Introducing the *MicroMaster* „Managing Technology & Innovation“ and the *Master in Engineering and Management* „Technology, Innovation, Marketing, and Entrepreneurship (TIME)“

Assoc. Prof. Dr. David Antons

Webinar DACAPO | 11\textsuperscript{th} November 2017

School of Business and Economics
TIME Research Area | Innovation, Strategy and Organization Group (ISO)
RWTH TIME is a proud part of RWTH Aachen, Germany’s leading university of technology

- **RWTH = Rheinisch-Westfälische Technische Hochschule** *(Institute of Technology of the North-Rhine Westphalia, i.e. a State of Germany)*

- RWTH Aachen is one of Europe’s leading institutions for science and research. **Ranked frequently as Top German University by HR Managers** *(e.g. German BusinessWeek Ranking 2007, 2008, 2009, 2011, 2012).*

- **Established in 1870** as a "Technische Hochschule". Quickly became leading place for mining technology, electrical and mechanical engineering, and later also medicine and medical technology. Today, RWTH is also leading in the sciences and has been awarded the title of a “**Exzellenzuniversität**” as one of the very few top German institutions.

- **One out of every five board members** in a German corporation is a **RWTH Aachen alumni**, and about **every second engineering manager** in the German automotive industry has graduated at RWTH.

- Out of **annual budget** of about **US$1 billion**, 50 percent is funded by **competitive research grants and direct support from industry**.

- **>44,000 students** are enrolled in **100+ academic programs**, more than 25% of them are international students coming from 120 different countries.
About Us

RWTH-TIME's new (shared) building in Kackertstraße 7, Aachen
INTRODUCTION | TIME

Ideating, developing and commercialising technological innovation

Entrepreneurship
- General entrepreneurship
- Corporate entrepreneurship
- Entrepreneurial finance, controlling and marketing
- Entrepreneurship and new venture emergence
- Entrepreneurial founding processes
- Business planning and entrepreneurial financing

Innovation
- Interfaces in open innovation processes
- Business model innovation
- Tools and methods of invention
- Learning from performance feedback
- Organisational search and problem solving
- Technology legitimation, adoption, and payoff

Marketing
- Acceptance of technology-based Services
- Marketing of innovative Services and new Technologies
- Social Media Marketing
- Relationship marketing
- Service marketing
- Pricing of technological products and services

Focus on managerial aspects of conceptualization, development, and commercialization of technological innovations
About me

Dr. David Antons

Associate Professor at the TIME Research Area

- **PhD**: Technology- and Innovation Management (RWTH)

- **Visiting Scholarships**: Judge Business School, Cambridge University, UK School of Engineering, University of Melbourne, AUS

- **Research Interest**: Open Innovation, Barriers to Innovation, Learning from Failure, Corporate Reputation
Managing Technology & Innovation: How to deal with disruptive change

School of Business and Economics
TIME Research Area
Programme Structure | Module Overview

Online program consists of 6 modules

Managing Disruptive Change (MDC):
How to not get disrupted

Customer-Centric Innovation (CCI):
How to continuously reinvent yourself to stay competitive

Thinking & Acting like an Entrepreneur (TAE):
How to think like an entrepreneur

Innovation & Creativity Management (ICM):
Turning ideas into successful products and services

Strategic Management:
From Intuition to Insight (SM1):
How to strategically analyze your environment

Strategic Management: From Insight to Decision (SM2):
How to best position your company
Free Online Courses. Advance Your Career. Improve Your Life.
RWTH Aachen is a chartered member of the edx.org platform
This is what it is about
Overall | Program Landing Page

Managing Technology & Innovation: How to deal with disruptive change

Learn how to lead an organization to success by anticipating and leveraging disruptive change brought about by technology and market trends.

What you'll learn

- To scan a company's environment and identify relevant threats to its business
- To develop a generic set of mitigation strategies to quickly address upcoming change
- To discover risks and sources of internal resistance towards innovation and develop successful counter strategies
- To familiarize yourself with the differences between entrepreneurial and corporate thinking
- To strategically position your company in times of uncertainty
Real Career Impact

"Given that the only constant in today’s business environment is change, every company out there needs to make sure that it does not miss out on any major developments. At Ford, we believe that this is something that should not only be done at the top levels. We therefore try to empower our employees in a way that enables them to contribute to the strategic positioning of the company as a whole. By combining theory & practice, the RWTHx MicroMasters program provides employees with valuable tools to not only understand changes in the environment but to also prepare for and respond to them."

