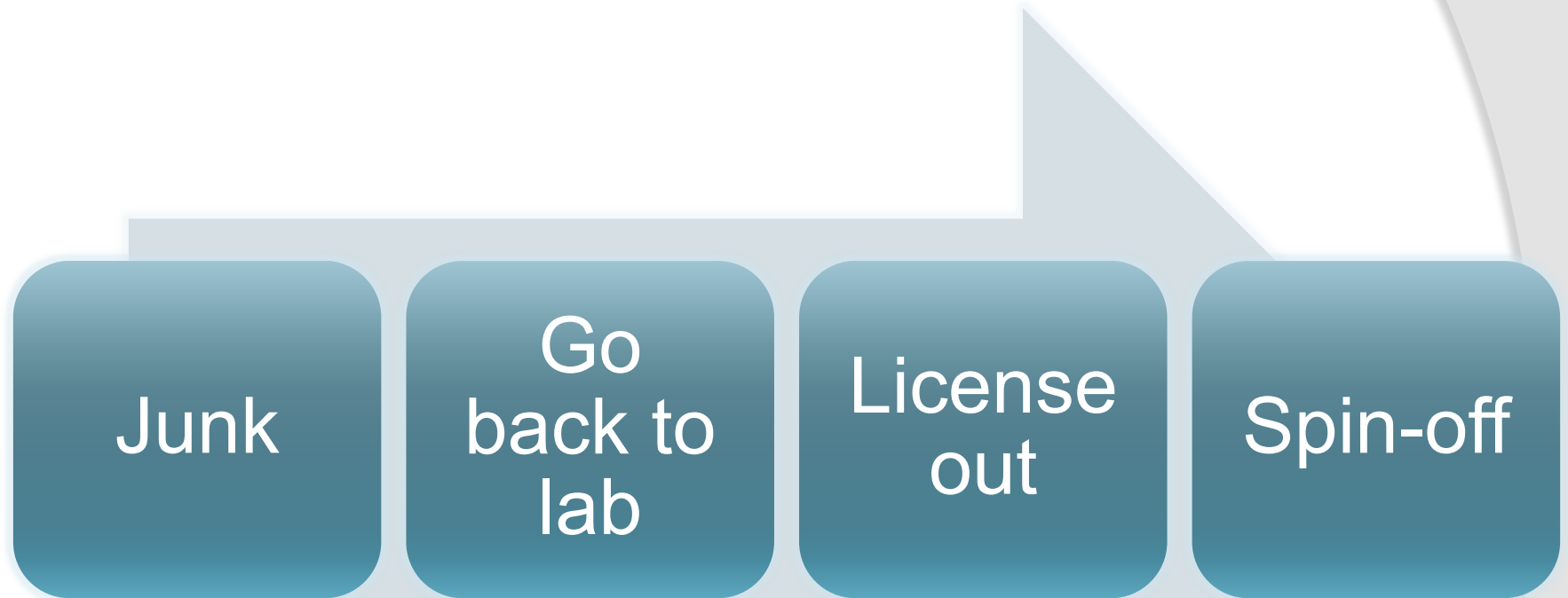
K2B Projects



K2B Projects



K2B Project

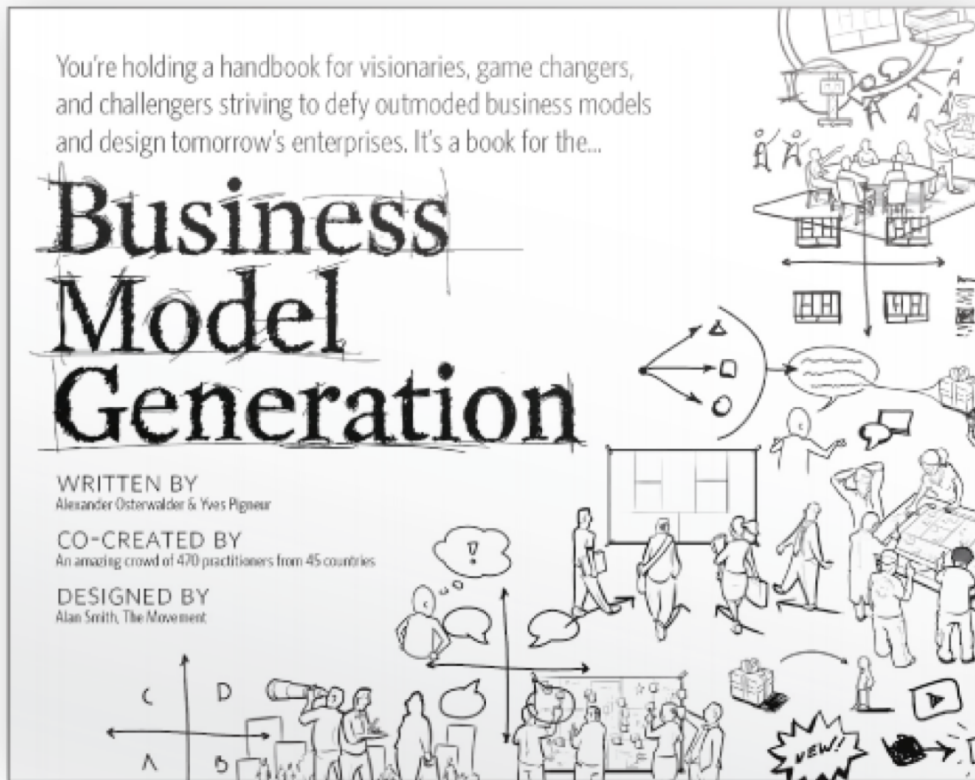


Very incipient
technology

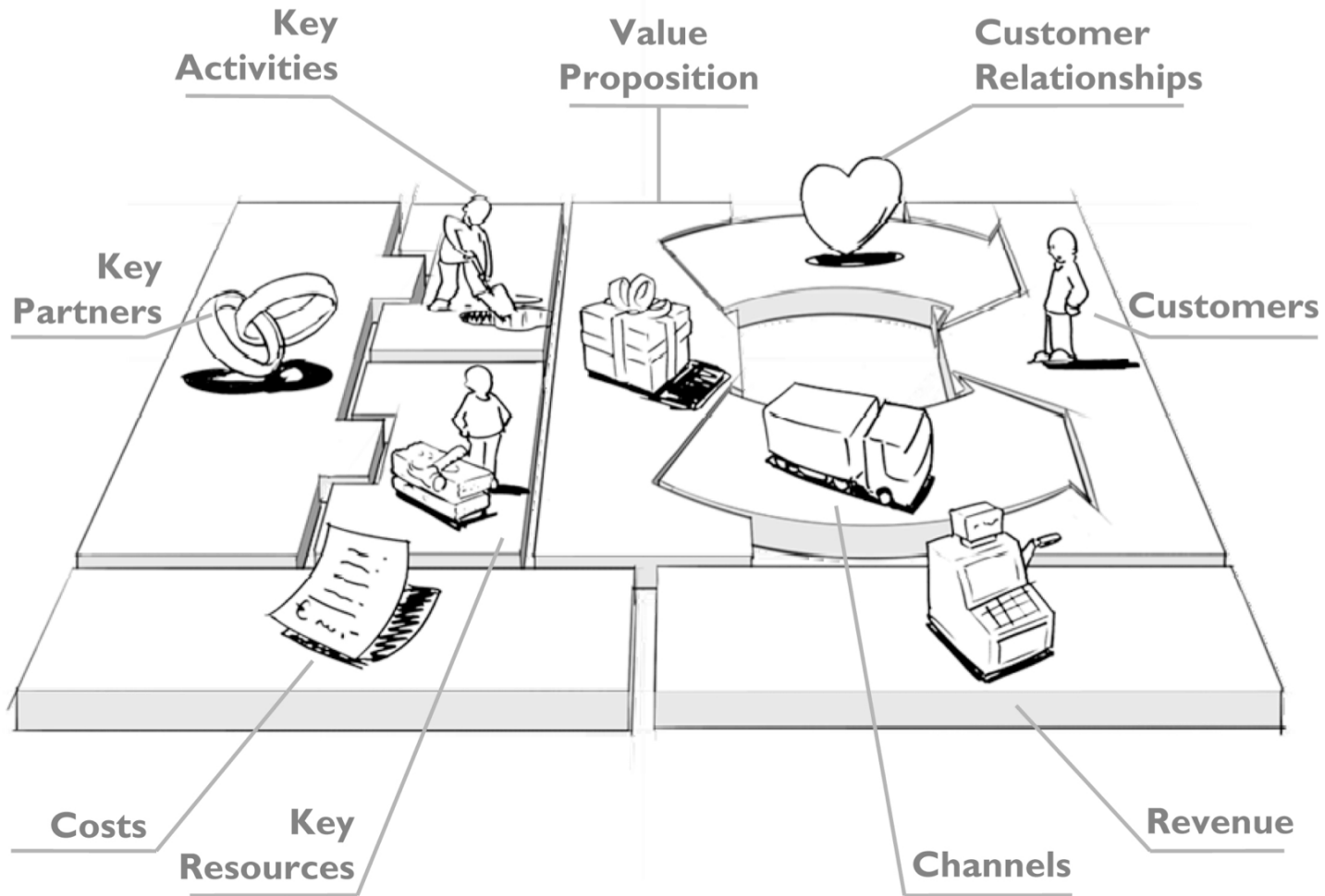
Near the market
technology

HOW WILL WE GET THERE?

ALEX OSTERWALDER



HOW WILL WE GET THERE?



drawings by JAM

HOW WILL WE GET THERE?










The Business Model Canvas

Designed for:

Designed by:

On: Day Month Year

Iteration:

<h3>Key Partners</h3>  <p>Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?</p> <p>IMPORTANCE FOR BUSINESS MODEL: Optimization of activities Reduction of risk and uncertainty Acquisition of particular resources and activities</p>	<h3>Key Activities</h3>  <p>What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?</p> <p>CATEGORIES: Production Problem Solving Platform/Network</p>	<h3>Value Propositions</h3>  <p>What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?