iMDE: international Market-Driven Engineering

Lecture 1: Introduction 2013-09-09







Agenda

- 13.15-13.20: Welcome!
- 13.15-13.45: Presentation of the course-overview (Charlotta)
- 13.45-14.00: Introduction of the teachers
- 14.00-14.15: Break for 15 minutes
- 14.15-15.00: Presentation by students of their universities, cities and countries
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- 15.15-15.30: Presentation of the project-idea, theme, film, and the groups (Charlotta)
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- 15.45-16.00: Why Internationalization (JunJin/Charlotta)



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Welcome

39 Swedish students

42 Chinese students

Team of teachers (5 Swedish and 5 Chinese)

Welcome everyone to the course "international Market Driven Engineering (iMDE)"



Welcome

iMDE – international Market-Driven Engineering

This course will take you from "how to generate innovations", though "the writing of Business Plans, and understanding Product development and Production" to the "how to sell and market a product".



iMDE

iMDE – international Market Driven Engineering

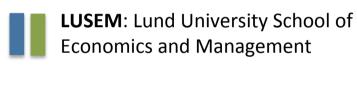
"The world is becoming more international and cutting edge knowledge in marketing as well as engineering in a global world is becoming a valuable asset on the job-market. There is a lack of people with skills in both fields with the ability to connect market needs and innovations with product development, especially in an international context. International Market Driving Engineering is aimed at providing these knowledge and skills."



iMDE

iMDE is a unique course!

It is a joint course that is truly international (Sweden and China) and cross disciplinary (Management and Engineering).



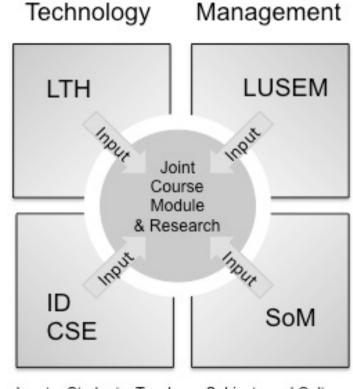
LTH: Lund University, faculty of Engineering

SoM: Zheijang University, School of Management

ID and CSE: Zheijang university, Industrial Design (ID) and Department of Control Science and Engineering (CSE).

Lund University, Sweden

Zheijang University, China



Input = Students, Teachers, Subjects and Cultures

iMDE

iMDE is a unique course!

iMDE is a joint course collaboration. It intertwines the two disciplines Technology and Management, in Sweden and in China, in four ways; Students, Teachers, Subjects and Cultures.

Students: 39 students from Sweden and 42 students from China.

35 students from Management/Economics and 46 students from Engineering

Teachers: 5 Swedish teachers and 5 Chinese teachers. A minimum of 2 teachers with different aspects of the subject matter will be present at each lecture. The course will contain both lectures and a project.

Subjects: Innovation and Product Development will be treated from the marketing/management perspective as well as from the Engineering perspective.

Cultures: China and Sweden. The cultural aspects of project management and business behavior will be treated in the course and practised in real life through the course project.

Course Content

Course start: Monday September 9th, 2013

The course will consist of:

- 10 Lectures
- 1 Project (performed in groups of 10-11 student)
- 2 Company visits

The examination of the course will consist of:

• Written project report, oral project presentation, short film

Course termination: Thursday October 17th, 2013



Course Schedule

Lectures:

- Mondays at 9:00am-12:00am
- Wednesday at 9:00am-12:00am
- Friday at 9:00am-12:00am
- The lectures are held at Xixi campus, lecturehall D201, Art building

Project

 The project will be done as a groupwork. Teamwork to be managed by the team. There will be 3 coaching sessions.

Company visit

There will be 2 company visits as part of the course.



Lectures

The course will take you from "how to generate innovations", though "the writing of Business Plans, and understanding Product development and Production" to the "how to sell and market a product".

- Lecture 1: Introduction
- Lecture 2: Innovation-1 (Inspiration)
- Lecture 3: Innovation-2 (Ideation)
- Lecture 4: Innovation-3 (Implementation)
- Lecture 5: Innovation-4 (Innovation climate and Examples)
- Lecture 6: Product Development and Production Business plan
- Holliday
- Lecture 7: Business plan
- Lecture 8: Marketing and Sales
- Lecture 9: Final presentation
- Lecture 10: Final presentation



Coaching

There will be 3 coaching sessions.

