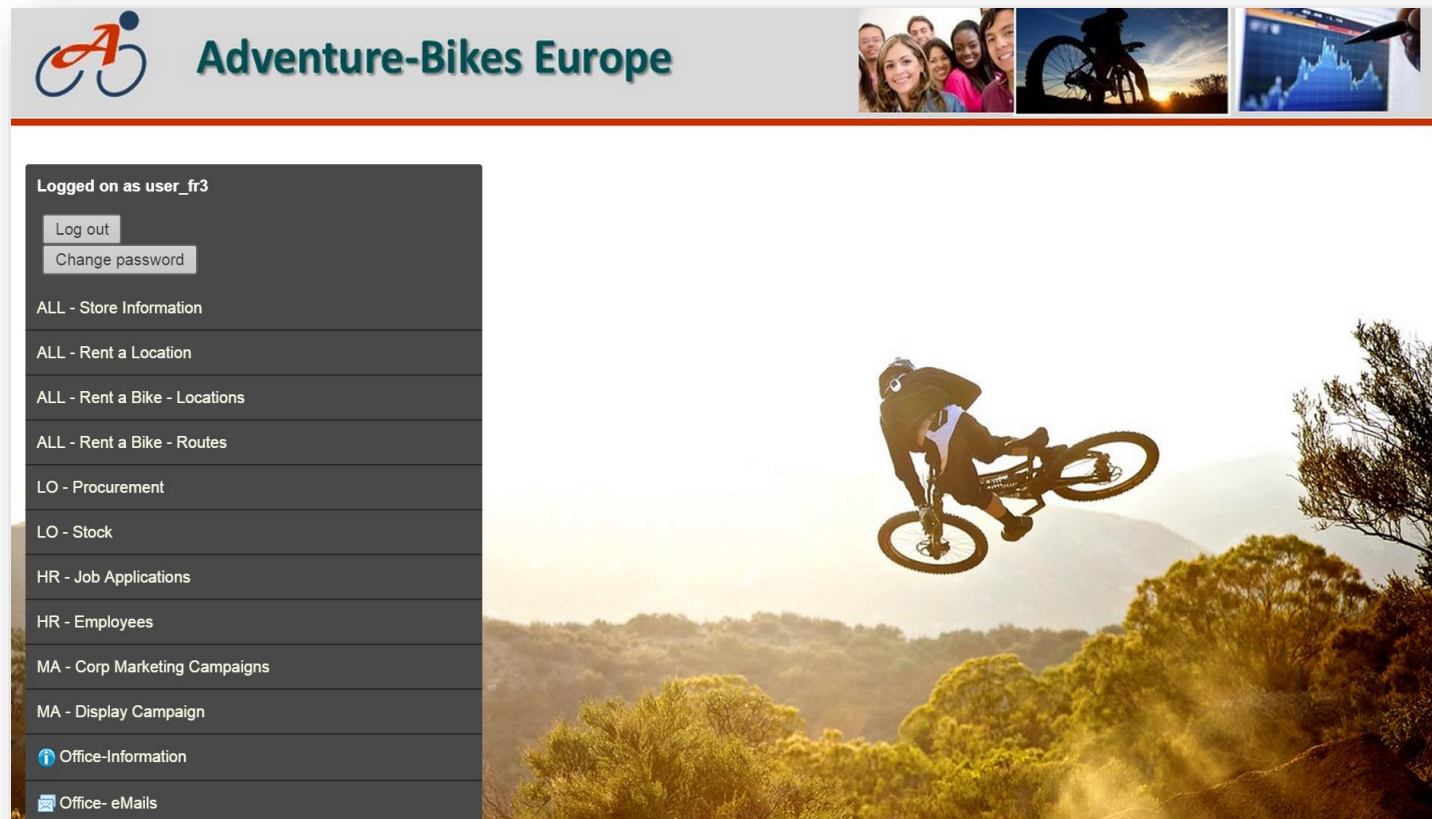


BI Game

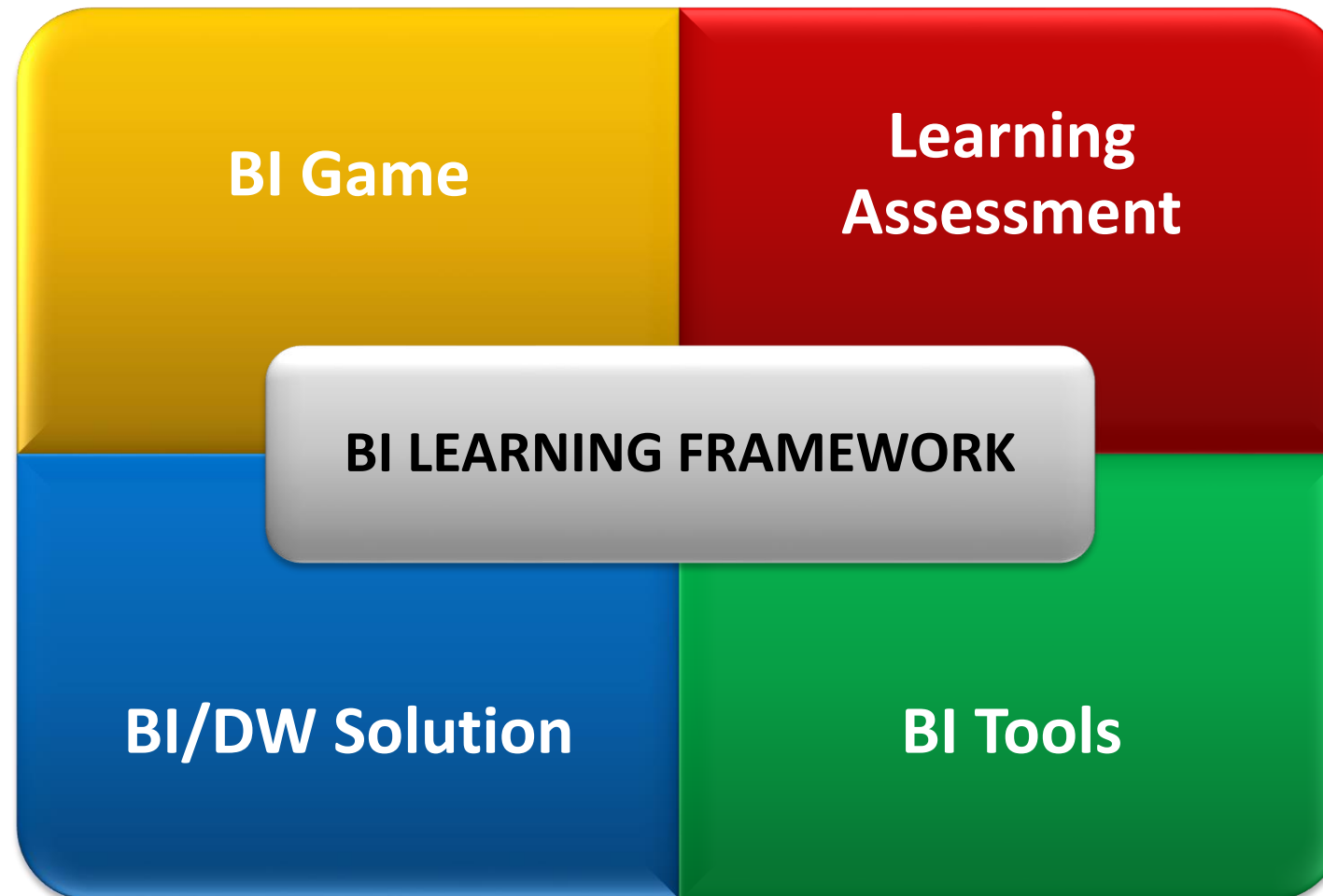
A Computerized Simulation/Game for Teaching & Learning
Business Intelligence