</p> <p>CATEGORIES: Novelty Performance Customization "Getting the Job Done" Design Price Risk Reduction Self-Service Accessibility Convenience/Usability</p>	<h3>Customer Relationships</h3>  <p>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they?</p> <p>EXAMPLES: Personal assistance Personalized assistance Self-Service Automated Services Communities Co-creation</p>	<h3>Customer Segments</h3>  <p>For whom are we creating value? Who are our most important customers?</p> <p>Market Segments: Individual Organizational Marketplace</p>
<h3>Cost Structure</h3>  <p>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?</p> <p>BY HOW MUCH DOES EACH COST? Cost structure depends on structure, low-price value proposition, maximum automation, extensive outsourcing Value drivers (price-cost) ratio: variable proportion value proposition</p> <p>SCALE OF COST STRUCTURE: Fixed Costs (salaries, rents, utilities) Variable costs Economies of scale Economies of scope</p>	<h3>Key Resources</h3>  <p>What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?</p> <p>LEVELS OF RESOURCES: Physical Financial (Investment partners, copyrights, brand) Human Financial</p>	<h3>Channels</h3>  <p>Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?</p> <p>CHANNELS PRICES: 1. Distribution 2. Evaluation 3. Distribution (customer acquisition and engagement) (low, dependent) 4. Purchase 5. Distribution (customer acquisition and engagement) (low, dependent) 6. Delivery 7. After sales 8. Distribution (customer acquisition and engagement)</p>	<h3>Revenue Streams</h3>  <p>For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?</p> <p>TYPE: Asset Sale Usage Fee Subscription Fee Licensing/Royalty Fee Advertising Brokerage Fee Referral Fee</p> <p>REVENUE MODEL: Fixed Price Product/Service Dependent Customer segment dependent Volume Dependent</p> <p>REVENUE STREAM: Fixed Price Usage Fee Subscription Fee Licensing/Royalty Fee Advertising Brokerage Fee Referral Fee</p>	

WHY ME?...



