



Advanced Seminar on Information Systems and Digital Technology

Term: Summer 2022

Chair for Information Systems and Systems Development

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Esport: A Nascent Digitally-enabled and Innovation-driven Industry

Esport—or competitive video gaming—is on the rise as events attract millions of viewers. For example, the League of Legends World Cup Finals in 2018 attracted more than 200 million viewers (Esports Charts, 2021). In contrast, the American Super Bowl 2019 attracted 104 million viewers on US TV (Nielsen, 2018) with an estimated 30-50 million international viewers (Constantine, 2019). The European esport industry alone was estimated to be worth EUR 3.9 billion in 2018 (Ludwig et al., 2020). The worldwide revenue from advertisements in esport was close to USD one billion in 2019, according to recent estimates (McKinsey, 2020). Esport is no longer a niche market but has a broader audience, as 67% of Danish and 72% of Chinese consumers are already familiar with esport (IDC, 2019).

There is a vivid debate about esport in the literature. Proponents highlight esport as a means to self-actualization and satisfaction through a desire to win and a preference for difficult tasks, and for its entertainment and value creation (Marchand & Hennig-Thurau, 2013). Yet, there are also adversaries. For example, the German Olympic Sports Confederation, which defines the strategic orientation for Germany’s umbrella sports organization, does not acknowledge esport as a regular sport because of limited physical activities (German Olympic Sports Confederation, 2018). Also, concerns due to intellectual property claims—as video games are owned by the developing organization (Holden & Baker, 2019)—and concerns due to possible addiction (Zastrow, 2017)—coining the term internet gaming disorder as a psychiatric disorder (Przybylski et al., 2017)—have been raised. Motivated by this debate, this research seminar examines the novel business practices and behavior within the nascent esport industry.

Scholar’s controversial debate about the positive and negative aspects of esport often results from unilateral investigations. Information systems (IS) scholars are well equipped to contribute to the discussion on esport as an important contemporary socio-technical phenomenon. Esport revolves around digital technology that often mediates and shapes social interactions. Prior IS research on esport illustrates this: digital probes in eRaces facilitate generativity (Jarvenpaa & Standaert, 2018), non-verbal in-game team communication using pings influences team performance (Leavitt et al., 2016), and good gamers have desirable managerial skills (Simons et al., 2020). Also, first business schools realized esport’s potential.

For example, the GAMA lab is a game research and analytics lab, initiated by IS scholars, with a focus on esports research (Berente & Dobolyi, 2021). As such, esports as a digital-native industry provides new research opportunities for IS scholars that combine artifact-centric research with, for instance, social, psychological, and economic research. Hence, this seminar seeks to explore the uniqueness of esports as a digitally-enabled phenomenon, for instance, in areas such as ecosystem governance and growth, esports consumption and interaction, and platform design (Werder, 2022).

In this seminar, students will learn to identify, plan and conduct their own research project. The projects are likely to use secondary data in order to answer their developed research questions. Given the explosion of information in today's society, the ability to extract, transform and analyze data from secondary data sources is an important business skill in our knowledge society. While different types of data collection methods exist, this seminar focuses on the use of secondary data for reasons of data access during later analysis.

Fundamentals on Scientific Work

The students learn the fundamentals of scientific work via the Flipped Classroom on Scientific Work. A separate registration (and preparation) is necessary:

- https://www.ilias.uni-koeln.de/ilias/goto_uk_fold_2445676.html

Students are exempted if they have already attended the classroom session of the Flipped Classroom on Scientific Work in the context of another course. If this is the case, students should contact werder@wiso.uni-koeln.de beforehand providing the course name and semester, in which the classroom session on scientific work has been accomplished.

For more information please visit:

- <https://wirtschaftsinformatik.uni-koeln.de/en/studies/theses/scientific-work>

Activities

The seminar work consists of five main phases:

1. The students acquire the basics of conducting scientific work via the Flipped Classroom.
2. The students learn the fundamentals concerning responsible AI research and secondary data collection and analysis.
3. The students plan their seminar project and develop a study protocol that is submitted and discussed.
4. The improved study protocol guides the student to collect their data and assists them in their analysis. Hence, relevant data sources are identified, data is collected and processed in order to develop a key deliverable of the seminar project.
5. The seminar project is documented in a seminar paper.

Timeline

- To be announced: Classroom session on Scientific Work (not necessary if you have attended before; online materials available in ILIAS)
- 08. April 2022, 08:30-10:30: Kick-off (Introduction to Seminar; Organization) -
- 13. April 2022, 15:30-17:30: Discussing on Topic 1
- 20. April 2022, 15:30-17:30: Discussing on Topic 2

- 27. April 2022, 15:30-17:30: Discussing on Topic 3
- 09. May 2022, 09:00- 17:00: Study protocols: Discussions and feedback
- 13. July 2022, Submission of final seminar paper

Room:

- [411 Seminarraum S310](#) (Pohlighaus, EG)

NOTE: At the point of writing, I am planning that we hold these sessions in presence, as is the current plan of the faculty. However, given the unpredictable evolution of the pandemic, we may have to fall back to online sessions if infection numbers get out of hand. I will keep registered students informed via ILIAS.

Date	Video Lecture	Student Assignment 1	Student Assignment 2	Student Assignment 3	Meeting
TBA	Online session on Scientific Work (not necessary if you have attended before; online materials available in ILIAS)				TBA
08.04	Kick-off; research gaps and secondary data; types of analysis; how to write a review	(Werder, 2022)			Seminarraum S310 08:30-10:30
13.04	Esport Viewers and Consumption: (Liu et al., 2017)	(Hamari & Sjöblom, 2017)	(Sjöblom et al., 2019)	(Macey et al., 2020)	Seminarraum S310 15:30-17:30
20.04	Esport governance and growth of the ecosystem: (Cennamo & Santaló, 2019)	(Peng et al., 2020)	(Parshakov et al., 2020)	(Scholz, 2020)	Seminarraum S310 15:30-17:30
27.05	Esport technology-mediating platform: (Rietveld & Schilling, 2020)	(Westmattelmann et al., 2021)	(Weiss & Schiele, 2013)	(Jarvenpaa & Standaert, 2018)	Seminarraum S310 15:30-17:30
09.05	Key issues protocols	Review 3 study protocols and prepare questions			Seminarraum S310 09:00-17:00
13.07	-	Submission of final seminar thesis			EOD

Course Grading

The course grading is threefold:

- **Paper Summary (20%)** - you are expected to write a clear and concise one-page summary of the article that has been assigned to you. In addition, you are expected to read two more papers within your topic domain, so that you can lead an online discussion. You are expected to read the summary articles or the papers of the additional topic domains within this course, so that you can participate in online discussions.
- **Study Protocol OR Short Paper (30%)** – Given the current you are expected to develop and write a study protocol (3-5 pages). You will also be assigned two study protocols/short paper of your peers that you review, so that you can lead and contribute to online discussions. In the case of short paper presentation, you are expected to develop and present your (preliminary) results (approximately 10 min).
- **Seminar paper (50%)** - departing from your initial study protocol and the feedback received on your preliminary results, you are expected to hand in a seminar research paper. This work contains (1) a clear and concise introduction that motivates the research, (2) a review of the state-of-the-literature, defining central terms, (3) document your research approach in a transparent, yet concise way, (4) present and discuss your developed results and (5) give an outlook toward future research needs.

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