Time: 9:00am – 12:00am

All teachers available all the time.

Coaching-slots (20 min) for the project-groups to book.

The coaching-sessions should provide help to the project-groups in managing the project.



Project

- Projects to be performed in groups of 10-11 students
- The project should focus on Innovation and Product Development (prototypes)
- Project-theme 2013: "Inclusion"
- 1 group 1 project 1 innovation 1 prototype
- Final presentation: written report, oral presentation, film
- More about the projects later



Company visits

2 company visits:

- Wednesday September 18th: Alipay
- Thursday September 26th: Supcon



Course Schedule

Week	Date	Lecture	Time	Content
September 10-13	9/9	Li	13-16	Introduction
	11/9	L2	9-12	Innovation-1 (Inspiration)
	13/9	Coaching	9-12	1 hour coaching per group
	12.15			571
September 16-20	16/9	L3	9-12	Innovation-2 (Ideation)
	18/9	L4	9-12	Innovation-3 (Implementation)
	18/9	Visit to company	Afternoon	Ali-pay
	19/9			Holliday in China
	20/9			Holliday in China
	Sunday 22/9			Working day in China
September 23-27	23/9	L5	9-12	Innovation-4 (Examples)
	23/9	Coaching (extra)	atterneers	
	25/9	L6	9-12	Product Development, Sourcing and Production
	26/9	Visit to company	Morning	SupCon
	27/9	Coaching	9-14	1 hour coaching per group and visit to Züingang Campus
	Sunday 29/9			Working day in China
Sept. 30- October 4	30/9			
	1/10			Holliday in China
	2/10			Holliday in China
	3/10			Holliday in China
	4/10			Holliday in China
October 7-11	7/10			Holiday in China
	9/10	L7	9-12	Business plans
	11/10	L8	9-12	Marketing and Sales
	Saturday 12/10			Working day in China
October 14-18	14/10	Coaching	9-12	1 hour coaching per group
	17/10	L9	9-17 (All day)	Final presentations
	18/10	L10	9-13	End of course
			_	

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Teachers

The Swedish troup:

- Anders Warell
- Damien Motte
- Carl-Henric Nilsson
- Charlotta Johnsson
- Gabriel Somesfalean



Anders Warell

- PhD, 2002, Industrial Design Engineering
- Associate Professor, Industrial Design
- Research interests: design and innovation practices, product form and visual brand identity, and user experience centered design
- Wife Johanna, 2 sons (3 and 7)
- Enjoys long-distance running, highaltitude mountaineering and home building projects





Damien Motte



- Post-doc at the Department of Design Sciences LTH, Lund University
- MSc in Industrial Engineering, PhD in Machine Design
- Research interest:
 alternative engineering
 design and product
 development
 methodologies



Carl-Henric Nilsson

- Founder of Technology Management, 1997
- PhD Industrial Engineering
- Strategy, process-orientation, team-building and leadership
- Wife Guggy and three children
- Tennis, squash, sailing and golf
- Motto: Live, learn, deliver!





Charlotta Johnsson



- Responsible Technology
 Management Program
 2008-present
- Ass.Prof. in Automatic Control (Ph.D. in 1999).
- Research interest:
 manufacturing operations,
 production control,
 process control and
 international standards
- Husband Hans an three kids (14, 12 and 6).



Gabriel Somesfalean



- Researcher at Lund University
- Responsible for Joint
 Centre for Innovation and
 Entrepreneurship (JCIE)
 together with Aiqi WU.
- Research interest: Atomic Physics
- Has lived in China for several years.



Teachers

The Chinese troup:

- Jun Jin
- Qinmin Yang
- Shijian Luo
- Weiqing Xu
- Aiqi Wu



Jun Jin

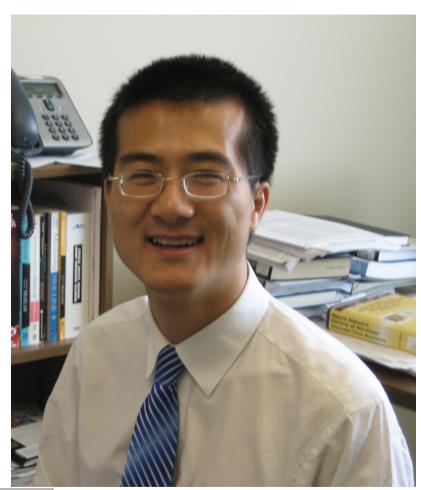


- Ass.Prof. In Innovation and Technology Management (Ph.D. in 2005)
- Visiting Professor of UNU-MERIT (the Netherlands), PSU (US)
- Research interest: open innovation, reverse innovation, innovation capability, innovation and sustainable development