— Walter Pijls, Supervisor Innovation Management for Mobility, Ford Motor Company
The MicroMaster consists of six modules:

1. **Managing Disruptive Change**
   Tools to not only understand changes in your company's environment but to also prepare for and respond to them.
   - Starts on January 17, 2018
   - Enroll Now

2. **Customer-Centric Innovation**
   Learn to take on competition by creating successful and innovative business ideas through a thorough understanding of customer needs.
   - Starts on November 15, 2017
   - Enroll Now

3. **Innovation & Creativity Management**
   Learn how to drive innovation and creativity in your company and how to turn ideas into successful products and services.
   - Starts on January 17, 2018
   - Enroll Now

4. **Thinking & Acting like an Entrepreneur**
   Learn how to harness the mindset of an entrepreneur and how to put it to use within your own company.
   - Starts on November 15, 2017
   - Enroll Now

5. **Strategic Management: From Intuition to Insight**
   Design effective strategy processes, analyze shifting industry structures and develop new capabilities in times of industry transition.
   - Starts on January 17, 2018
   - Enroll Now

6. **Strategic Management: From Insight to Decision**
   Learn how to reposition your organization, orchestrate strategic alliances and assess strategic options from an ethical perspective.
   - Starts on March 14, 2018
   - Enroll Now
Managing Disruptive Change

Equip yourself with the necessary tools to not only understand changes in your company’s environment but to also prepare for and respond to them.

Customer-Centric Innovation

Learn to take on competition by creating successful and innovative business ideas through a thorough understanding of customer needs.
Modules | Content Overview (2/3)

Innovation & Creativity Management

Learn how to drive innovation and creativity in your company and how to turn ideas into successful products and services.

Thinking & Acting like an Entrepreneur

Learn how to harness the mindset of an entrepreneur and how to put it to use within your own company.
Modules | Content Overview (3/3)

Strategic Management: From Intuition to Insight

Learn how to design effective strategy processes, analyze shifting industry structures and develop new capabilities in times of industry transition.

Strategic Management: From Insight to Decision

Learn how to (re)position your organization, orchestrate strategic alliances and assess strategic options from an ethical perspective.
## Modules | Content Overview (1/2)

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<td>Learn to take on competition by creating successful and innovative business ideas through a thorough understanding of customer needs.</td>
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### Module Description

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<tr>
<td>- How to spot specific disruption patterns as well as potential sources of disruptions</td>
<td>- The nature of successful innovation processes</td>
<td>- Managing the Innovation Process: From Stage-Gate to Agile Development</td>
</tr>
<tr>
<td>- Ways to assess the degree of the respective disruptions in terms of stage, speed and impact</td>
<td>- How to manage the “fuzzy” frontend of innovation from opportunity recognition to concept validation</td>
<td>- Technical Problem Solving</td>
</tr>
<tr>
<td>- The know-how to select appropriate counter initiatives drawing from a tool kit of potential actions, depending on the assessment of the disruption</td>
<td>- How to transfer trends and insights from the external environment into business opportunities</td>
<td>- Open Innovation Techniques</td>
</tr>
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<td></td>
<td>- How to understand what customers really want by identifying latent needs with the “jobs-to-be-done” framework, Outcome Driven Innovation, or Empathic Design</td>
<td>- Creativity Techniques</td>
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<td>- How customer co-creation and Netnography complement internal ideation management</td>
<td>- Evaluation and Screening</td>
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| Learn how to harness the mindset of an entrepreneur and how to put it to use within your own company. | • How entrepreneurs discover their business ideas and determine their commercial potential  
• How to distinguish entrepreneurial and managerial thought patterns  
• The specific skill set required to launch a new venture | • Position your organization in times of transition  
• Orchestrate strategic alliances and broader innovation networks  
• Assess strategic options not just from an economic, but also from an ethical perspective |
|                                        | Learn how to design effective strategy processes, analyze shifting industry structures and develop new capabilities in times of industry transition. | • Identify the building blocks of strategy and arrange them in a cohesive process  
• Analyze the (shifting) structure of your industry  
• Renew or extend internal resources and capabilities, especially in times of far-reaching technological changes |
|                                        |                                                 | Learn how to (re)position your organization, orchestrate strategic alliances and assess strategic options from an ethical perspective. |
Let’s take a deep dive into one of the courses!
This course is ending in 3 days on Nov 11, 2017.
After this date, course content will be archived.

Important Course Dates
- Today is Nov 8, 2017 10:28 CET
- Course End: in 3 days - Nov 11, 2017
- Certificate: in 4 days - Nov 12, 2017
  Day certificates will become available for passing verified learners.

Course Handouts
All general course documents can be found here:
- Course Syllabus
- Final Exam Rules
- Slide Deck Videos Week 0
- Slide Deck Videos Week 1
- Slide Deck Videos Week 2
- Slide Deck Videos Week 3
- Slide Deck Videos Week 4
- Slide Deck Videos Week 5
- Slide Deck Videos Week 6
Course Introduction

Welcome to Innovation & Creativity Management!

Introduce yourself to the course!

