

Institut for Produktion og Ledelse
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Wellcome to the KU E'ship Class 2009 Knowledge based Entrepreneurship

Entrepreneurship is -
 the process of looking at things in such a way, that possible solutions to problems and perceived needs may evolve in venturing"
Saskatchewan Government; Ministry of Learning

Entrepreneurship is -
 the pursuit of opportunity without regard to resources currently controlled, for the creation of new economic value
Howard Stevenson, Harvard Business School

venture (plural ventures)
 A risky or daring journey or undertaking.
 Here: a daring commercial undertaking with an economical perspective

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AGENDA

13:05 – 13:20 Katapult: the university project incubator
 – and your coach, Peter Conrad Ottesen.
pco@science.ku.dk

13:20 – 13:45 The Venture Cup Competition
 Michael Bak, regional manager.
mb@venturecup.dk

13:45 – 13:50 Myself

14:00 – 14:50 Who are you? 30 seconds personal presentation of anyone to everybody.
 The Importance of Entrepreneurship

15:00 – 15:50 The KU e'ship course: rationale, contents, lecture plan etc.

16:00 - 16:50. The entrepreneur

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13:05 – 13:25 **Katapult**

Peter Ottesen
 Projektleder – Katapult

Forskning og Innovation
 Det Naturvidenskabelige Fakultet
 Københavns Universitet
 Tagensvej 16
 2200 København N

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KATAPULT
 INNOVATION
 OG NÆRKSÆTTERI
 FOR STUDERENDE

www.katapult.ku.dk

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13:25 – 13:50 **The Venture Cup Competition**
Michael Bak
 Regional manager
 Venture Cup Copenhagen
 Tel: +45 3815 3377 Email: mb<att>-venturecup.dk
 Mob: +45 27 148 248 Web: www.venturecup.dk

Winners 1,2,3 2007
Former students

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The Teacher

- M.Sc. CE. DTH, 1974
- Mil. service, Research Dept.
- VIP, DTH, 1976 – 1988
- DTU Incubator 1988 – 2000
- DTU Innovation 2000 – 2004
- Associate prof., E'ship, IPL, 1992 ->

- CEO, Gastrotechnology, 2004 -> 2006
- Boardmember, app 15 Start-ups
- Chairman, Swantec ApS
- Boardmember, Gastroprocess Technologies ApS
- Own company: Danish Product Development ApS

Alltogether – a practitioner

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Dansk Produktudvikling ApS

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The Importance of Entrepreneurship

- **Germany's and Japan's recession, early ninety-nineties** in spite of massive investments in industrial development was partly due to a poor business birth rate: a lack of the enterprising and competent cambrium of young talentet entrepreneurs.
- **Entrepreneurs have brought USA back in a leading position in the global economy.** By example: 8 out of the 25 biggest companies in US did not exist in 1960. In Europe all 25 biggest companies were big also in 1960 (FORA 2007)
- **Germany, 1870-ties:** die Gründerzeit: French war reparations are invested in new German industry to create an economical lead that gave Germany a overwhelming competitive strength (later to wasted in wars).

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The Importance of Entrepreneurship

The Global Entrepreneurship Monitor GEM:
 Variation in rates of entrepreneurship may account for as much as one-third of the variation in economic growth

Country	Percentage (%)
France	~95
Australia	~90
Ireland	~85
USA	~85
Finland	~75
Singapore	~70

Best Countries: 15% of New Companies Start growing rapidly

Denmark: 5% of New Companies expand

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The growth-oriented start-ups create > 85% of the jobs

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The Importance of Entrepreneurship

Challenges 2009:

- **New industrialized nations take over classic industry. Massive outsourcing of jobs from west to east still ongoing**
- **Large companies locked in heavy investments do incremental innovation. Radical break-through and expedient action is the entrepreneur's turf**
- **The shake-out of less capable companies during the economical recession opens new opportunities when things turn to the better – and hence we need a strong and skilled community of entrepreneurs standing ready to facilitate a rapid recouperation. (Change is the fuel of entrepreneurship)**