Technology Management

Qinmin Yang

- Ass. Prof. in Control Science and Engineering, ZJU
- Ph.D. in Electrical Engineering, 2007
- Co-Founder of ColTiTech Inc., 2003
- System Engineer, Caterpillar Inc., 2008
- Adaptive control theory, nanorobotics, wind power systems
- Hobbies: soccer, football, and zuqiu





Shijian LUO



Ph.D. and Ass.
 Professor at Industrial
 Design (part of Dept.
 of Computer Science)



Weiqing XU

- Ass. Prof. at School of Management, ZJU
- Ph.D. in Business Administration, 2005
- Deputy director of department of business administration, SoM, ZJU
- Research interest: services marketing, customer relationship management, user innovation





Aiqi WU

- Ass. Prof. at School of Management, ZJU
- Ph.D. in Business Administration, 2005
- Deputy director of department of business administration, SOM, ZJU
- Director of Joint Centre for Innovation and Entrepreneurship
- Research interest: entrepreneurship and strategic management





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Sweden

20 minutes presentation by the Swedish students about:

- Lund, Sweden
- Lund University
- Technology Management



China

25 minutes presentation by the Chinese students about:

- ID: the department
- CSE: the department
- SoM: the department



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Project

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- Projects to be performed in groups of 10-11 students
- The project should focus on Innovation and Product Development (prototypes)
- Project-theme 2013: "Inclusion"
- 1 group 1 project 1 innovation 1 prototype
- Final presentation: written report, oral presentation, film



Theme 2013: Inclusion

INNOVATING WITH PEOPLE

THE BUSINESS OF INCLUSIVE DESIGN

- Participation
- Collaboration
- Equality
- Togetherness
- Diversity
- People
- Places
- Environments
- Services
- Products
- Thoughts and ideas
- Societies

- What does "inclusion" mean to you?
- What do you see around you which is not inclusive?
- Have you ever felt "un-included"?