Prof. Dr. Peter Lehmann
Waranya Poonnawat

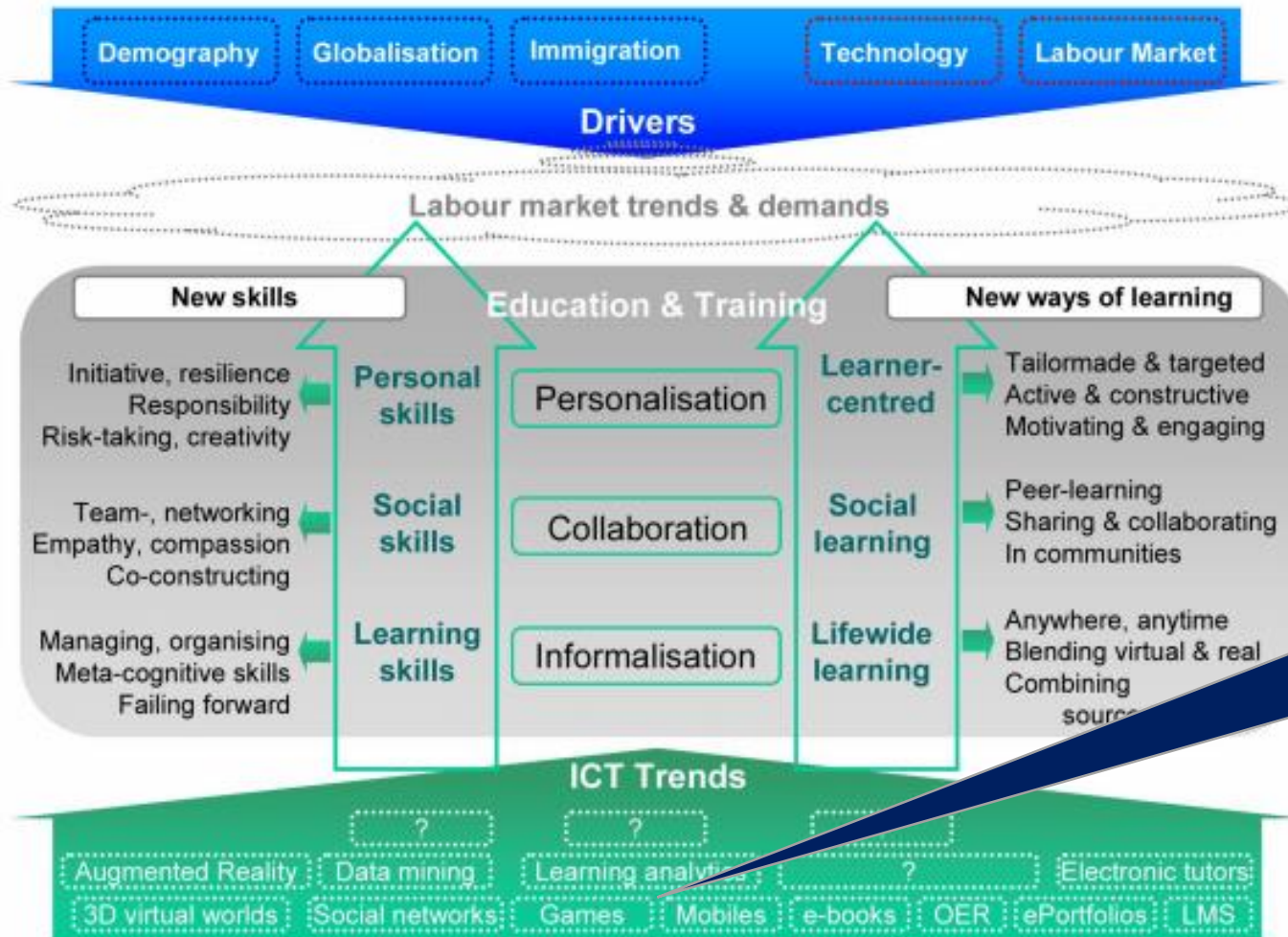
Business Intelligence Academy (BIA)
Stuttgart Media University (HdM)
University of the West of Scotland (UWS)

Components of BI Learning Framework



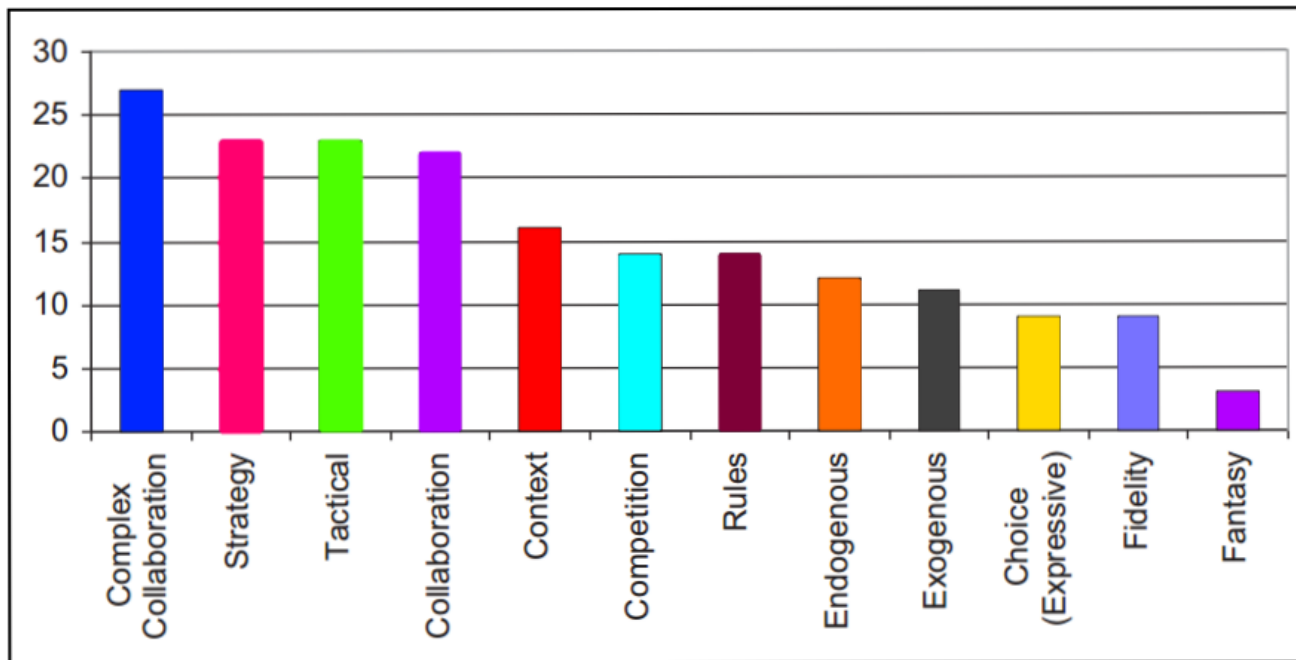
Future of Learning

Figure 1: Conceptual map of the future of learning



Games
Learning Analytics
...

