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# Bridging HERM and BPM: Insights from Rīga Stradiņš University

### Ludmila Ziediņa<sup>1</sup> and Gatis Praličs<sup>1</sup>

<sup>1</sup>Rīga Stradiņš University, Latvia ludmila.ziedina@rsu.lv, gatis.pralics@rsu.lv

#### Abstract

Rīga Stradiņš University (RSU) is located in the capital of Latvia, Rīga. RSU is recognized for study programmes in medical, health, and social sciences. With over 11700 students of whom 26% are international students from 82 countries, RSU is continuously improving its administrative efficiency, business process management (BPM), and strategic governance. RSU consistently maintains its ISO 9001:2015 certification, demonstrating ongoing commitment to quality and continuous improvement. As part of a digital transformation roadmap, RSU has adopted ADONIS, a BPM tool, to document, analyse and improve business processes. This paper presents initial insights as a part of a broader initiative at RSU to implement BPM using ADONIS, specifically focusing on analysing how RSU process landscape aligns with the Higher Education Reference Model (HERM). HERM is a globally recognized framework that standardizes business capabilities, data models, and IT governance in higher education. The objective of this study is to identify gaps, assess coverage, and evaluate areas for improvement, ensuring alignment with this internationally recognized higher education framework. The analysis highlights RSU strengths in supporting HERM capabilities, uncovers areas requiring improvement, and provides recommendations for improving compliance with HERM. This research contributes to a broader understanding of how HERM, combined with a BPM tool, can support analysis of university business capabilities.

#### 1 Introduction and Motivation

Over the past seven decades, RSU has become a modern higher education institution, recognized both in Latvia and internationally, with a strong focus on medical, health, and social sciences education. RSU has consistently maintained a reputation for academic excellence and has been recognized as the university with the best reputation in Latvia for eight consecutive years (Rīga Stradiņš University, 2024). RSU has been continuously maintaining its quality management system certification in

accordance with the international standard ISO 9001:2015, reaffirming its commitment to the development and continuous improvement of its activities since becoming the first higher education institution in Latvia to certify its quality management system in 2002 (RSU, 2025). To further strengthen its institutional efficiency, RSU has committed to improve its business process management (BPM) framework. As universities face increasing operational complexity, regulatory requirements, and digital transformation challenges, BPM becomes essential. BPM offers a systematic approach to designing, analysing, and improving university processes. Recognizing the importance of BPM, RSU has initiated a BPM implementation project adopting the ADONIS BPM tool (BOC Group, 2025). By adopting ADONIS, RSU aims to:

- 1. Model and analyse university processes.
- 2. Identify inefficiencies and redundancies in administrative and academic workflows.
- 3. Model to-be business processes before implementing IT projects to gain a unified understanding about the new solutions between all stakeholders.
- 4. Ensure compliance with regulatory requirements and various higher education standards.
- 5. Support management with structured process insights.

To benchmark its process landscape against global higher education institutions (HEI) practices, RSU has decided to align its business process landscape with the Higher Education Reference Model (HERM) as a part of BPM ADONIS implementation initiative. HERM, first introduced in 2016, is a standardized framework that provides a business and data architecture for higher education institutions (EDUCAUSE, 2024).

This paper presents initial insights into a broader initiative at RSU to implement BPM best practices, focusing on analysing how RSU process landscape aligns with HERM business capabilities. By mapping RSU process landscape to HERM business capability model, this research aims to:

- 1. Identify which HERM business capabilities are supported at RSU.
- 2. Compare core vs. supporting processes between HERM and RSU classification.
- 3. Highlight gaps where RSU processes do not align with HERM.
- 4. Evaluate value chain differences in RSU core processes.

By adopting HERM and ADONIS, RSU can assess its process maturity and ensure alignment with international higher education standards. This study will provide insights into how structured BPM approach can support universities with analysing their process landscape against international HEI reference models providing insights for future process improvements and digital transformation efforts.

# 2 Review of Existing Research on HERM Adoption in Universities

We have reviewed several relevant case studies from other universities that have adopted HERM to analyse processes. These cases provide valuable insights into outcomes of HERM adoption across the higher education sector.