Playdale.co.uk: Inclusive Orbit

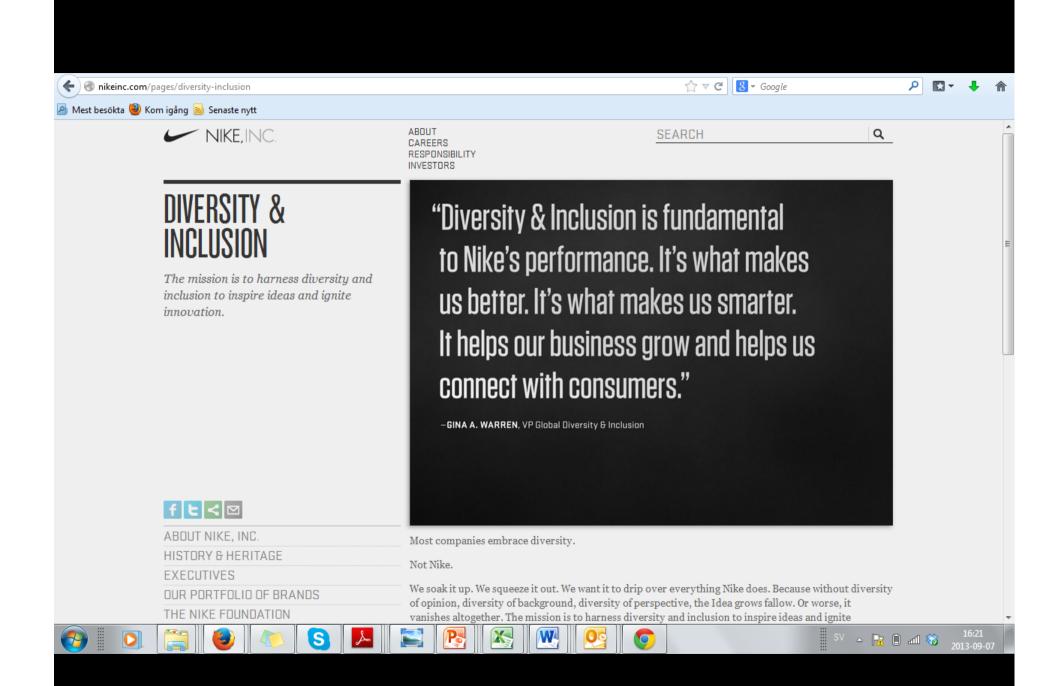




ZHEJIANG UNIVERSITY







Project

- Work in groups of 10-11
- Practice teamwork learn from each other
- Get inspiration from your daily life, come up with an idea, and realize it as a prototype.
- Coaching sessions will be offered.
- While working together, create a short (3 minutes) film about your work
- At the final presentations you should present:
 - your prototype
 - written report including the business plan
 - The film "this is how we did it"



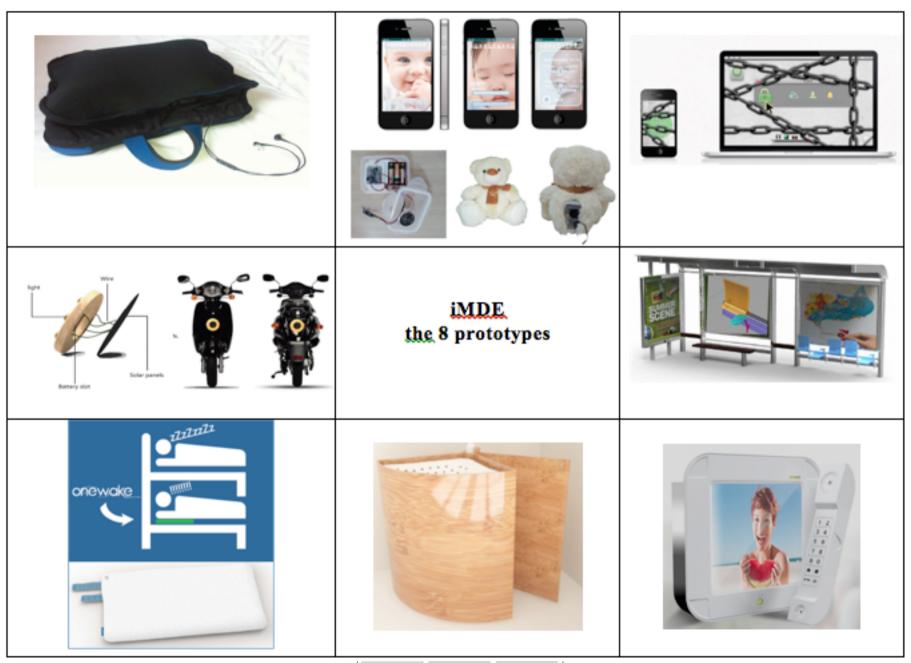
Theme 2012: Helping everyday life











Technology Management

Groups 2013

Group	Swedish Students		Chinese Students		
	LUSEM	LTH	SoM	CSE	ID
1	Robin Thinberg (M) Johanna Leonard (F)	Anna Kojlstad Svedu (F) Jacob Gustafsson (M)	Hui ZHAO (F) Lianguang Yuan (M)	Hao XING (M) Jinghong HU (?)	Meiying SHEN (F) Hongyu CHEN (M)
2	Stefan Wideland (M) Kristoffer Ronnels (M)	Helena Sörensson (F) Karim Mabrouk (M) Sara Hastig (F)	Bo YU (M) Yan WU (F)	Sheng ZHAO (M)	Wen CENG (F) Ziyang CHEN (M)
3	Sara Melin (F) Fredrik de Craene Johansson (M) Frida Hugne (F)	Stefan Einarsson (M) Gustav Henriksson (M)	Jishuai LI (M- cancelled) Dandan WU (F)	Ning LIU (M) Fenglin YAN (F)	Mingya WEI (F)
4	Erik Lindberg (M) Caroline Lilja (F)	Caroline Sjodahl (F) Pauline Lidberg (F) Johan Fredriksson (M)	Min ZHONG (F) Xuelin DONG (M)	Xu TAN (M) Bin WANG (M)	Xiaolin HUANG (F)
5	Knut Artman (M) Michaela Kamp (F) Elisabeth Lam (F)	Elin Wennerstrom (F) Victor Petersson (M)	Yidong WAN (M) Jia LOU (M)	Xuechao JIA (M) Qiao WU (F)	Yiyang TAO (M) Yu PAN (F)
6	Per Nilsson (M) Miriam Chakir (F)	Hanna Svenstrup (F) Hugo Martinsson (M) Gabrielle Lindesvard (F)	Wenling XIA (F) Xiao BAO (M)	Haomin WEI (M)	Lei HAN (M) Kuan CHENG (M)
7	Thomas Hallstrom (M) Sofie Tapper Jansson (F) Adam Carlsson (M)	Nina Gustafsson (F) Eric Jonsson (M)	Yaqian JIAO (F)	Zhaochen ZHAN (M) Kai FENG (F)	Xiaoneng JIN (M) Yu CAO (F)
8	Christian Green (M) Jonathan Roxeheim (M)	Erik Ahlmann (M) Souzan Meana (F) Fanny Nordin (F)	Yingying MAO (F) Peng ZHOU (M)	Yuting MU (?) Peng SUN (M)	Wenshi ZHONG (F)