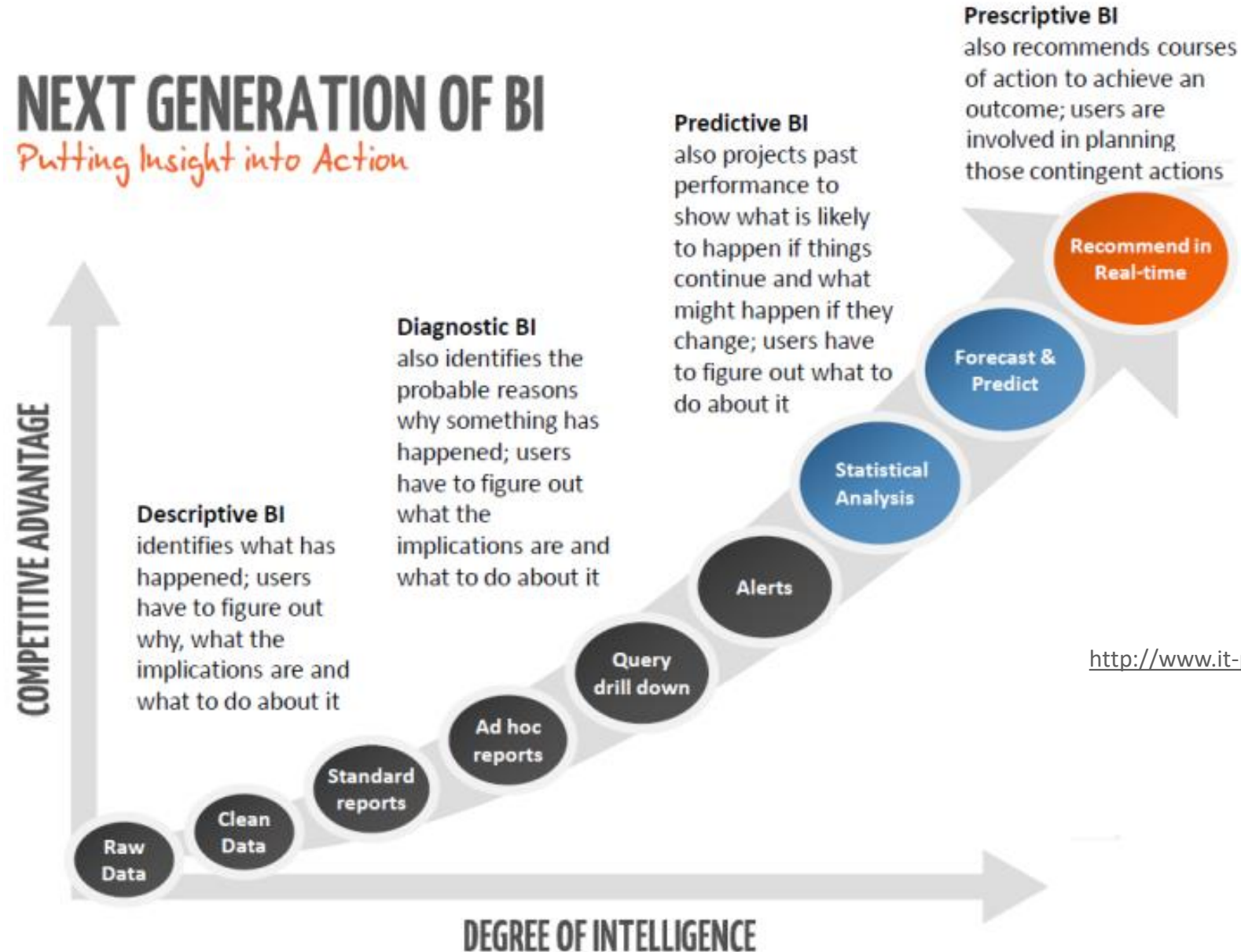
Game Characteristic & 21st Century Skills



Social Skills
 Creativity
 Collaboration
 Self-Direction
 Productivity
 Risk Taking
 Critical Thinking
 Flexibility
 ICT-Literacy
 Problem Solving
 Learning 2 Learn
 Solve Conflicts
 Communication
 Planning

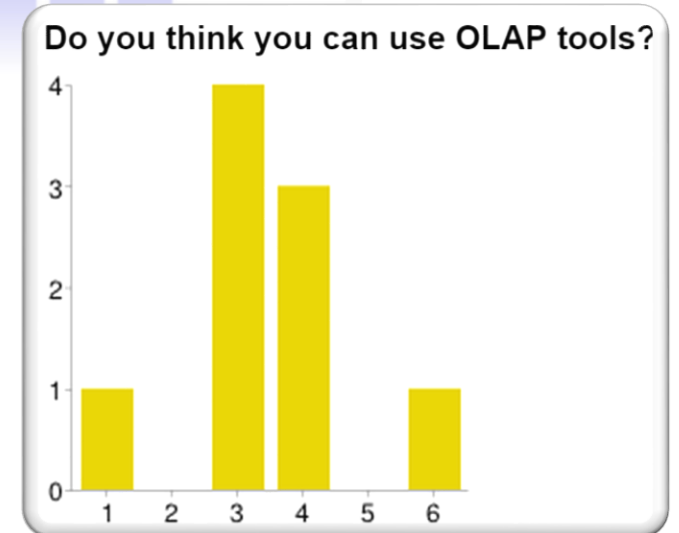
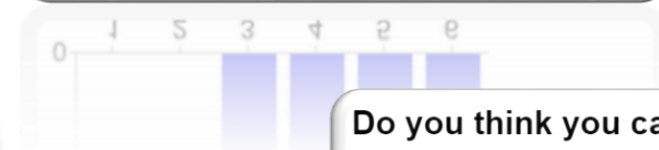
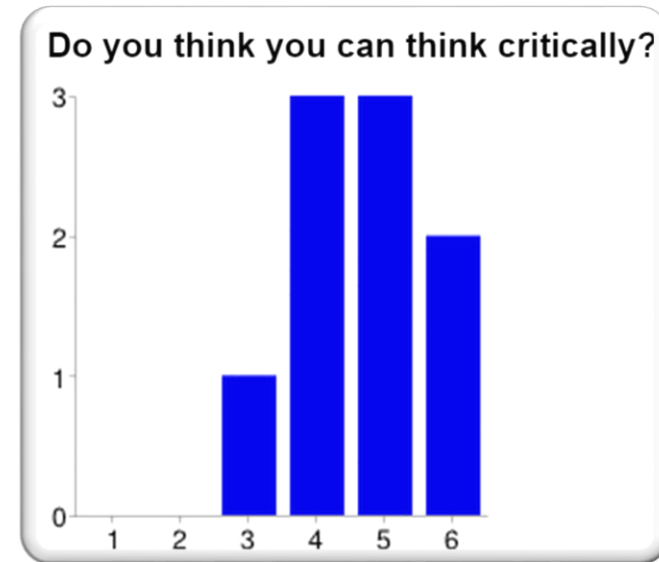
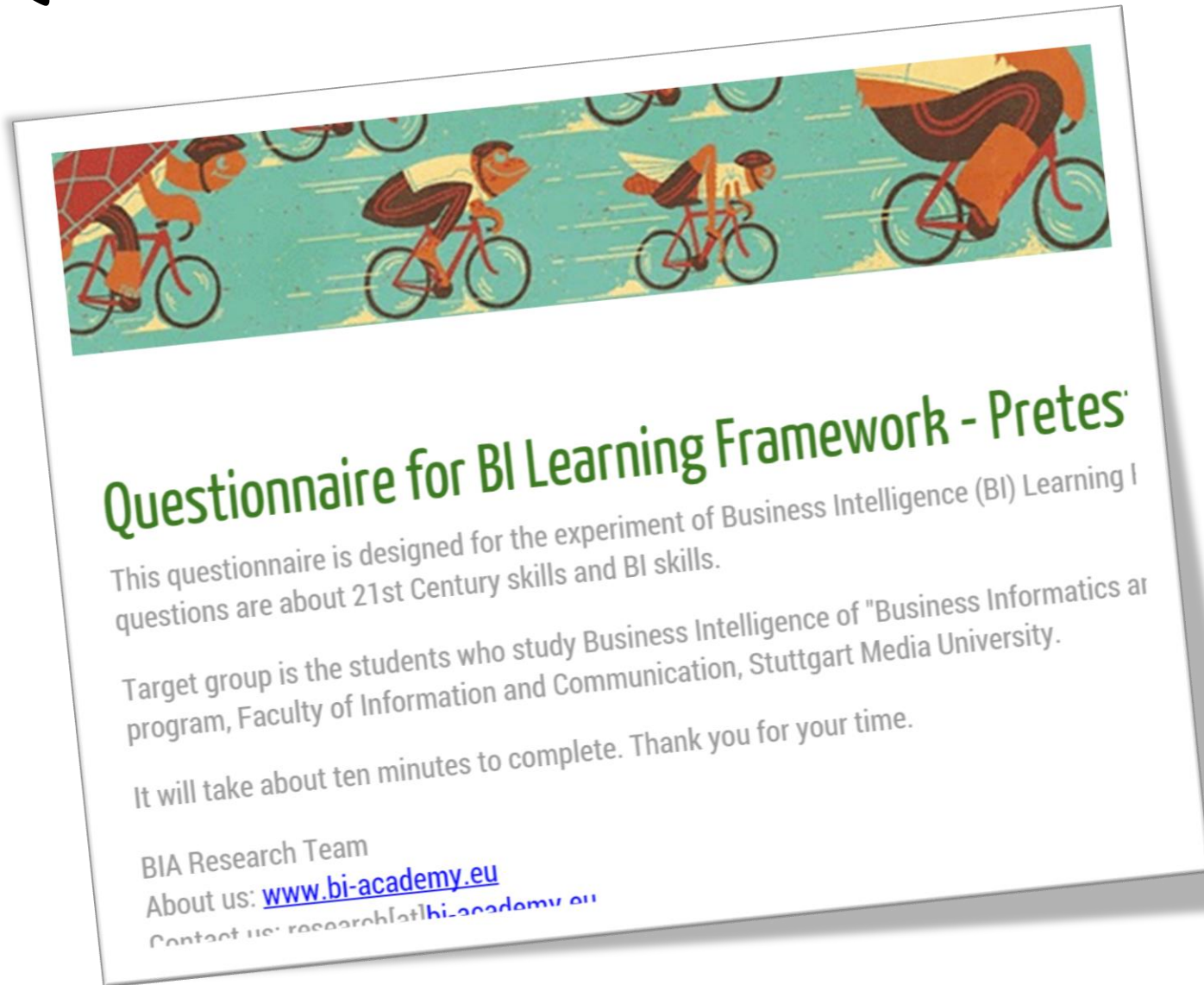
Figure 2. Game characteristic contribution to 21st century skills.

