

Successful University Collaboration in the Areas of Industrial Engineering and Innovation



Purdue Polytechnic Summit 2017

Prof Dr Sascha Götte & Prof Dr Iris Reyhav

Agenda

1. Prologue
2. Going Global Intensive Week at Lucerne
3. CRM Intensive Week at Ariel
4. Outlook
5. Q&A

1. Prologue

- Prof Dr Sascha Götte
- Innovation and Technology Management
- Lecturer for Marketing and Strategic Management
- Lucerne University of Applied Sciences & Arts
- E-Mail: sascha.goette@hslu.ch



- Prof Dr Iris Reyhav
- Industrial Engineering & Management
- Head of Department
- Ariel University
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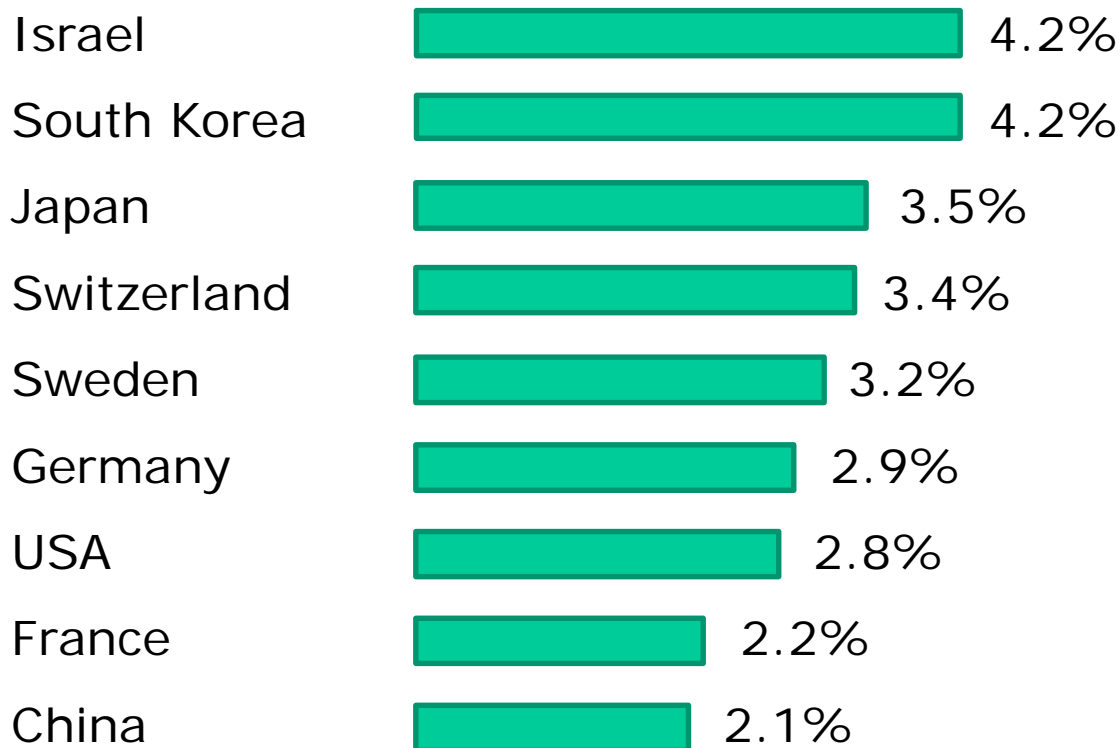


1. Prologue

- Ariel University and Lucerne University of Applied Sciences have both established in the past a number of international university collaborations, including some dual degree programs on bachelor and on master level.
- Nevertheless, the international activities were focussed on (more or less) bilateral student exchanges on undergraduate level.
- At both institutions bachelor and master programs are offered combining modules in the areas of Engineering and Management with strong focus on Innovation.
- Both countries – Israel and Switzerland – are among the worldwide leading countries in terms of Innovation.