Practice exam

Introduction to proctored exams

Practice proctored exam
due Oct 26, 2017 01:59 CEST

Week 0: Basic Requirements

Basic Requirements

Week 1: Creativity theory and techniques

Creativity theory and techniques
Recap Questions due Oct 26, 2017 01:59 CEST

Online Assignments
Online Assignments due Oct 26, 2017 01:59 CEST

Readings

Verified Track Update Reminder

Live Kick Off Event

Live Kick Off Event

Buddy Matching Prorgam

Sign-up & Information Buddy Program

Week 2: Development Stage

Development Stage
Recap Questions due Oct 26, 2017 01:59 CEST

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Readings
Customer-Centric Innovation and the Frontend of Innovation

when talking about innovation we often make a big mistake. We think ideas are our innovation but actually ideas are just costs. Only ideas that are turned into prototypes which are turned into successful products and services are successful innovation. This is exactly where this MOOC is about we want to go on a journey to understand how to turn ideas into successful products and we will do this in the second part of the big picture, our structure of the innovation process.
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Consistency, accreditation and integration into TIME-MME to be ensured

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Study Mode: Audit
# Modules | Technical Specifications

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Study Mode: Verified
Sounds good! But how to enroll?
How to register and sign up to the MicroMaster
You will receive an email with a link to verify your registration.
How to register and sign up to the MicroMaster
Viewing 40 results matching "managing technology &amp; innovation"
And there is one more thing...
## Modules | Technical Specifications

Consistency, accreditation and integration into TIME-MME is ensured

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1. refers to the course within the TIME-MME for which the ECTS are accredited
RWTH BUSINESS SCHOOL

Learn more about the award-winning blended-learning program delivered in partnership with Cambridge Digital Innovation at Hughes Hall, University of Cambridge
RWTH Business School

- Year Founded: 2016 (first programs offered in 2001)
- Number of Students: More than 250
- Percentage of International Students: 60%
- Number of Degree Programs: 3 (EMBA, MME-TIME, DBA)
- Number of Certificate Programs: up to 20 different programs
- Size of Faculty: 60
- Number of Staff: 8
Your Program Design

MME-TIME Key Facts

- Master of Science (M. Sc.) Management and Engineering
- Focus on Technology and Innovation Management
- Target Group only STEM Graduates
- Hands-on experience and blended-learning approach
- Flexible study mode and duration
- Winner of the national competition for digitally enabled university education “Curriculum 4.0”
- Small Course Size
- Personalized Career Coaching
- Intensive Language Courses
- Delivered in partnership with Cambridge Digital Innovation at Hughes Hall, Cambridge University
Your Program Design

MME-TIME Basic Structure

1. **TIME Essentials**
   - 6 courses (30 CP)

2. **Management Electives**
   - 4-5 courses (20-25 CP) out of 6+ courses

3. **Technology Electives**
   - 3-4 courses (15-20 CP) out of approx. 20 courses

4. **Master Thesis**
   - Research-based project (20 CP)

+ German language classes and workshops, TIME Speaker Series, Company Visits, Optional Internship

3 of these courses can be covered by taking all 6 courses of the MicroMaster
### The MME-TIME Class of 2017

#### Selected Employers
- Accenture
- Bombardier Transportation
- Capgemini
- Daimler AG
- Huawei Technologies
- Korea Securities Depository
- Mercedes Benz
- Robert Bosch
- Schlumberger
- Tata Motors
- Volkswagen
- ZF Friedrichshafen

#### Selected Prior Degree Programs
- B.Sc. Electrical Engineering
- B.Sc. Mechanical Engineering
- B.Tech. Mechanical Engineering
- M.Sc. Management Engineering
- B.Sc. Industrial Engineering
- M.Sc. Industrial Engineering
- B.Tech. Electronics and Communication Engineering
- B.Sc. International Logistics Management and Engineering
- B.Sc. Mechatronics Engineering
- B.Sc. Biotechnology Engineering
- B.Sc. Chemical Engineering
- B.Sc. Mechanical and Automotive Engineering
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<td>Chief Technology Officer</td>
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</tr>
<tr>
<td>Technical Product Manager</td>
<td>Responsible for the development of technical products or service systems</td>
</tr>
<tr>
<td>Business Development Manager</td>
<td>Responsible for the development and implementation of new business models and ideas</td>
</tr>
<tr>
<td>Technology and Innovation Manager</td>
<td>Responsible for the R&amp;D and the strategic innovation processes</td>
</tr>
<tr>
<td>Technology Marketer</td>
<td>Responsible for the creation of marketing strategies for high-tech products and services</td>
</tr>
<tr>
<td>Technical Project Manager</td>
<td>Supervision and responsibility of complex technical projects</td>
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Contact

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School of Business and Economics
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