Groups 2013 (updated)

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3	Sara Melin (F) Fredrik de Craene Johansson (M) Frida Hugne (F)	Stefan Einarsson (M) Gustav Henriksson (M)	Han DONG (M)- new Dandan WU (F)	Ning LIU (M) Fenglin YAN (F)	Yingbin SHUAI (M)
4	Erik Lindberg (M) Caroline Lilja (F)	Caroline Sjodahl (F) Pauline Lidberg (F) Johan Fredriksson (M)	Min ZHONG (F) Xuelin DONG (M)	Xu TAN (M) Bin WANG (M)	Xiaolin HUANG (F)
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Business, management and technology

"It is a great advantage to be able to employ people who are doubly qualified within technology and management. Connecting the technical aspects to the commercial ones is a very good basis on which to stand in order to contribute to the success of a company.

It is equally important for an engineer to master economics and management as it is for an economist to understand the underlying technical basis of a company's products."

Michael Treschow, Chairman of the board, Unilever (former chairman of Ericsson)



Business, Management and Technology

If you are interested in building, developing and leading technical organizations and companies you need an understanding of

- 1) the technology that your company is working with
- 2) how to manage people and create successful environments
- 3) how you do business

In this course we will combine these three core aspects – business, management and technology.

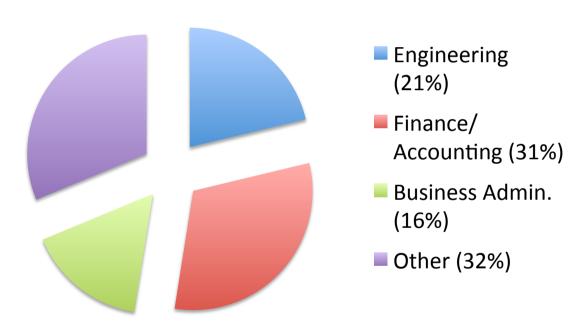
Our focus will be on Innovation and Product Development.



The education of Fortune 100 CEO

CEO = Cheif Executive Officer





More than 50% of Fortune 100 CEO's have an Engineering or Financial background

Referens:

http://www.slideshare.net/sheilacurran/the-education-of-fortune-100-ce-os-sheet1



The path to Fortune 500 CEO

How did CEOs become CEOs – what did they do?

1. Develop Financial Acumen

- Companies want a person that can create value for the company.
- A person that understands the financial drivers of the company.
- 2. Settle in Eventually and climb the ladder
 - Most CEOs are recruited internally, but were not "lifers".
- 3. Time to CEO appointment
 - Nominal time to appointment is 18 years experience.
 - Technology companies have shorter time to appointment (14 years)



The path to Fortune 500 CEO

4. Board experience

 45% served as non-executive directors on public company boards before being CEO.