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The Importance of Entrepreneurship T&T

Effects on National-Level High-Growth Entrepreneurship
Entrepreneurial Framework Condition Effect

Availability of finance for entrepreneurial firms	Neutral
Policy support for entrepreneurial firms	Negative (p<0,10)
Regulatory compliance costs	Negative (p<0,05)
Entrepreneurship education (primary level)	Neutral
Availability of business services	Neutral
Market change and dynamism	Neutral
Physical infrastructure	Neutral
Entrepreneurial culture	Neutral
Entrepreneurship education (universities)	Positive (p<0,05)

Source: Levie & Autio 2007
 Notes: Random-effects panel regression in 7-year panel of 48 countries. Controls: gdp per capita, gdp per capita squared, industry structure, gdp change (t-1), population growth rate. 2-tailed significances.

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The Importance of Entrepreneurship The Role of Universities

Massachusetts Institute of Technology

- One in four faculty involved in technology venturing
- 5.000+ companies founded by graduates and faculty since 1861 (in av.: 35/yr. DTU: probably 5 – 10)
- Employees at MIT- companies > 1.000.000
- Turn-over of MIT- companies > \$250 Billion/yr (Denmark 2005 GNP: \$285 Billion)
- If a nation: MIT Business Community the 24th largest in the world

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From a personal perspective:

1. Chances of you setting up a business after having concluded a good e'ship course increase by X3
2. Chances that your business will survive and grow are significantly increased by good E'ship T&T.
3. In US: salaries of graduates with e'ship components in their course CV exceed those of their less entrepreneurial fellows by app. 30%
4. Enterprising traits and competencies constitute much sought after personal qualifications in to days industries

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The Entrepreneurial Course: something for the mindset & the skillset

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MINDSET: The Eye for Opportunities

Skulle jeg ønske mig noget, da ville jeg ikke ønske mig rigdom eller magt, men mulighedernes lidenskab.
Det øje som overalt, evigt ungt, evigt brændende ser muligheder
Søren Kirkegaard

Were I given a wish, I would not want wealth nor power, but the passion for opportunities.
The eye that everywhere, ever young, ever burning, identifies opportunities.
Søren Kirkegaard
 DK philosopher, 1816 - 55

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SKILLSET:

High Tech Venturing is a complex, demanding and interdisciplinary process.

Success depends on multiple competencies, networks, advanced technical knowledge, business experience, etc.

Multiple Competencies	<i>Education and Training</i>
Networks	<i>Group work, Venture Cup</i>
Business experience	<i>Mentor program</i>
	<i>Simulator training</i>

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Objectives

1. Enable the inner entrepreneur (the burning Eye)
2. Learn how to launch a business venture
 = acquire applicable portable competencies

1+2: Develop a business capacity: learn to identify business opportunities – to capture them and to exploit them

- **Create new companies**
Develop new business areas

Business start-up is not for everyone; it takes an educated decision
Acquire the qualifications needed – to decide and to act.
 And remember, that entrepreneurial skills and attitudes are applicable and rewarded in most aspects of life – so this is not just about starting businesses

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Learning Objectives

A student who has met the objectives of the course will be able to:

1. Identify business opportunities
2. Develop business ideas (Opportunity driven creativity)
3. Develop business models
4. Analyze markets for technological products and services
5. Interview customers
6. Analyze customer value creation
7. Plan the establishment of a company (Business planning)
8. Determine capital requirements
9. Establish cash flow projection
10. Establish budgets on profit/loss, assets/liabilities
11. Calculate an equity investment
12. Specify management competence profiles

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Enable the Entrepreneur

- The Near-Entrepreneurial Experience
- Introduction to a Working Life
- Develop trust in own competencies
- Get inspiration from successful entrepreneurs

- **Enable the Entrepreneur**
- Learn how to start
- Study experiences
- Train Methods and Principles
- Qualify Competencies
- Develop Business Talents
- Create New Companies

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Learn How to Start and run a Company

Subjects covered:

- Basic experiences and practicalities
- Opportunity-driven creativity
- Business models and start-up strategies
- Business planning
- Marketing economics
- Financing
- Business administration
- Business law
- Intellectual property rights
- Management

- Enable the entrepreneur
- Learn how to start
- Study experiences
- Train Methods and Principles
- Quality Competencies
- Develop Business Talents
- Create New Companies

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Study experiences

Case Stories:

- Entrepreneurs
- Consultants
- Investors

- Enable the entrepreneur
- Learn how to start
- Study experiences
- Train Methods and Principles
- Quality Competencies
- Develop Business Talents
- Create New Companies

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Train Methods and Principles - 1

Project-oriented Group Work

- Opportunity-driven Creativity
- Pre-analysis
- Information research
- Information analysis
- Business model development
- Business Planning
- Presentation & Pitching

- Enable the entrepreneur
- Learn how to start
- Study experiences
- Train Methods and Principles
- Quality Competencies
- Develop Business Talents
- Create New Companies

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Train Methods and Principles - 2

Business Development

- Ideas
- Pre-analysis
- Information research
- Information analysis
- Business model development
- Business Planning
- Presentation & Pitching – or
- All over again (not on this course, however)

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Qualify Your Competencies

- Realistic interpretation of opportunities
- Qualifying your basis of decision
- Develop specific self-confidence
- Make a substantiated decision

- Enable the entrepreneur
- Learn how to start
- Study experiences
- Train Methods and Principles
- **Qualify Competencies**
- Develop Business Talents
- Create New Companies

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Develop your networks

- Meet new people – in the group – and outside
- Start working with them in a start-up context
- Meet some of the players within financing and consultancy
- Meet your customers – your jury!

- Enable the entrepreneur
- Learn how to start
- Study experiences
- Train Methods and Principles
- **Qualify Competencies**
- **Develop Business Talents**
- **Develop your networks**
- **Develop your business talent**
- **Create New Companies**

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Develop your business talent

- Get to know your marketplace
- Find out what can be sold and what not
- Develop your capacity for sensing business opportunities
- Develop "the silent merchant": the continuous outlook for business opportunity (the burning eye) coupled with the continuous calculator, working residually somewhere in the deep of your mind, that enables luck.

- Enable the entrepreneur
- Learn how to start
- Study experiences
- Train Methods and Principles
- Qualify Competencies
- Develop Business Talents
- Develop your networks
- **Develop your business talent**
- Create New Companies

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Create New Companies

After the course →

- Basic competences acquired
- Insight into the knowledgebased entrepreneurial culture
- Relations to pre-seed venture capital developed
- A business idea ready to be launched

**You earned your wings
 Now try if they can bear
 - once you've graduated**

- Enable interest i entrepreneurship
- Learn how to start
- Study experiences
- Train Methods and Principles
- Qualify Competencies
- Develop Business Talents
- Develop your networks
- Develop your business talent
- **Create New Companies**

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The LECTURE PLAN - 1

Tuesday, 3 February 2009

Introduction:

1. to Katapult, the university project incubator
2. to Venture Cup the regional business plan competition
3. to each other
4. to entrepreneurship
5. to the course
6. to the teacher
7. to the entrepreneur

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The LECTURE PLAN - 2
Friday, 6 February 2009, 10:00 – 12:00

The Basics of Entrepreneurship 1.
 - Preconditions for success in business start-up
 - The entrepreneur: characterization of a person and a working life

The Basics of entrepreneurship 2.
 - Success and non-success in high-tec venturing
 - Classic rules of the Thumb

Get the Right Idea
 - Stimulating opportunity-driven creativity

From Idea to business
 - Strategies in high-tec venturing

Practicalities: Meet Your Team

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No lectures in week 7

**Tuesday 17 February:
 Group consulting sessions**

30 minute meetings between groups and teacher

Location: HCØ
Time: to be agreed per e-mail to johe <att> man.dtu.dk

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The LECTURE PLAN - 3
Friday, 20 February 2009

Business Planning

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The LECTURE PLAN - 4
Tuesday 24 February 2009