- PhD in Biomedicine in **Imperial College** of **London**, UK
- University Professor for over 15 years
- Lived abroad and traveled over more than 50 countries
- **Founder** and **CEO** of BIOALVO SA
- Invited Professor at FCUL for Innovation & Entrepreneurship
- **Executive** Post-Graduation in **Harvard Business School**
- **Mentor** of NATIONAL NETWORK OF MENTOR
- FP7/H2020 Expert for Innovation Calls
- **EU** European Marine Board Expert
- **Founded** MY.SKINMIX
- Participated in more than 10 BP competitions and accelerators
- Executive Director of BLUEBIO ALLIANCE

Imperial College
London

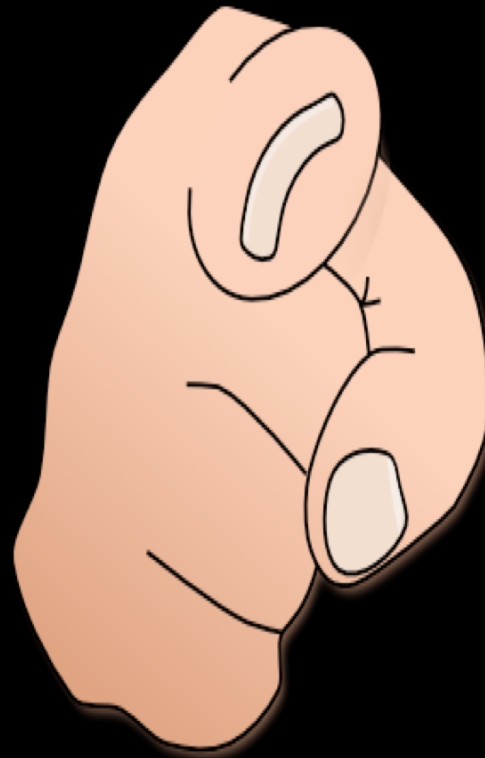


HARVARD | BUSINESS | SCHOOL

SO, WHAT ARE YOU THINKING TO DO NEXT?

- **GET A JOB?**
- **Preferably well paid!!!**
- **Where???**
- **How do you distinguish yourself from the rest of you in this room???**

HOW GOOD ARE
YOU?







**BUT I AM SORRY
TO SAY....**

**There are no
JOBS! BUT ...**

**THERE IS A LOT
OF WORK TO BE
MADE!**





WHAT DO I DO THAT ADDS

REMARKABLE

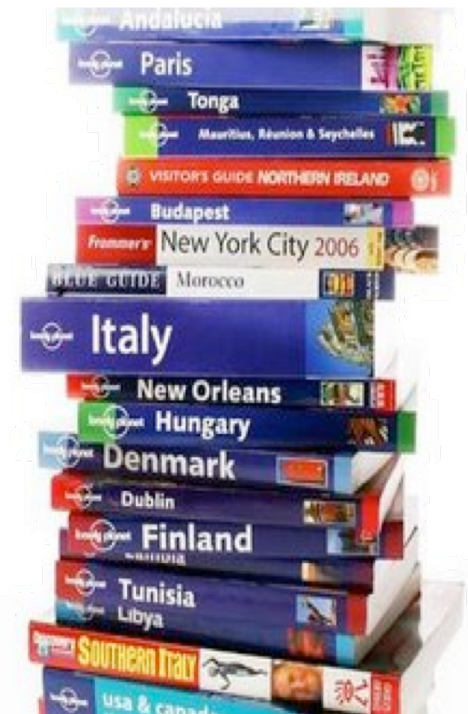
MEASURABLE

DISTINGUISHED

DISTINCTIVE

VALUE?

**PEOPLE THAT
KNOW THE
WORLD BEFORE
THEY “KNOW”
WHAT THEY
WANT!**



**SUPER
STOCK**

superstock.com



IT IS NOT ABOUT YOU ALONE!!

**WHAT DO YOU BRING TO YOUR EMPLOYER
AND SOCIETY??!!**

**BUT YOU COULD ALSO BECOME
AN ENTREPRENEUR?**

WHY NOT???



**DO YOU THINK I AM
CRAZY?**

MY CHALLENGE TO YOU!