5. General observations

 More than 50% of the CEOs were recruited from COO position (Cheif Operating Officer – i.e. Use the financial understanding to create excellence in operation)

=> Financial and Technical understanding is important

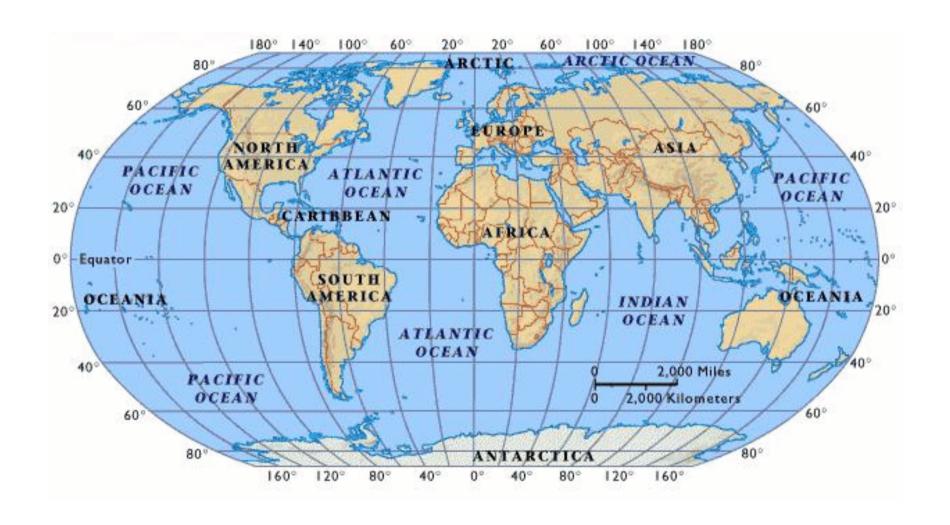
Reference: "The path to becoming a fortune 500 CEO" Forbes Magazine June 2011. http://www.forbes.com/sites/ciocentral/2011/12/05/the-path-to-becoming-a-fortune-500-ceo/

Technology Manageme

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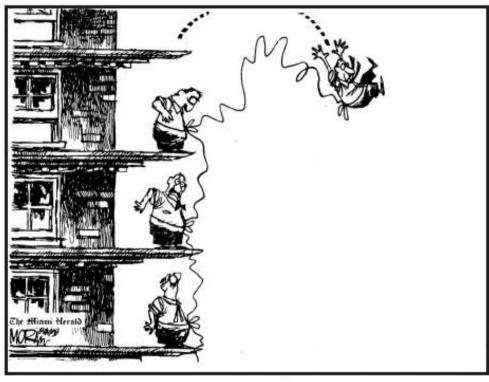






Globalization and Interdependence





Local vs Global



Which country owns the brand? Where a product is made? Where a product is designed?