BI Maturity Model – BI Skills

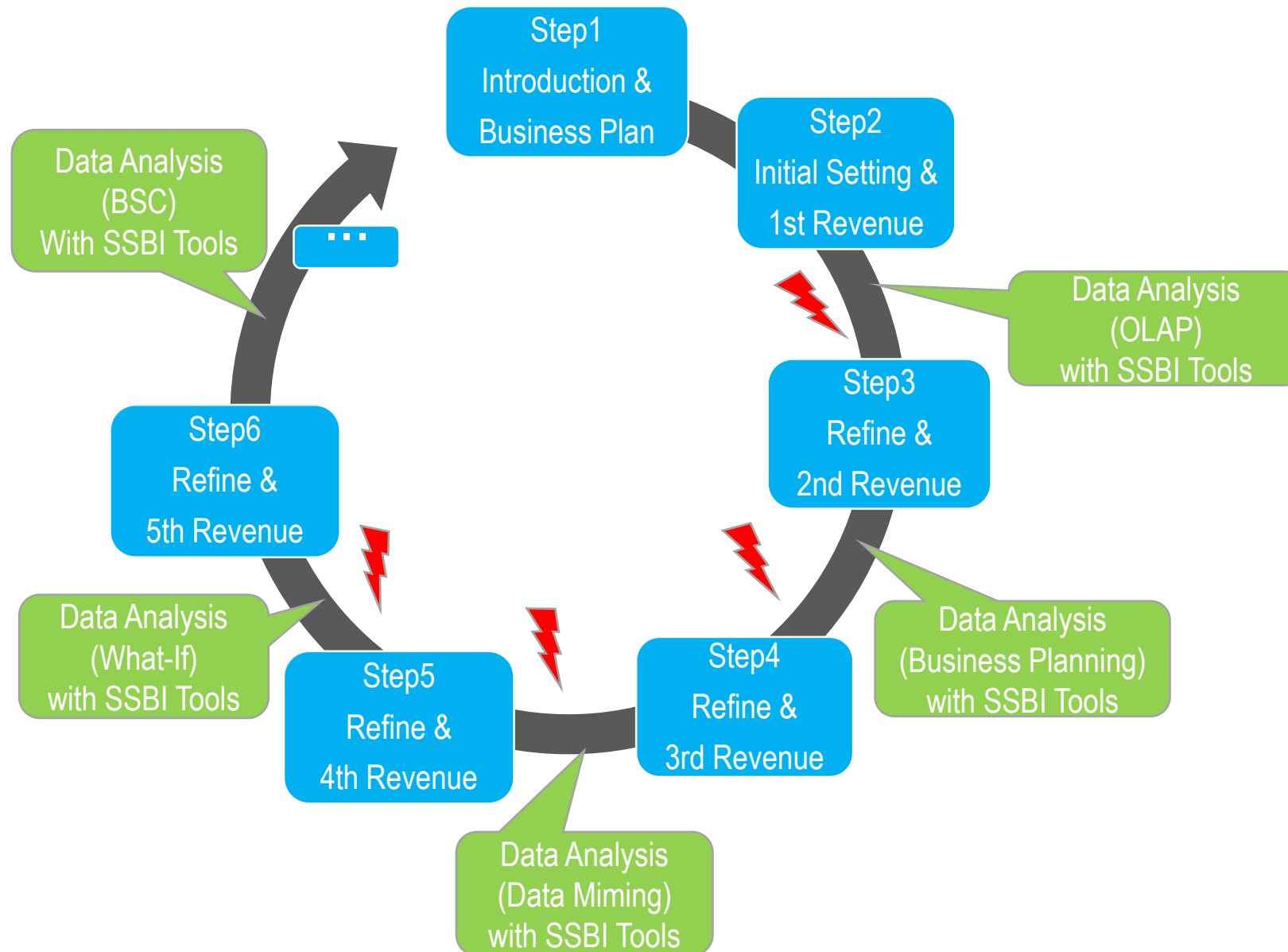


<http://www.it-performs.com/resources/bi-maturity-model>

Questionnaire : Pretest



Event Format



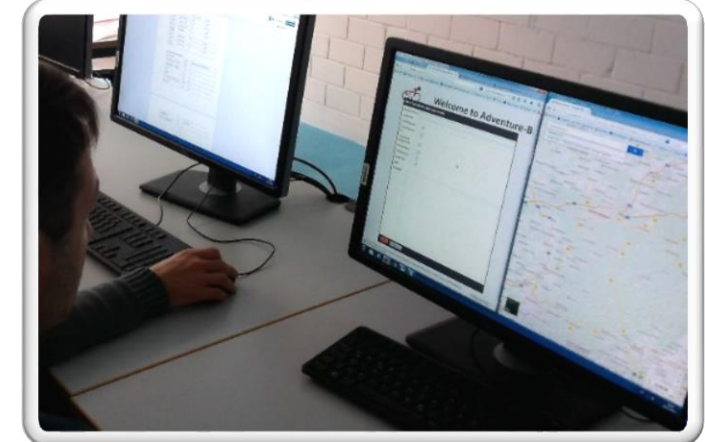
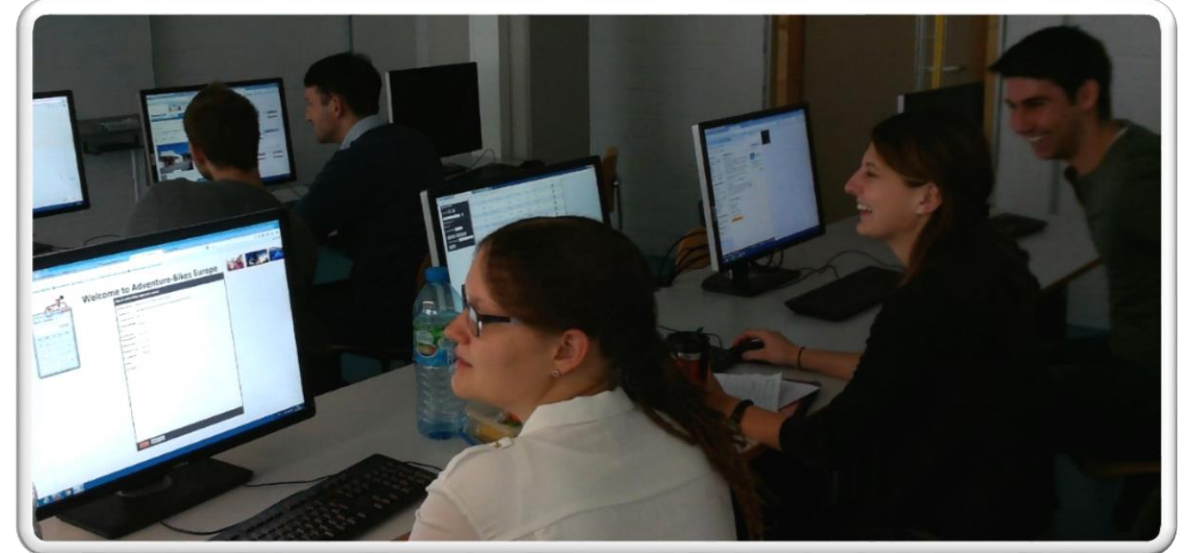
Step1 : Introduction