Business law

- Legal company forms (A/S, ApS, I/S, etc.)
- Holding companies
- Salaried employees act
- Agreements in trade and amongst founders and shareholders
- Product Liability

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The LECTURE PLAN - 5
Friday, 27 February 2009

Business Economics

- Budgeting
- From action plan to cash flow budget to capital requirements

Market Research and – analysis

- Michael Porter's market model: "Five forces"
- The value chain

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The LECTURE PLAN - 6
Tuesday, 3 March 2009

IPR strategies for start-ups
 Components in the IPR shield
 The basics of a patent
 Economy impact on IPR strategies for start-ups

Case (To Be Defined = TBD)

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The LECTURE PLAN - 7
Friday, 6 March 2009

Financing 1
 - Mapping the landscape of investors and capital

Financing 2
 - Presenting the pre-seed and early-stage investors:
 - Seed Capital Denmark
 - Growth Fund (Vækstfonden)
 - The Venture Capital Company

Financing 3
 - Numericals of investing

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The LECTURE PLAN - 8
Tuesday, 22 January 2008

Preparing exam
 - Formalities
 - Plan
 - Presentation techniques

Business management
 - Setting up the administration of your business venture
 - The art of fine business management:
 - The board: roles and practicalities

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The LECTURE PLAN - 9
Friday, 20 March 2009

Sales and marketing
 - Why is this most important activity at all?
 - What makes you a successful sales person?
 - Sales strategies in high tech venturing

Exit
 A retrospective look at the course
 Entrepreneurship and the History of the European Ideas

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The Course Manual

[Link](#)

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MATERIALS

- Knowledge based Entrepreneurship (textbook)
- Overheads
- Hand-outs
- Start-up Handbook (McKinsey)

All items are available at
www.entrepreneur.dk

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WORK PLAN

Reference is made to the Course Manual

Tentative time schedule:

Kick-off:	Team formed.	Week 6	6 February
1. milestone:	Product /business concept OK	Week 9	27 February
2. milestone:	Market research finalised	Week 11	13 March
Project deadline:	Business plan completed:	Week 13	27 March

After deadline, you have two more days (excl. week-end) to prepare your presentation.

Submitting your Business Plan: Friday 27 March at 12:00 am
 Exams: Thursday 2 April and 3 April

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End of Introduction



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Applied High-tech Venturing

Agenda

The Entrepreneur

- Motivation
- Personality
- Workinglife
- The ideal preconditions

The Business

- Succes- and Non-succes factors
- Classic Rules of the Thumb

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Why do it?

- The ultimate demonstration of your power and skills
- Great fun and hard work
- A catching lifestyle – so beware of the nerd-syndrome
- An independent lifestyle: hardly
- A team sport with highly motivated and hard working friends
- Great expectations, great perspective
- To make a Gazillion?

It happens - but
 Get Your priorities right – and focus on company development.

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The Entrepreneur

- Extrovert
- Proactive
- Energetic
- Initiator
- Capable of – and quick in - making decisions and enforce them (a DOER rather than a PLANNER)
- Personal Integrity
- Stubborn
- Ressource-demanding
- Unpatient

A charming bastard!

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The Entrepreneurial Team

Producer

Inventor

Integrator

Salesman

Entrepreneur

Professor

Administrator

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The Entrepreneurial Working Life

The Negative Angle

- **A lot of hard work**
 - Strain on family and friends
 - Tough on psyche and body.
- **Crisis and Chaos prevails**
 - Basis of decisions often diffuse
 - Chronic lack of money
- **High stress-level**
 - Responsible to values and employees
 - Short deadlines

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The Entrepreneurial Working Life

The Positive Angle

- **A match between personality and working life**
- **The start-up phase is like a flue: *it ends***
- **Sometimes: a personal fortune ->**

The Serial Entrepreneur

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The Ideal Preconditions

- **Up-to-date education**
- **Domain knowledge**
- **Entrepreneurial skills**
- **A positive life situation**
- **A global perspective and a good command of English. (BE-standard OK)**

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