CHARM-EU Alliance: a European University alliance (CHARM-EU, 2025) applied HERM to generate a shared understanding of the administrative and academic processes supporting a joint master's programme. The alliance created a student journey model aligned with HERM, along with a

visual IT architecture map (CHARM-EU, 2024). This case highlighted how HERM can support benchmarking and service design across university.

The paper by Le Strat et al. (Le Strat, Maltusch, Suominen, & Ariño Martín, 2022) presents three European case studies France, Finland, and Spain that explore the implementation of enterprise architecture and capability models, including HERM, in higher education institutions, e.g., University of Helsinki uses HERM to unify fragmented process models under shared HERM capabilities.

The paper by Rouvari (Rouvari, 2024) presents a case study on how the Finnish Universities of Applied Sciences (UAS) CIO Forum uses HERM and the Business Technology (BT) Standard to manage IT and support digital transformation strategies. The main conclusion is that the joint use of HERM and the BT capability model provided strategic IT management with educational objectives. However, the author advises to extend capability models with organization-specific capabilities to address gaps.

## 3 Methodology: Mapping RSU Processes to HERM

The methodology for mapping RSU process landscape to HERM business capabilities was structured as follows:

1. Creation of the HERM business capabilities model in ADONIS: a hierarchical representation of HERM capabilities was created in the RSU ADONIS BPM tool based on the official HERM documentation (EDUCAUSE, 2024) and a Latvian translation provided by the Higher Education and Science Information Technology Shared Service Centre (The Higher Education and Science Information Technology Shared Service Centre, 2025). To facilitate the mapping between HERM and RSU process landscape, HERM business capabilities were created as process repository elements in ADONIS, to enable structured relationships between RSU processes and HERM capabilities. The HERM model captures both core and enabling capabilities, allowing further decomposition into sub-capabilities and visualizing the value chain of core capabilities. For example, Figure 1 shows HERM model in the RSU BPM tool, and Figure 2 depicts the Learning and Teaching core capabilities with the value chain visualization.

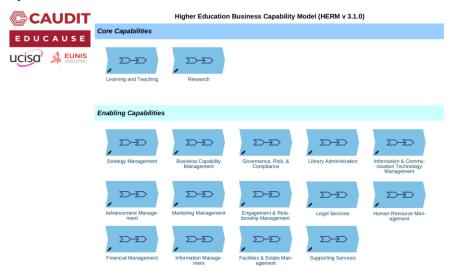


Figure 1: HERM Business Capabilities Model in the ADONIS tool

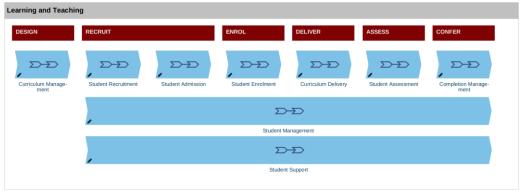


Figure 2: HERM Learning and Teaching Capabilities Model in RSU BPM Tool ADONIS

2. Mapping HERM capabilities to RSU process landscape: RSU hierarchical process map was used as the basis for mapping (see an excerpt of the RSU process landscape depicted in the Figure 3 showing management and core processes). The first level of the RSU process landscape was aligned with HERM business capabilities to establish a direct relationship between university processes and HERM business capabilities.

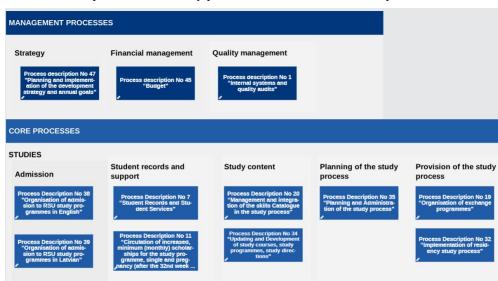


Figure 3: A Fragment of the RSU Process Landscape

3. Mapping relationship between HERM business capabilities and RSU processes: the mapping was conducted using ADONIS process dependencies attributes, specifically using impact relationships between HERM capabilities and RSU processes to illustrate which RSU processes are impacted by HERM business capabilities (see Figure 4). Additionally, RSU processes were assigned special HERM labels to indicate their corresponding HERM higher-level business capability and whether they align with HERM core or enabling capabilities (see Figure 5).