1. Prologue

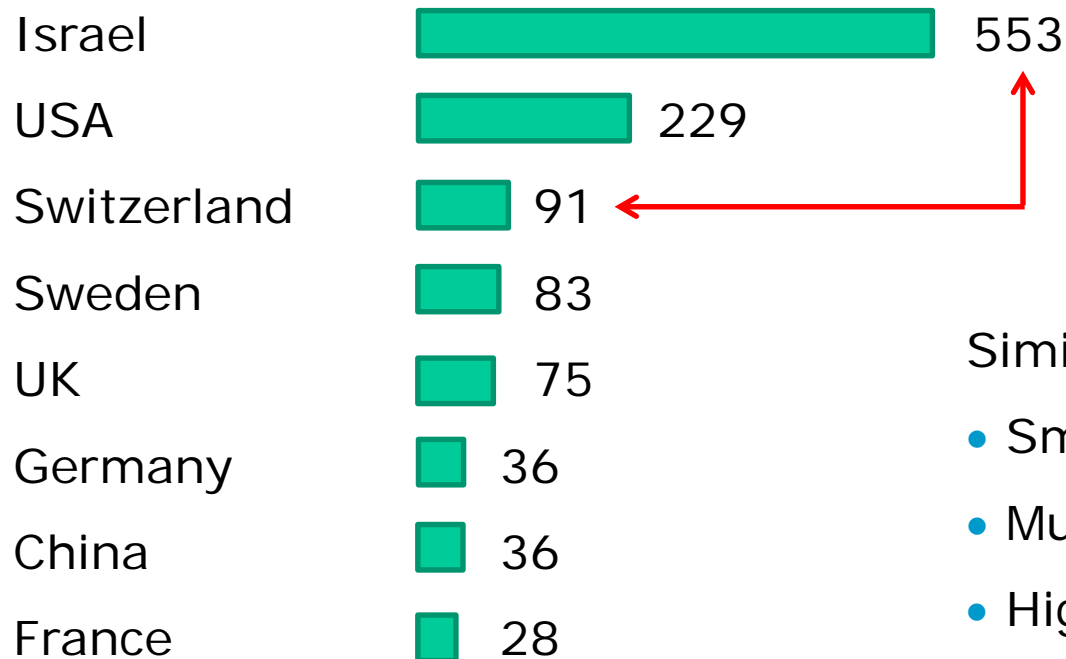
Gross Domestic Spending on R&D in % of GDP (in 2015):



(Source: OECD)

1. Prologue

Venture Capital Investments per capita in US\$ (in 2015):



Similar environments:

- Small countries
- Multi cultural population
- High labor cost
- No natural resources

(Source: EY, IVC, wiwo)

1. Prologue

- Thus, it made sense to establish a closer cooperation between Ariel University and Lucerne University of Applied Sciences especially in the area of Innovation.
- In the first phase focus on existing programs combining Engineering with Management.
- Making use of complementary key competencies at both institutions:
 - Lucerne University of Applied Sciences has a long term experience in using computer based TOPSIM simulation games in management modules.
 - Ariel University has a strong expertise in Customer Relationship Management in the high tech industry.
- Setting up of two joint intensive weeks with a duration of one week each combining lectures with case works and company visits.



Lucerne University of
Applied Sciences and Arts

**HOCHSCHULE
LUZERN**



- Lucerne School of Engineering and Architecture, founded in 1959, >2.200 students
- 9 Bachelor programs (1 in English)
- Master programs in Architecture and Engineering
- Applied R&D with focus on Building as a System and Energy for the Future.

