Syllabus
MAR3115 Data Story Telling
Margarita Bidler
Winter Semester 2023 /24

Level	Bachelor
Credits	3
Student Contact Hours	28 (2 x 14 weeks)
Workload	hours of attendance: 28 an additional 60 hours of self-study (i.e., working on the project / presentation).
Prerequisites	none
Time	Wednesday, 1.45 – 3.15 pm
Room	W2.3.01
Start Date	October, 4th

Lecturer		
	Name	Margarita Bidler
	Office	W2.4.04
	Virtual Office	
	Office Hours	Wednesday 3.30 – 5.00 pm Appointment by mail
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Summary

Today, data is ubiquitous. In times of Big Data and advanced analytics, we have more information available than ever before. In this multitude of data, one skill is becoming increasingly important: data storytelling is the concept of building a compelling narrative based on complex data and analytics that help tell your story and influence and inform relevant stakeholders.

The course introduces students to the concept of data storytelling. After an introduction to the basics, students will work on use cases to deepen their knowledge.

Outline of the Course

- What is Data Storytelling and why is it important?
- Process – From business problem to presentation
- What makes a strong narrative? (e.g. P-A-S framework)
- Choose your visualizations
- PowerPoint, Dashboard, Infographics, and more
- Deep dive: Dashboards – Pros and Cons
- Project:
    - Examples: World bank, Gapminder, Our world in data, Eurostat
    - Choose your own topic and show us – based on data – why we should care about your chosen topic
    - Q&A sessions
    - Presentation & discussion of student projects

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes	Assessment Methods		
	After completion of the program the students will be able…	After completion of the course the students will be able…	Project Work	Project Work	Participation in Class
			50%	30%	20%
			Collective	Individual	Individual
1	**Expert Knowledge**				
1.4	...to solve business problems based on profound data research skills and by applying quantitative methods.	… to understand and tackle business problems and identify business opportunities through a data-based approach (i.e., strong data driven evidence and narratives)	x		
2	**Digital Skills**				
2.3	...to effectively use digital technologies to interact, to collaborate and to communicate.	... to effectively use digital tools such as dashboards, interactive presentations or infographics to communicate to and convince decision makers		x	
3	**Critical Thinking and Analytical Competence**				
3.1	...to implement adequate methods in a competent manner and to apply them to complex problems.	... to use adequate methods (dashboards, data presentation, convincing data narratives) to provide decision makers with strong data-based arguments to tackle business problems	x		
3.2	...to critically reflect and interpret findings and to develop comprehensive solutions for complex problems.	… to critically reflect data, combine various relevant data sources, interpret findings and to develop a coherent data story	x		
4	**Ethical Awareness**				
	...to develop sound strategies in the areas of ethics, sustainable development and social responsibility and are able to apply them to typical economic decision-making problems.	… to consider ethical aspects when working with data to tell a compelling story. Students build data stories free of biases and make sure the data they use was conducted in line with ethical standards	x		
5	**Communication and Collaboration Skills**				
5.2	...to demonstrate their oral communication skills in presentations.	… to convince business stakeholders through strong oral communication with the help of a data stories		x	
6	**Internationalization**				
6.2	...to articulate themselves in a professional manner in international business.	... to articulate and discuss data business cases in a professional manner in international business.			x

Teaching and Learning Approach

After lectures introducing students to the concept of Data Storytelling and the discussion of best practice use cases, students are required to apply the theoretical knowledge: Students work in small groups on a topic they choose on their own.

Q&A sessions allow students to work on their project during lecture time and ask questions individually.

The final presentations will be discussed by the whole group.

Literature and Course Materials

Dykes, B. (2019). *Effective data storytelling: How to drive change with data, narrative and visuals*. John Wiley & Sons.

Knaflic, C. N. (2015). *Storytelling with data: A data visualization guide for business professionals*. John Wiley & Sons.

Assessment

Final presentation of Data Storytelling project in small groups (50%). Each student must prepare and present a distinguishable part (analysis). This part will be assessed individually (30%). Moreover, each student's participation during discussions of other projects will be assessed (20%).