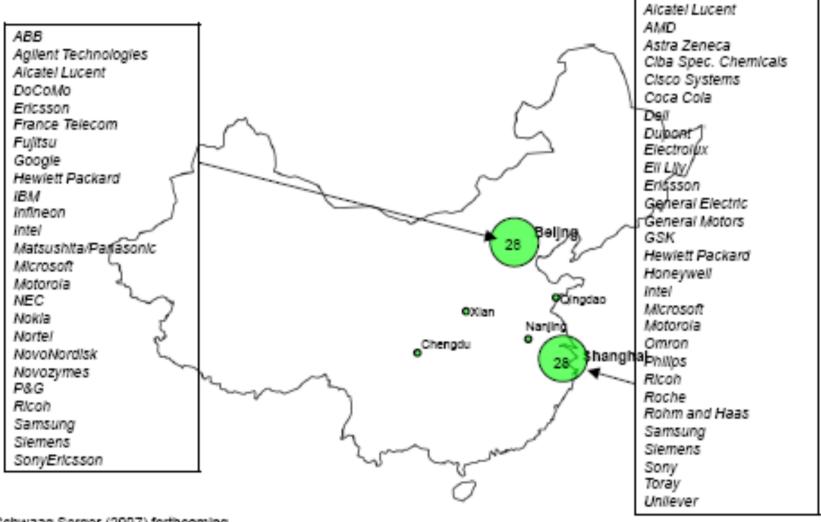








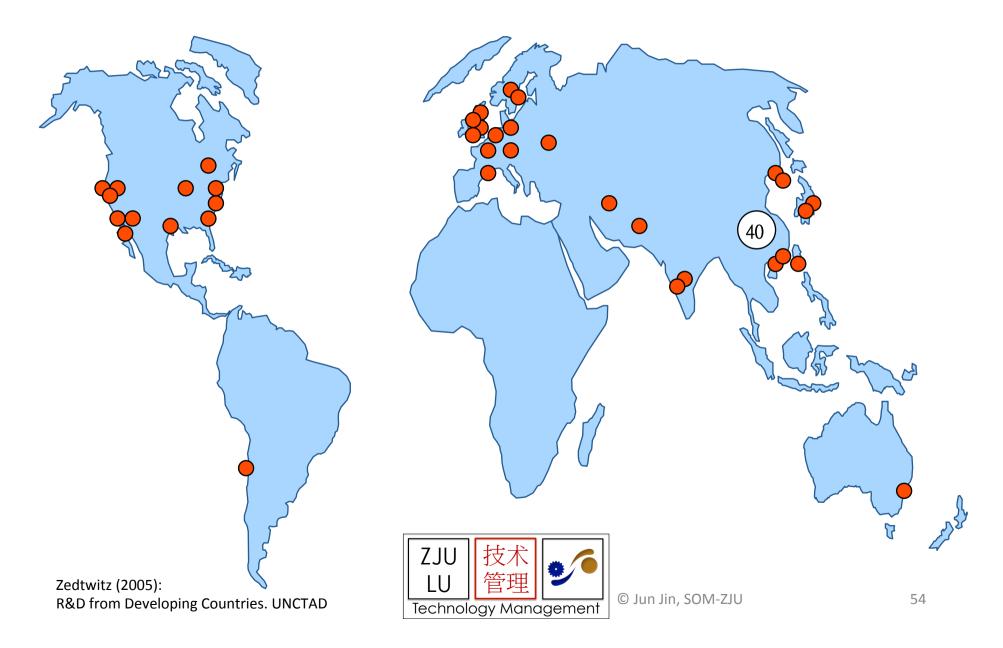
Global R&D centers in China



Schwaag Serger (2007) forthcoming



Chinese R&D in the World



INDUSTRY INSIGHTS

PRODUCTS & SOLUTIONS

SUPPORT

ABOUT US

Huawei Worldwide

Please select your location and language



Africa

Algeria (English)

Cameroon (English)

Congo (English)

(العربية) Egypt

Ghana (English)

Kenya (English)

Morocco (English)

Nigeria (English)

South Africa (English)

Sudan (English)

Tanzania (English)

Uganda (English)

Zambia (English)

Zimbabwe (English)

Asia Pacific

Australia (English)

Bangladesh (English)

Cambodia (English)

China (简体中文)

HongKong, China (English)

India (English)

Indonesia (English)

Japan (日本語)

Kazakstan (English)

Korea (English)

Malaysia (English)

Myanmar (English)

New Zealand (English)

Philippines (English)

Singapore (English)

Srl Lanka (English)

Talwan, China (English)

Thalland (English)

Turkey (English)

Uzbekistan (English)

Vletnam (English)

Europe

Austria (English)

Belarus (English)

Czech (English)

Finland (English)

Germany (Deutsch)

Greece (English)

Italy (English)

Netherlands (English)

Norway (English)

Poland (English)

Portugal (English)

Romania (English)

Russla (русский)

Spain (Español)

Sweden (English)

United Kingdom (English)

Latin America

Argentina (English)

Brazil (português)

Central America and Caribbean

(Español)

Chile (English)

Colombia (Español)

Costa Rica (English)

Ecuador (Español)

Guatemala (English)

Mexico (Español)

Peru (English)

Venezuela (Español)

Middle East

Qatar (English)

Saudi Arabia (English)

United Arab Emirates (English)

North America

United States (English)

Go to Huawei Global







Welcome

iMDE – international Market-Driven Engineering

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Enjoy!



References

- Lund university: http://www.lu.se
- Zhejiang university: http://www.zju.edu.cn
- http://www.slideshare.net/sheilacurran/the-education-of-fortune-100-ceos-sheet1
- "The path to becoming a fortune 500 CEO", Forbes Magazine June 2011.
 http://www.forbes.com/sites/ciocentral/2011/12/05/the-path-to-becoming-a-fortune-500-ceo/
- Zedtwitz (2005): R&D from Developing Countries. UNCTAD



Thank you for your attention

See you again on Wednesday!