2. Going Global Intensive Week at Lucerne

TOPSIM – Going Global:

- sophisticated, computer-based, management simulation:

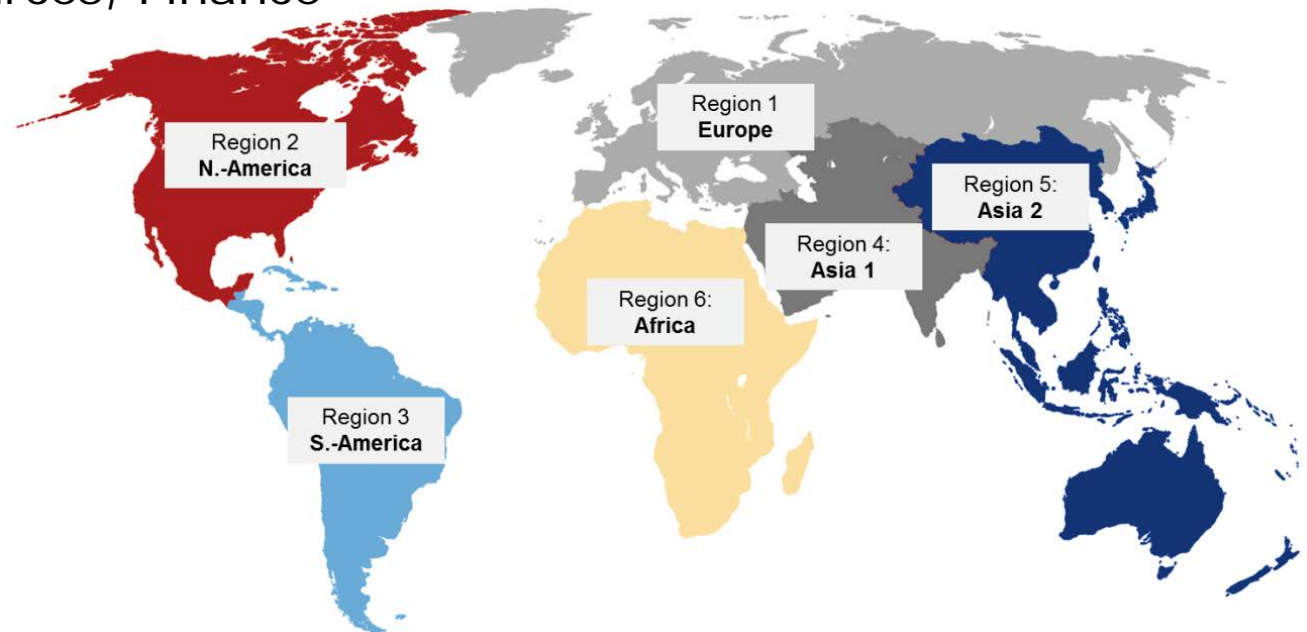


LEARNING BUSINESS
BY DOING BUSINESS

2. Going Global Intensive Week at Lucerne

TOPSIM – Going Global:

- Five teams, each team is present in one region
- Decision areas: Marketing, Purchasing, Production, Sales, Logistics, Human Resources, Finance
- Eight periods



2. Going Global Intensive Week at Lucerne

Professional Competencies:

- Understand the importance of international marketing for companies being active in today's globalized business environment.
- Assess the international environment of a company and develop appropriate international marketing strategies.

Methodological Competencies:

- Develop results individually and in teams.
- Analyse problems and decide in uncertain situations.

Social and Self Competencies:

- Acquire new competencies.
- Assume responsibility for results developed individually and in teams.
- Communicate results orally and in written form.