- Germany:
 - population 80,000,000
 - bike selling per year $\sim 4,000,000$ = ratio is 1/20
- Selected cities:
 - e.g. FN (Friedrichshafen), FR (Freiburg im Breisgau), KL (Kaiserslautern), ...
 - Similar population e.g. $\sim 250,000$
 - market volume $\sim 12,500$ bikes per city
- Reference : Joos at Radolfzell
 - <http://www.zweirad-joos.de/>
- Assignment:
 - open a new shop with the size $\sim 800 - 1,000 \text{ m}^2$



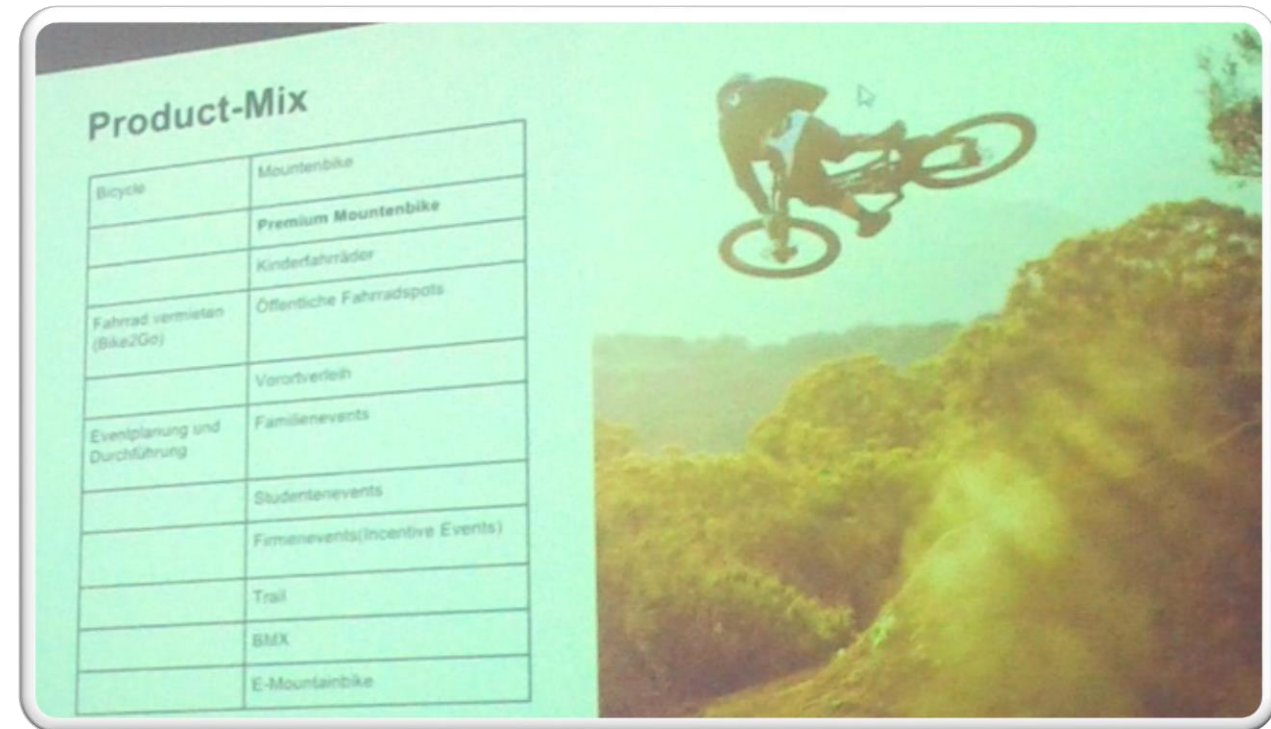
Step1 : Business Plan

- 8 slides
 - Location
 - Competitors
 - Target groups
 - Human resources/employees
 - % of Product mix : Premium, Mid-up, Mid-low, Budget including bike2go
 - Marketing mix
 - Devices & Equipment for the new shop
 - Cost plan & Break-even



Step1 : Business Plan

- Presentation
- Initial market share



Step2 : Initial Setting

- Choose / add a location

Location ID

8

Location Address

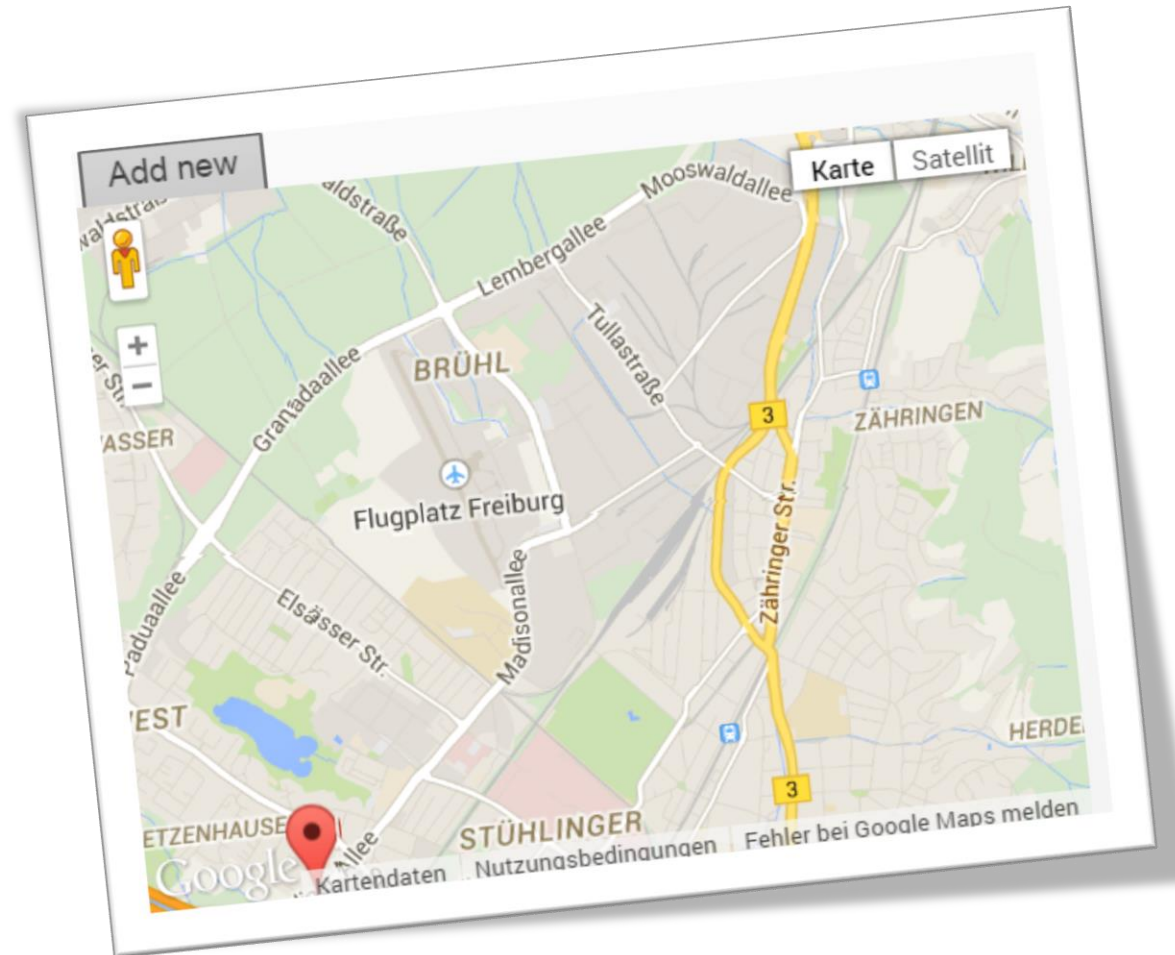
Kartuserstraße 45, 79102 Freiburg im Breisgau