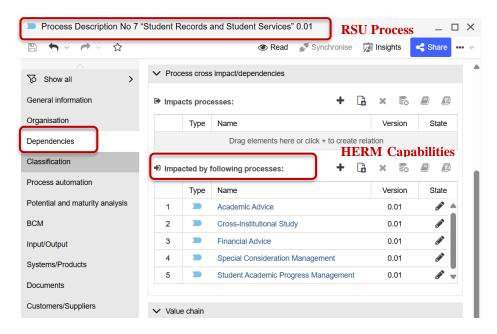


Figure 4: RSU Process Alignment with HERM Business Capability Using ADONIS Impact Dependency

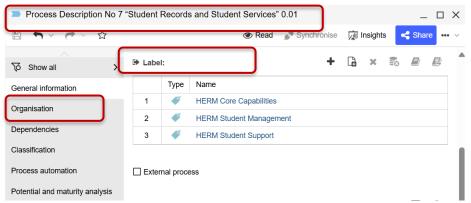


Figure 5: RSU Process with HERM Labels

- 4. Visual analysis, relationship modelling, and dependency visualization: the analytical and charting functionalities in ADONIS were used to visualize the alignment between HERM and RSU processes, providing insights into dependencies, overlaps, and gaps. The dependency modeler in ADONIS was used to create graphical representations of the dependencies between RSU processes and HERM capabilities, supporting the understanding of process interconnections:
  - a. One example is depicted in Figure 6. This diagram shows which RSU management processes correspond to HERM capabilities using a box-in-box hierarchical approach. The green boxes are HERM supporting capabilities which contain red boxes: RSU management processes in this way depicting the impact relationship. Green boxes mean that they are supporting processes, however red boxes are management processes. Color-coding helps differentiate various types

of processes, making it easier to analyse which processes belong to management, core, or support functions.

# Compliance Management Process description No 1-Internal systems and ... Process description No 1-Internal systems and ... Process via Impacts processes Process From dataset Internal Audit Process description No 1-Internal systems and ... Process Process description No 47-Planning and impl... Process Process Process Process Improvement process Supporting process Supporting process Supporting process Supporting process

Alignment of RSU Management Processes with HERM Capabilities

Figure 6: Alignment of RSU Management Processes with HERM Capabilities

This methodology supports the assessment of RSU process alignment with HERM and can be replicable by other HEI.

# 4 Analysis of HERM-RSU Process Alignment

No entry

# 4.1 RSU Management Process Alignment with HERM

A key distinction between RSU process landscape and HERM business capability model lies in their highest-level process classification structures. RSU categorizes processes into three types: management, core, and supporting, whereas HERM defines two types of business capabilities: core and enabling capabilities.

RSU process classification provides a view of business processes, distinguishing between:

- 1. Management processes: strategic processes that govern the university (e.g., strategy planning, budgeting, quality assurance).
- 2. Core processes: the key academic and research-related processes (e.g., curriculum development, student admissions, research activities).
- 3. Supporting processes: processes that enable academic and administrative functions (e.g., IT services, HR, facility maintenance, etc.).

HERM, on the other hand, classifies business capabilities into:

- 1. Core capabilities: the primary activities directly contributing to the university's mission (e.g., teaching, learning, and research).
- Enabling capabilities: functions that support the execution of core capabilities (e.g., IT services, finance, legal compliance).

RSU management processes, such as strategy planning, financial planning, and quality management align with HERM enabling business capabilities.