2. Going Global Intensive Week at Lucerne

Schedule:

	Monday Febr 6 2017	Tuesday Febr 7 2017	Wednesday Febr 8 2017	Thursday Febr 9 2017	Friday Febr 10 2017
8.30-10.00	Welcome Introduction to international marketing	Evaluation of results of period 2, development of decisions for period 3	Market entry strategies with case study	Evaluation of results of period 7, development of decisions for period 8	Preparation of management summary and general assembly
10.30-12.00	Team organisation Assessment of the international environment Development of corporate objectives	Evaluation of results of period 3, development of decisions for period 4	Evaluation of results of period 4, development of decisions for period 5	Evaluation of results of period 8, preparation of management summary and general assembly	General assembly
13.00-14.30	Development of decisions for period 1	Company visit: Schokolade Schoeneberger	Evaluation of results of period 5, development of decisions for period 6		Recapitulation Feedback and evaluation Closing
15.00-16.30	Evaluation of results of period 1, development of decisions for period 2	Company visit: Schindler	Evaluation of results of period 6, development of decisions for period 7	Company visit: Maxon Motor	
17.00-18.00	Optional: Visit of the old town of Lucerne		All: Social event with cheese fondue in the alps		Optional: Fair well event organized by the students
19.00-21.00		Individual activities		Individual activities	

2. Going Global Intensive Week at Lucerne

Grading:

- Share price development: 40%
- Management summary: 20%
- General assembly: 40%



General assembly team Europe

Team:

CEO – Stefan Cetti
CFO – Meytal Anabi
CTO – Yaakov Bezrukov
CMO – Shiri Shmaya
COO – Sivan Odani

Company goals:

FINANCIAL GOALS

- ✓ Buy in bulk according to steel prices.
- ✓ Factories should have high efficiency.
- ☑ Highest market share in North America with 25% at the end of period 8.
- ✓ Steady revenue growth of 4% in domestic markets.
- ✓ Profitable subsidiary in Asia II until the end of period 8.

TECHNICAL GOALS


- ✓ To lead technologically.
- ✓ Reasonable environmental safety level.
- ✓ To be competitive in Asia II.

MARKETING GOALS

- ✓ High Customer awareness by intense advertising.
- ✓ Awareness in home market constantly over 90% and in Asia II after market entrance within 4 periods as well.

EXPANSION GOALS

- ✓ establish a strong second leg in Asia II.
- ✓ Followed by exports to Asia I.



NORTH AMERICA
A TOPM - Going Global Business Simulation


GENERAL

The company is based in north America with a plant in the US, it nevertheless seeks to expand its control towards the far east, by attaining a plant in China. After the recession, and due to financial and banking crisis, the market recovered very slowly, reconstructing its financial systems. Experts predictions of moderate increase in the demand for home appliances, were realized.

PROGRESS OVER THE PERIOD

Initially, growth came from domestic markets, however, by the third period, having faced with the crisis, we have opted for expansion to Asia II, entering aggressively into the Asian market by building a factory in china. In the fifth period, we started selling in Asia I and decided to keep selling there, while extending our manufacturing with cooperation in the region.

Share Price




OUTLOOK AND MARKET DOMINATION

Fierce competition in Asia I resulted in heavy losses. We decided to withdraw (in Period 9) and concentrated efforts in strengthening our dominion in North America (~17%) and Asia II (~16.5%). Finally, we have reached efficient levels of production in the Chinese plant, yielding significant benefits by manufacturing efficient quantities of machinery for the Asian market in and of its own. We now enjoy an increase in price shares.

CONCLUSIONS

Constructing a factory in china did not prove to be a wise investment in the short run, however, it may nevertheless turn out to be worthwhile in the long run.

The decision to sell high volumes while maintaining our initial goals of high technology levels was incorrect. We should have invested in finding out where the sweet points with more profitable combinations of volume sales, and technology.