Location Size m2

800,00

Image





Step2 : Initial Setting

- The store location

City	Freiburg im Breisgau
Population City Region	218043
Country/State	Germany
Location Size m2	1000
Location Rent per m2	8,45
Location Size Warehouse PCT	91
Parking Places	29
Distance to City	3,80
Location Age	1995

Image

Dragon Industrie

Gewerbe Makler GmbH & Co. KG

ETL Username	ETL_USER_4496
ETL Password	ETL_PASS_4496
ETL Connection String	85.214.102.16
GEO Longitude	7,85
GEO Latitude	48,00

Step2 : Initial Setting

- View stock & order products

Product Category	Material Number	Material Description	Price Segment	AMOUNT	Store Space in m2
City Bikes	CB-001	Corona Bravo 7	Budget	35	70
City Bikes	CB-002	PEGASUS Avanti Wave 26" 7N	Mid-Low	36	72
City Bikes	CB-003	Travel City EasyEnt RT 7N 2014	Mid-Up	36	72
City Bikes	CB-004	Town Lite Rohloff GTS 2012 He	Premium	7	21
Kid Bikes	KB-001	Puky ZL 16-1 Alu blau 2014	Budget	56	56
Kid Bikes	KB-002	Leo	Budget	57	57
Kid Bikes	KB-003	CUBE Cubie 2013	Budget	28	28
Mountain Bikes	MB-0002	Bulls Copperhead 3	Mid-Low	116	232
Mountain Bikes	MB-0003	Cube Reaction GTC 29	Mid-Up	16	48
Mountain Bikes	MB-0004	Scott Genius LT 700 Tuned 2014	Premium	8	24
e Bikes	EB-002	Grace Easy S-Pedelec 2013	Mid-Low	150	150
e Bikes	EB-003	Grace MX 2 Urban NuV sw 2014	Mid-Up	50	100
e Bikes	EB-004	Grace One City R-extend 2013	Premium	16	32
				Total: 611	Total: 962

	☐	Material Number	Material Description	Price Segment	Product Category	Transfer Price EUR	Sales Price EUR	Store Space in m2	Material Image	Amount
	☐	MB-0001	Cube Aim Disc	Budget	Mountain Bikes	382,00	449,00	2		0
	☐	MB-0002	Bulls Copperhead 3	Mid-Low	Mountain Bikes	799,00	999,00	2		116
	☐	MB-0003	Cube Reaction GTC 29	Mid-Up	Mountain Bikes	1.349,00	1.799,00	3		16
	☐	MB-0004	Scott Genius LT 700 Tuned 2014	Premium	Mountain Bikes	4.224,00	6.499,00	3		8
	☐	CB-001	Corona Bravo 7	Budget	City Bikes	225,00	299,00	2		35
	☒	CB-002	PEGASUS Avanti Wave 26" 7N	Mid-Low	City Bikes	300,00	349,99	2		36
	☐	CB-003	Travel City EasyEnt RT 7N 2014	Mid-Up	City Bikes	500,00	629,00	2		36

Step2 : Initial Setting

- view job application & selected employees

Employee ID	21
Position	Salesman
Name	Martina Traut
Age	29
Photo	
Annual Salary Expected	35.000

Employee ID	24
Position	Salesman
Name	Florian Hahn
Age	34
Photo	
Annual Salary Expected	29.000

Employee ID	2
Position	Mechanic
Name	Andreas Miller
Age	28
Photo	
Annual Salary Expected	5.000

Employee ID	10
Position	Mechanic
Name	Susanne Neuhard
Age	28
Photo	
Annual Salary Expected	26.000

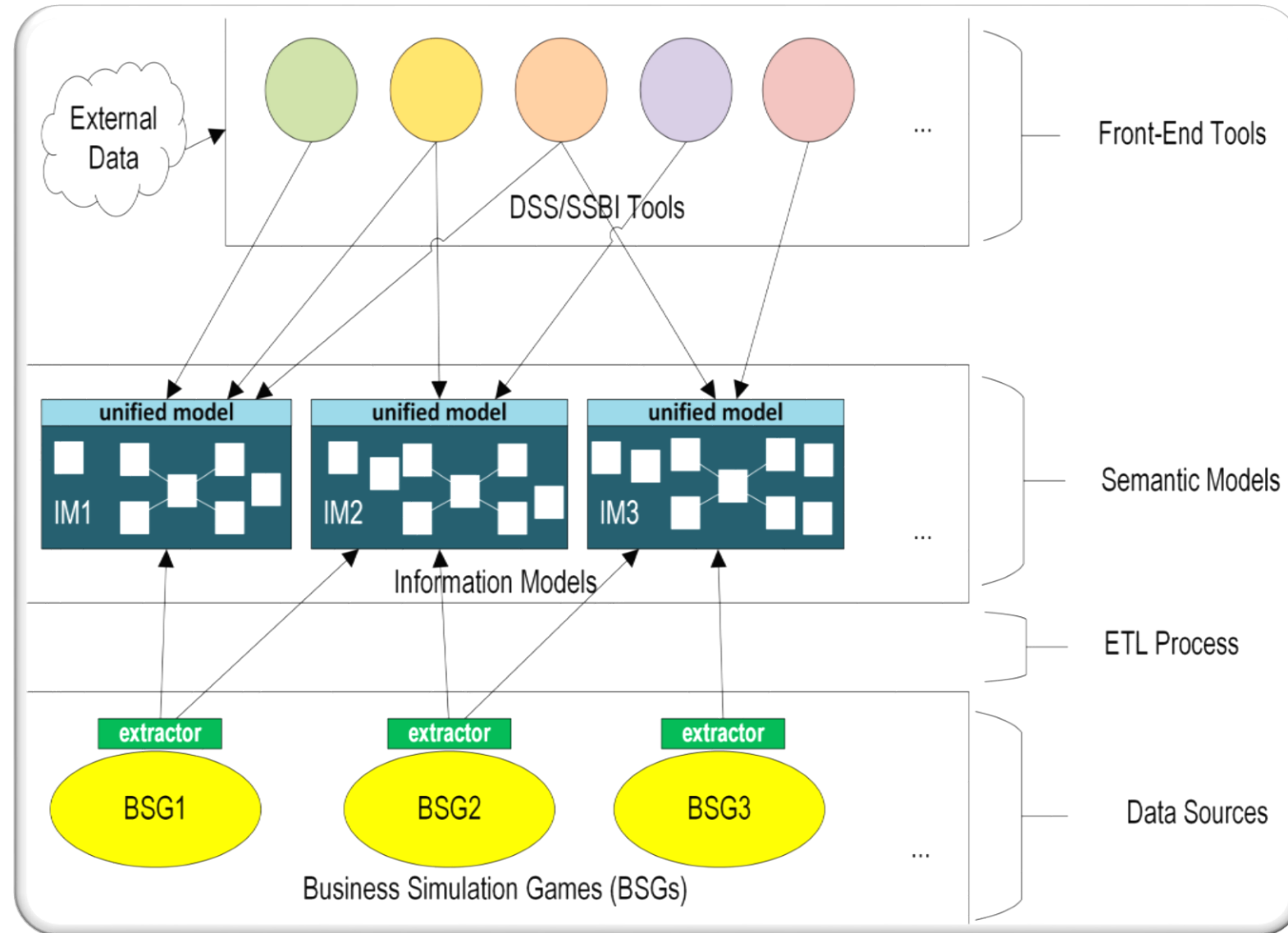
Annual Salary Offerd	33.000,00
Sales Commission in PCT	10

