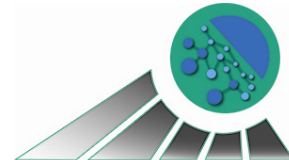


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**LEHRSTUHL**

für Strategisches Management und Organisation

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## **Case Study Seminar (LV-Nr. 32064) of the Chair BWL6 at the Summer Term 2025**

**Special topic:  
“Company Alliances in the context of AI and robotics in agriculture”**

Bachelor (3 CP) / Master (6 CP)  
Prof. Dr. Ricarda Bouncken  
Matthias Feist (Supervision)

### **Thematic classification:**

Students in this case study seminar will deal with the challenges, solutions, and implications of integrating artificial intelligence (AI) into robotic, autonomous systems and processes in and between companies in the agricultural sector.

For example, the German Research Center for Artificial Intelligence (DFKI), together with an engineering firm, a mechanical engineering startup from the agricultural sector, and a strawberry farmer, developed a strawberry-picking robot that should be able to distinguish ripe from unripe strawberries fully autonomously and automatically and pick strawberries independently. The DFKI developed the corresponding image recognition AI, the engineering office developed the mechanics of the gripper arm, and the mechanical engineering startup developed the overall robotic system, in which the modular contributions of the network partners had to be combined. The strawberry farmer provided his field as an experimental area for the robot and his knowledge of strawberries as a training basis for the artificial intelligence. In such innovation networks, not only co-specialized knowledge but also different logics in the innovation process (e.g. research orientation vs. market orientation) collide, which must be orchestrated appropriately in order to achieve joint innovation success.

New technological solutions, especially from the combination of AI with robotics, enable and require new organizational solutions and management approaches. At the same time, innovation processes in and between companies are developing these innovations further and enabling new business models, innovations, and other forms of organization. This opens up many new opportunities for companies – hence also for farmers – and their collaboration. Due to the current challenges in agriculture, in particular the labor shortage and climate change, the agricultural sector requires robotics and AI solutions, the development and implementation of which is progressing, but also faces a number of challenges.

The development and use of AI-supported robotics regularly requires cooperation between various technology suppliers (e.g. machines, sensors, software) and users, who often require individual solutions but still need to share large amounts of data and feed it to the AI systems.

For example, the functioning of AI-controlled robots is based on the evaluation of data that enables the robot to make intelligent decisions, learn, and improve itself. In order to access this data, platforms and cooperative solutions are required. As a result, collaboration and network systems of companies (ecosystems) are developing across functional and company boundaries. Innovative services in particular are often developed and driven forward by young companies but also need to integrate the specifics of agriculture.

New technology and new structures are developing in agriculture. What is interesting here, however, is that established thought patterns and training paths are clashing with new technologies. These areas of tension and solutions offer scope for new scientific debate and innovative solutions.

**In this respect, the case study seminar focuses on AI and robotics solutions in agriculture. To this end, students will prepare their own case studies that demonstrate challenges and solutions.**

### **Procedure:**

Using a qualitative research design, students work in teams of two or three to develop one or, if possible, several comparative case studies that deal with cooperation between companies or between companies (including start-ups) and other institutions for the development, further development or implementation of AI/robotics in the agricultural sector.

The characteristics of the cooperation and specific technological or market solutions must also be worked out, and the organization and management of the cooperation as well as its challenges and solutions must be presented. The change processes in particular are also interesting: Are changes taking place in entrepreneurial processes, business models, or ecosystems? What potentials, obstacles, or resistances are associated with this change?

The students **independently** search for, organize, and conduct 1-2 interviews with company representatives, network partners, and/or customers in the agricultural sector. These interviews form the basis for their case study, supplemented with secondary data on the companies or networks. An interview template is provided.

In addition to the typical companies in the agricultural sector, these can be companies that are just starting to work their way into this sector, such as those

- whose business model is partially or fully based on AI-based robotics/other automated systems
- that offer services, products, or solutions in the field of robotics/other automated systems that incorporate AI technologies and
- who work with partners or in networks to develop and offer AI technologies for robotics/other automated systems.

The results of these analyses are presented both in written form and in creatively designed posters. The poster presentations consist of a 15-minute presentation followed by a discussion of the results. Afterwards, each group prepares a concept paper in which the results of the seminar are presented in writing. The concept paper counts for ½, and the poster presentations for 1/2 of the final grade.

### **Notes**

- Conducting the interviews is mandatory
- Previous knowledge of qualitative-empirical work (interview analysis) is not mandatory but must be acquired

- Attendance of the integrated qualitative methods courses is strongly recommended
- Team formation can be done independently
- Most of the events take place in person

### **Registration**

Interested students can register for the case study seminar via [Campus Online](#) or [CM-Life](#) until after the first meeting.

### **E-learning: Course SS 2025**

### **Crediting**

The case study seminar can be included in the **Bachelor's** degree as Case Studies in Business Administration (C-4).

In the **Master's** degree, the case study seminar can be credited as "Selected Aspects of Strategic Management and Organization (V6-4)" in the minor specialization in Strategic Management and the major specialization in Management. It can also be credited in the supplementary area.