Management summary team North America

2. Going Global Intensive Week at Lucerne



Swiss chocolate production and tasting



Maxon Motor: high precision drive systems



Schindler: PORT technology for high rise elevators



Delicious cheese fondue in the Alps

Lucerne University of
Applied Sciences and Arts

**HOCHSCHULE
LUZERN**

Technik & Architektur



**ARIEL
UNIVERSITY**

Customer Relationship Management

Collaboration Course with Lucerne University of Applied Sciences and Art

Prof. Dr. Iris Reyhav & Prof. Dr. Sascha Götte

3-10 Sep. 2017



Ariel University in Numbers

Established: 1982

Recognized as a university: 2012

Campuses: 2

Faculties & Schools: 6

Academic Departments: 26

Research centers: 24

Students: 14,000

Professors & Senior lectures: 431





[The Faculty of Engineering](#)



[The School of Health Sciences](#)



[The Faculty of Social Sciences and Humanities](#)



[The Faculty of Natural Sciences](#)



[The Moskowitz School of Communications](#)



[Ariel Center for Design & Technology](#)



The School of Graduate Studies



The School of Architecture



External and Continuing Studies Unit



Preparatory Program

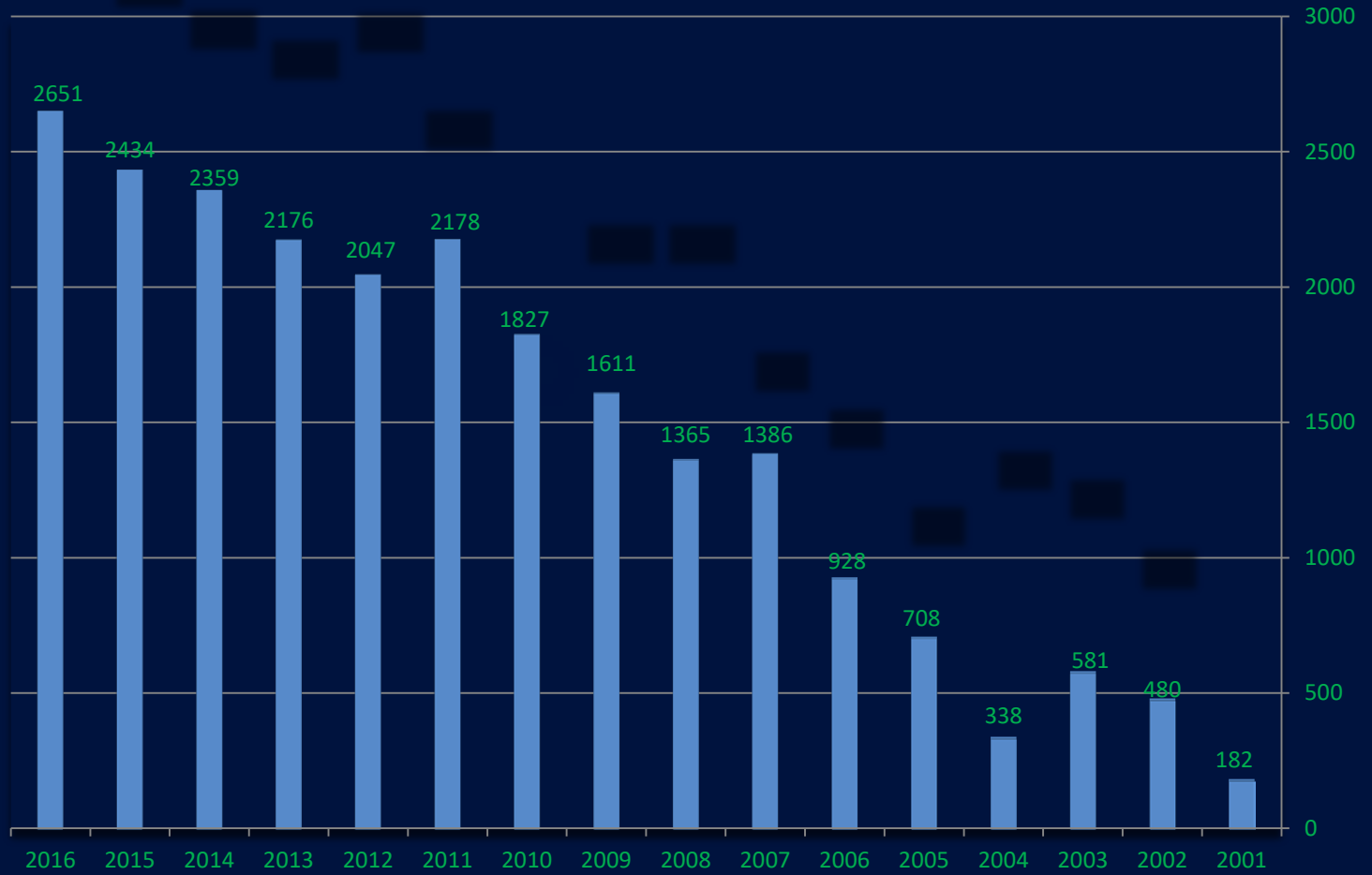


Advanced Degrees (M.A. and Ph.D.)

PhD Doctoral	Post-Doctoral	Pre- Doctoral Students	Doctoral Students	Master's Degree Graduates	Year
5	9	7	53	220	2016
	11	13	90	247	2015
			40	606	2014
				199	2013
					2012



No. of graduates between 2002-2016



Total number of graduates: 23,246



Research Centers



- The Schlesinger Family Center for Compact Accelerators, Radiation Sources & Applications (FEL)
- Hybrid Energy Sources R & D Center
- The Integrative Brain Science Center - Ariel – IBSCA
- Schlesinger Family Medical Radiation Protection, Training, Information and Research Center
- Materials Research Center
- Ariel Biomechanics Center (ABmC)
- Ariel Research Center for Space and Nano-Satellites
- Homeland Security R&D Center
- Ariel Research Center for Defense and Communication (ARDC)
- The Institute for Research of Jewish Communities of the Caucasus & Central Asia
- Robotics Research and Applications
- Ariel Center for Cyber Technology
- The Center for Law and Mass Media
- The Middle East Research Center
- The Institute for the Study of New Media, Politics and Society