Step2 : Initial Setting

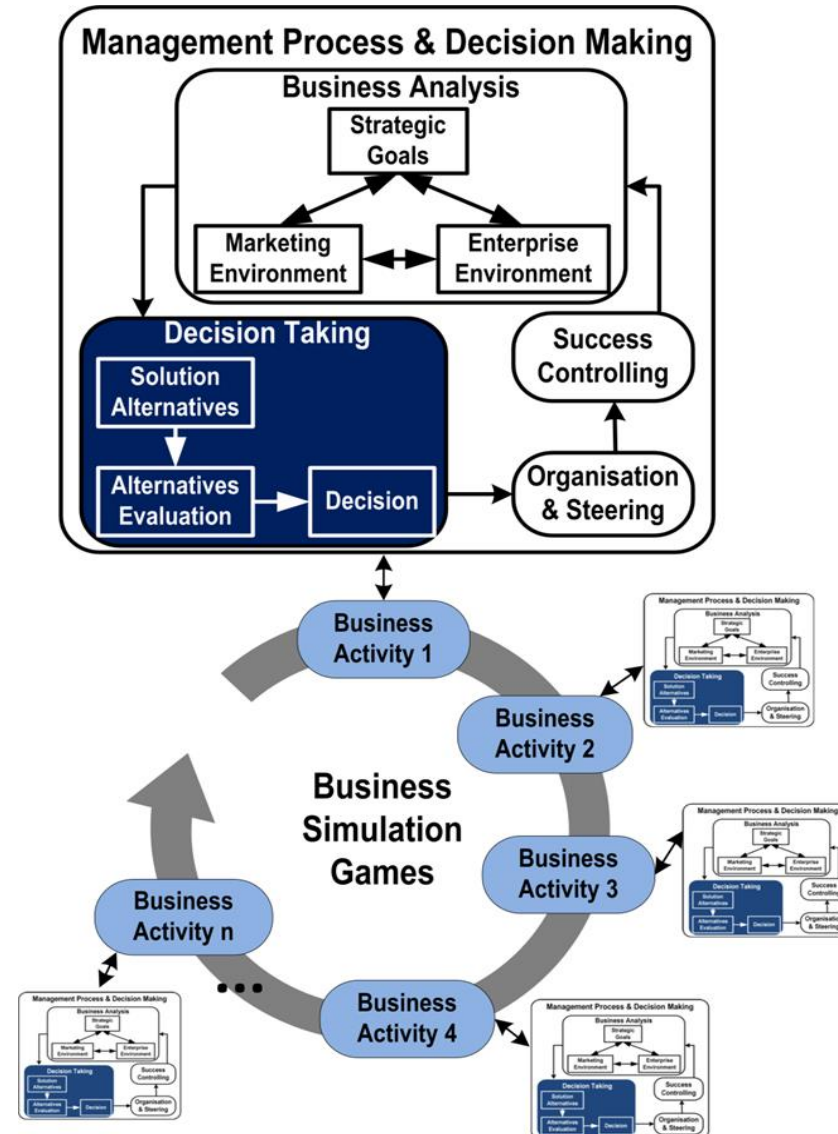
- View & select corporate marketing campaign

Type of Campaign	Name of Campaign	Cost Plan	Costs in Euro	Parameter	Default Value
DISCOUNT	Discount for Premium Mountain Bikes	No Costs	0,00	Discount in %	10,00
DISCOUNT	Discount for Mid-Up Mountain Bikes	No Costs	0,00	Discount in %	15,00
DISCOUNT	Get premium supply with one bike	per Bike	80,00	Number of Bikes	1,00
DISCOUNT	Students Semester Shot City Bikes	No Costs	0,00	Discount in %	10,00
DISCOUNT	cash for clunkers	Per Bike	50,00	Anzahl	50,00
DISCOUNT	Google Ads	per 100 Clicks per Month	500,00	Number of Clicks	1,00
DONATION	Help the World	per Bike	30,00	Number of Bikes	1,00
EVENT	Bike with the Trainer	Per Trainer	150,00		1,00
EVENT	Test drives for University Students	per event	1.000,00	per event	1,00
EVENT	Mountain Bike Race	per event	4.000,00	Cost per event	4.000,00
EVENT	Opening Event / Party	per event	6.000,00	per event	1,00
EVENT	EuroBike Exhibition Booth 10 m2	per event	28.000,00	per event	1,00
EVENT	EuroBike Exhibition Booth 30 m2	per event	50.000,00	per event	1,00
EVENT	Buy one get one for free	per Kids bike	50,00	Number of Bikes	50,00
FESTIVAL	Small Street Sports Festival	Per Festival	30.000,00	Number of Festivals	1,00
FESTIVAL	Mid sized street festival	Per Festival	50.000,00	Number of Festivals	1,00
MEDIA	Social Media Campaign	Per 10.000 views	3.000,00	Number of Banner Ads	10.000,00
MEDIA	Buy positive reviews	Per Premium Bike / Reviewer	2.500,00	Numbers of Reviewers	2,00