- Research Center for Economics and Management Policy
- Ariel Center for Applied Cancer Research (ACACR)
- SimuLab - Simulation for Industry (Applied Mathematics)
- Center for Drug Repurposing
- Institute of Personalized Medicine



Physical statistics

- Over 100 acres
- 51,000 m² (ca. 500,000 Sq.F) floor space for classrooms, research and administration
9,270 m² (ca. 90,000 Sq.F) for laboratories
- 2,000 dormitory beds



Campus Map



Milkan Gate- For vehicles and pedestrians	G1
Pedestrians Gate	G2
Pedestrians Gate	G3
David Gate- For vehicles and pedestrians	G4

Faculty offices	4
Industrial Engineering & Management	8



The University maintains an atmosphere of excellence in both research and scholarship that attracts thousands of students from all over the country.

https://www.youtube.com/watch?v=mID_2JwI5s&feature=youtu.be



Department of Industrial Engineering & Management

Head of Department: Prof. Iris Reyhav

The Department of Industrial Engineering and Management was established in 1994.

The Department offers a Bachelor of Science (B.Sc., M.Sc) degree recognized by the Council for Higher Education in Israel. The department offers courses in the following majors: operation management, information systems, technology management with emphasis on collaboration with industry.

Our graduates obtain positions in manufacturing, engineering, operations, public utilities and services in global organizations and governments.



The Department's research and teaching subjects

- Mobile Technologies
- IOT
- Artificial Intelligence
- Data Science
- Scheduling
- Inventory Management
- Transportation and Road Safety
- Man-Machine Interface
- Biometrics Authentication
- Robotics
- Human Factors
- Operation Research
- Production Management
- Industrial Automation
- Decision Making and Negotiation
- Machine Learning
- Social Networks



Visit us at- <http://www.ariel.ac.il/iem/en>



Course Description

- Customer Relationship Management (CRM) in marketing sales and service.
- Effective CRM strategies help companies align business process with customer centric strategies using people, technology, and knowledge.
- **A unique opportunity to meet, experience and learn some global leading companies in their respective fields.**



Course Process



- Emphasis on collaborative learning through team work on case studies in a new interactive collaborative learning center and daily visiting of various companies.
- lectures, mini – cases, travel to companies, and presentation exercise.
- The groups will be mixed by local graduate and undergraduate students and graduate students from Lucerne University.
- Course assignments will be available on our digital learning platform. In addition, useful reading will help the students with the course activities and will be made available as PDF files.
- The students will be expected to read the assigned reading material, work diligently toward the completion of assignments, attend sessions regularly and participate in all discussions, presentations, and activities constructively.

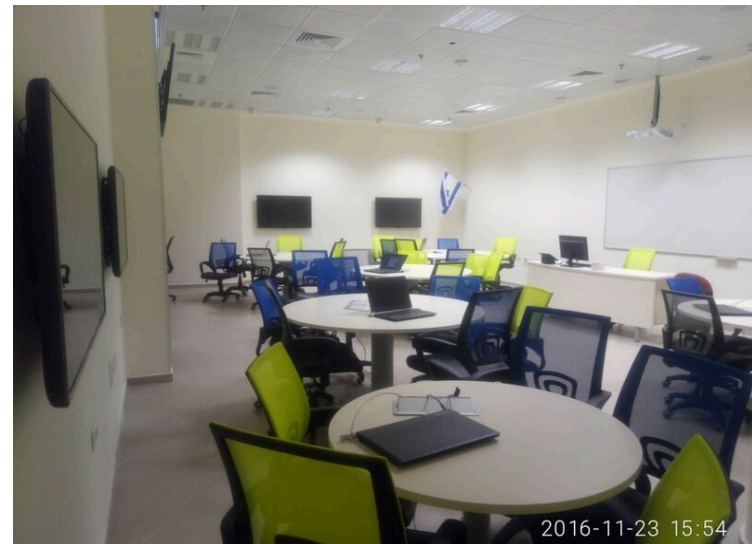
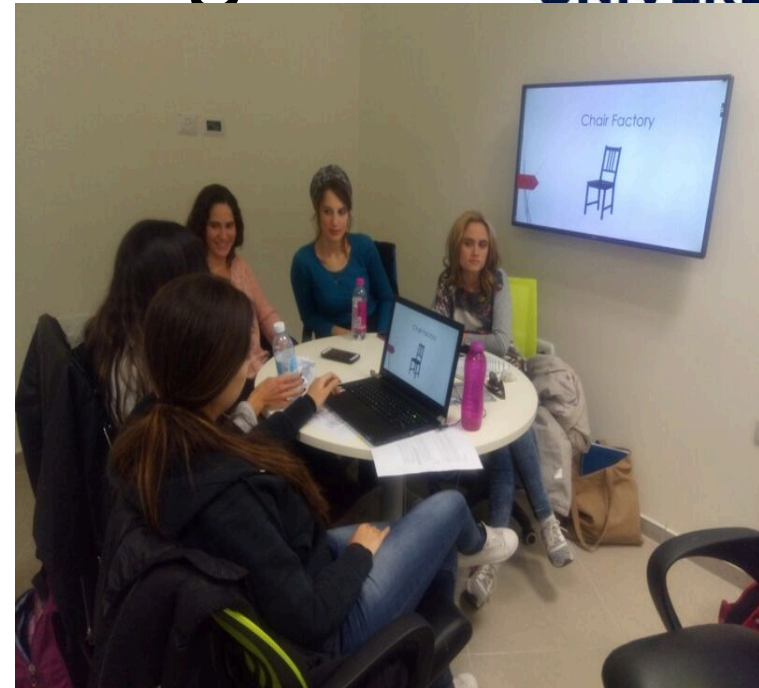


Course Objectives

- Understanding the fundamentals of CRM.
- Acquaintance with various companies in Israel leading in their respective field.
- introducing the student to the literature on CRM.
- Experience international collaborative students team work communication in learning.