Technical Framework



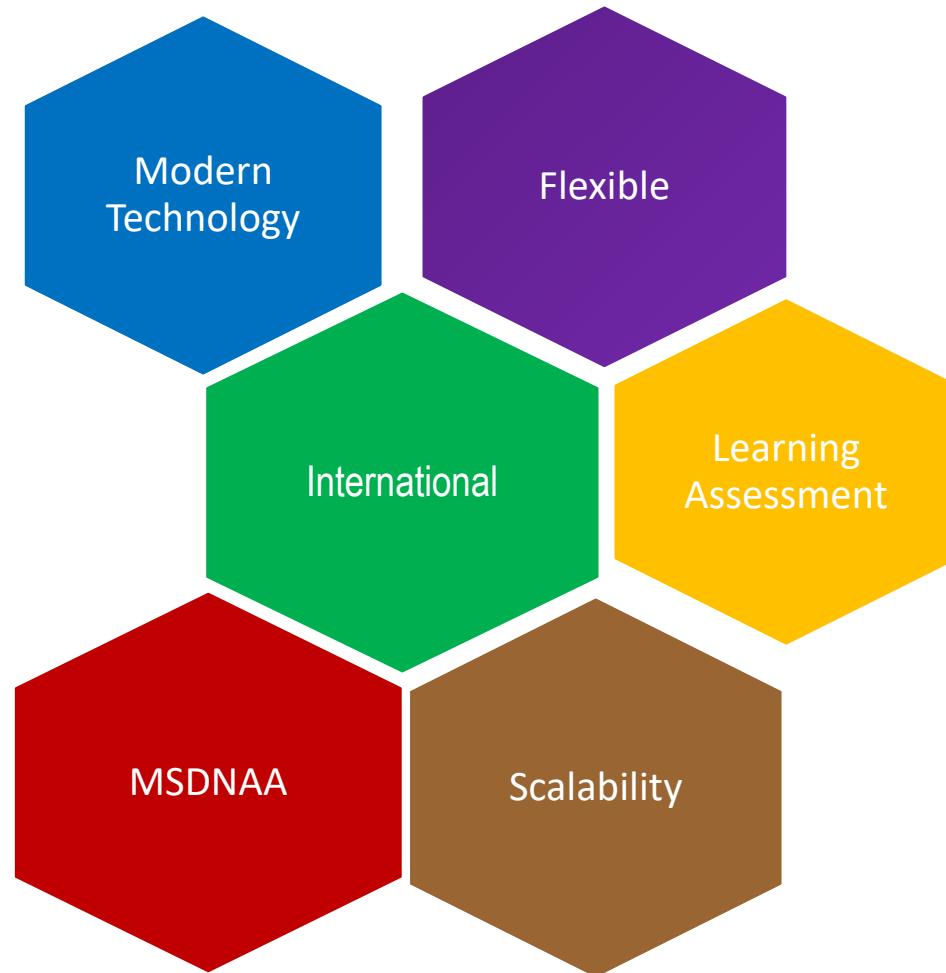
Concetual Framework



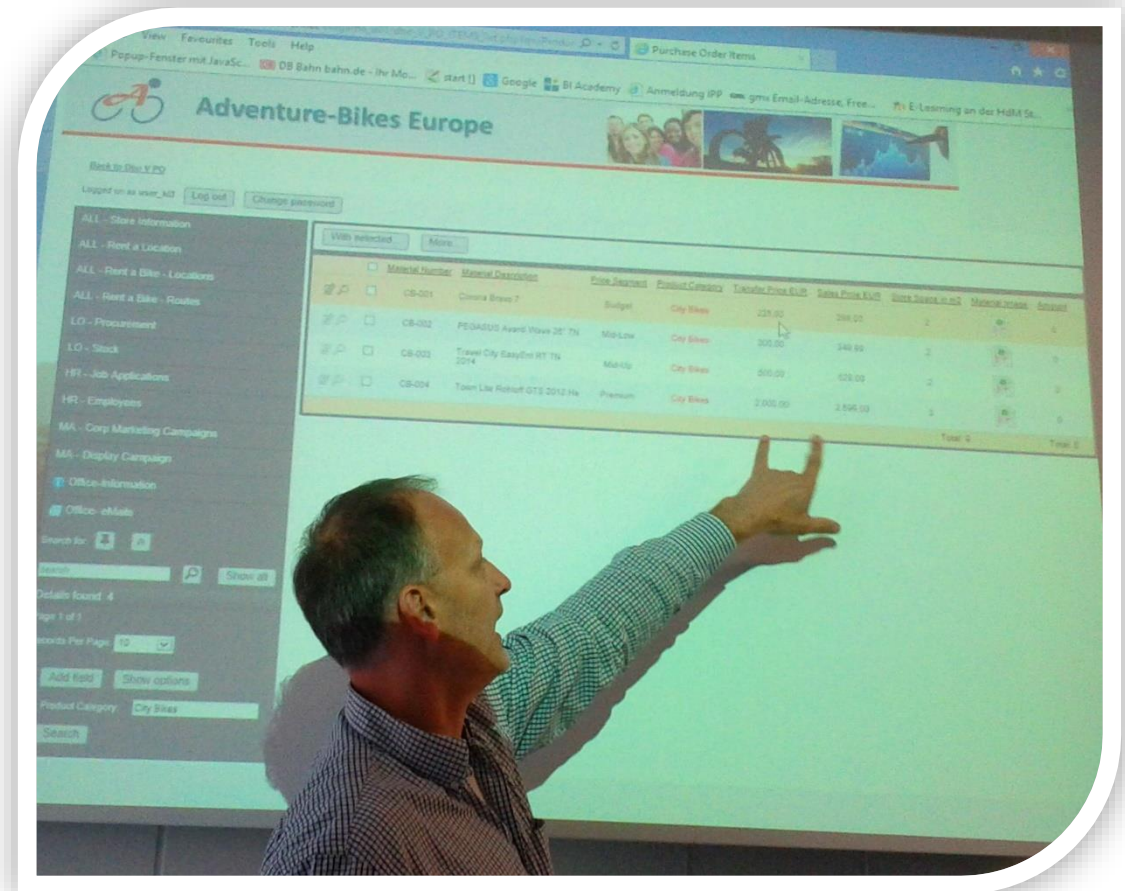
SSBI Tools – Data Analysis

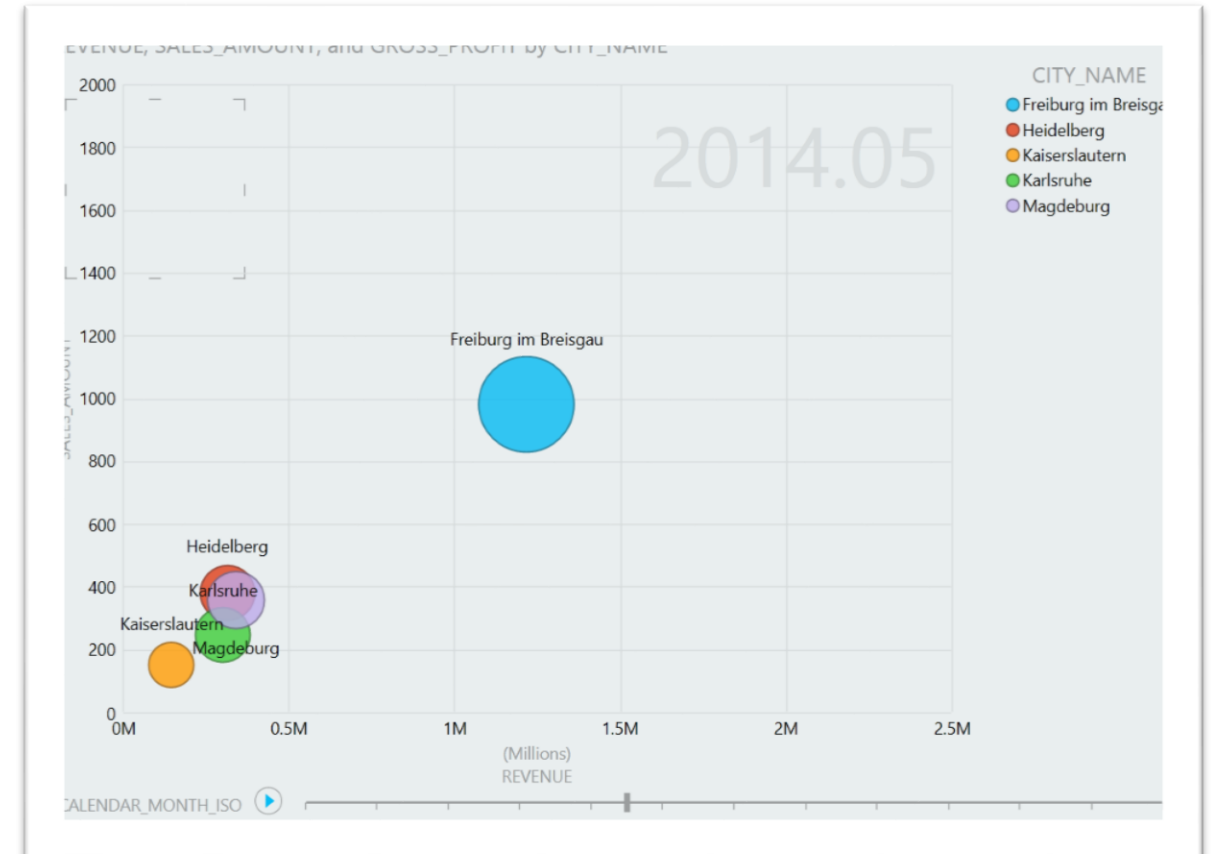


Advantages / Disadvantages



Teaching Skills with game and in BI





Q & A

Thank you for your attention!!

Any ideas are welcome: lehmann@bi-academy.eu, waranya@bi-academy.eu