Collaborative Learning Lab



Grading:

- **Pre Course individual preparation (reading will be send; literature and companies background)- 15%**
- **Daily activities based on company visit- 30%**
- **Team work assessment- 15%**
- **Final project submission and presentation- 40%**



Tentative Schedule Program:

Sun 3 Sep 17	Mon 4 Sep 17	Tue 5 Sep 17	Wed 6 Sep 17	Thur 7 Sep 17	Fri 8 Sep 17	Sat 9 Sep 17	Sun 10 Sep 17
Arrival to Israel Airport in Tel Aviv and transfer by bus to Ariel	Collaborative team work in interactive class on cases	Amdocs company visit workshop	Full day visit iscar company in north http://www.iscar.co.il/index.aspx/countryid/34	SAP company visit workshop	Check out Dormitory	Individual activities	Individual activities
University Dormitory Check in	Company visit	Collaborative team work in interactive class on cases	social activities in the area	Final presentations	Fair well event: Jerusalem tour and transfer by bus to weekend in Tel Aviv		Individual transfer to airport
Campus & the university Winery Tour	Individual activities	Individual activities	Collaborative team work in interactive class on cases				
Team setting							
Welcome event							





Amdocs is a leading software & services provider to the world's most successful communications and media companies.

Main Product Areas

- Customer Multiplay Digital Experience
- Enterprise Business
- Open Network
- Internet of Things (IoT)
- Customer Operational Intelligence
- Mobile Financial Services
- Amdocs Optima
- Entertainment and Media

Main Services Areas

- Intelligent Operations
- Testing
- Order to Activation
- Revenue Guard
- Systems Integration & Consulting Competencies
- Enterprise Integration
- Network Service Assurance
- Amdocs Academy
- Advisory Services
- Project Delivery



ISCAR is about world class manufacturing and application of cutting tools. It helps companies reduce the cycle time to produce parts, while increasing it's current machine tool capacity and improving it's profitability.

Upon close working collaboration with industry, ISCAR have developed industry-specific solutions to optimize productivity. Understanding the unique requirements of many industries and continually improve and introduce new ideas. Whether you are an automotive, aerospace, medical, die and mold, oil and gas equipment manufacturer or a general machining subcontractor, ISCAR have a solution to help you increase your throughput and resolve your machining challenges.





SAP is the world leader in enterprise applications in terms of software and software-related service revenue. Based on market capitalization, SAP is the world's third largest independent software manufacturer.

350,000+

Customers in more than
180 countries

85,200+

Employees in 130+
countries

€22.06bn

Total Revenue (IFRS) in
FY2016 (preliminary)

87%

Of Forbes Global 2000 are
SAP customers

45 yrs.

Of history and innovation

100+

Innovation and
development centers

15,000+

SAP partner companies
globally

125 mil.

Subscribers in our cloud
user base

CASTRO FASHION

Type	Public (TASE: CAST)
Industry	Fashion
Founded	Tel Aviv, Israel (1973)
Headquarters	Bat-Yam, Israel
Area served	Israel Russia Germany Switzerland Thailand Ukraine
Key people	Aharon Castro (Chairman) Gabriel Rotter (CEO, Director) Esther Rotter (CEO, Director) Shay Offir (Executive Vice President) ^[1]
Products	clothing , cosmetics , fashion accessories
Number of employees	1457 (2016) ^[1]
Website	Castro.com



We are all looking forward to seeing you in CRM course At Ariel University in Sep. 2017

Prof. Iris Reychav

Head of Department of Industrial Engineering & Management



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Outlook

1. CRM intensive week course 3-9 September 2017 Israel-students from both institution
2. Research Collaboration
3. Joint mentoring of PhD, Post students that will come to Ariel University.



Virtual campus tour

http://62.219.17.241/virtual_tour/univer_vr.html

Q&A ???