#### 4.2 RSU Core Processes Alignment with HERM Capabilities

RSU core processes are strongly aligned with HERM core capabilities. However, there are some differences in a way that RSU core processes relate to HERM enabling capabilities:

- 1. RSU process No. 19 "Organization of exchange programmes" is the core process that includes workforce training programmes abroad, and this process is related to the HERM capability "BC182 Workforce Training & Development", which is the enabling capability.
- 2. RSU process No. 22 "Getting and using student feedback" is the core process that describes gaining and utilizing student feedback about courses, study programmes, and teaching personnel, and this process is related to the HERM enabling capabilities:
  - a. BC217 Customer Experience Management
  - b. BC166 Complaint & Compliment Management
- 3. RSU process No. 37 "Management of institutional repository of Riga Stradiņš University" is the core research process that focuses on the management, maintenance, and accessibility of RSU institutional repository. It includes activities related to collecting, storing, and disseminating research outputs. This process is related to the following HERM enabling capabilities:
  - a. BC136 Information Governance
  - b. BC134 Collection Access Management
- 4. RSU process No. 14 "Preparation, implementation and monitoring of projects" is the core research process that ensures the planning, execution, and tracking of projects. This process is related to the following HERM enabling capabilities:
  - a. BC194 Project Accounting
  - b. BC243 Project Management

## 4.3 RSU Supporting Processes Alignment with HERM Capabilities

RSU supporting processes are also strongly aligned with HERM enabling capabilities. However, there are some differences in a way that RSU supporting processes relate to HERM core capabilities:

- RSU Process No. 12: "Circulation of medicinal products in Riga Stradiņš University departments" describes the management, distribution, and tracking of medications within RSU structural units, ensuring compliance with healthcare regulations and safety protocols. It includes procurement, storage, dispensing, and monitoring of medications used for teaching, research, and clinical purposes. It is a supporting process that corresponds to the following HERM core capabilities:
  - a. BC024 Learning & Teaching Resource Preparation

- b. BC025 Learning & Teaching Resource Management
- c. BC236 Research Resource Management
- 2. RSU Process No. 13 "Use of human organs and deceased human bodies for medical studies" regulates the ethical, legal, and procedural framework for using human organs and cadavers in medical education and research. It includes donation, preservation, handling, and utilization of organ specimens for anatomy, pathology, and surgical training. It is a supporting process that corresponds to the following HERM core capabilities:
  - a. BC024 Learning & Teaching Resource Preparation
  - b. BC025 Learning & Teaching Resource Management
  - c. BC236 Research Resource Management
- 3. RSU Process No. 16 "Medical Equipment Repair Request, Diagnostics, and Maintenance" governs the maintenance, diagnostics, and repair of medical equipment used in RSU teaching, research, and clinical environments. It covers the identification, reporting, servicing, and quality assurance of medical devices to ensure operational safety and regulatory compliance. It is a supporting process that corresponds to the following HERM core capabilities:
  - a. BC024 Learning & Teaching Resource Preparation
  - b. BC025 Learning & Teaching Resource Management
  - c. BC097 Research Infrastructure Management
- 4. RSU processes No. 17 "Whistleblowing" and No. 31 "Management of Complaints, Appeals, Non-Conformities, and Suggestions" corresponds to HERM core capability BC226 Student Grievance Management.
- 5. RSU process No. 25 "Submission and Storage of Student Theses" regulates the submission, evaluation, and archiving of student theses and final research papers, it includes digital and physical submission, plagiarism checks, approval workflows, and long-term storage of academic work. This is a supporting process in the RSU process landscape; however, this process corresponds to the HERM core capabilities:
  - a. BC031 Student Research Assessment
  - b. BC029 Learning Assessment

During this analysis, it was observed that while most HERM business capabilities are supported by RSU and functioning, some process descriptions are either missing or not fully documented, for example:

- 1. BC233 Donor, Sponsor, & Philanthropist Management
- 2. BC117 Childcare Management
- 3. BC116 Gallery & Museum Management
- 4. BC041 Curriculum Disestablishment
- 5. BC131 Cleaning & Waste Management, and other.

This presents an opportunity to understand what process descriptions are missing and need to be created to ensure comprehensive compatibility with reference models such as HERM.

#### 5 Discussion and Conclusion

The alignment of RSU process landscape with the HERM has provided valuable insights into how RSU business processes correspond to international higher education standards. The mapping using the ADONIS BPM tool has allowed to visualize process dependencies, identify gaps, and assess opportunities for improvement. RSU management, core, and supporting processes correspond well to HERM core and enabling business capabilities and it can be concluded that RSU has a strong alignment with HERM core and enabling capabilities.

However, there are also differences in classification approach. RSU classifies processes into three categories: management, core, and supporting, whereas HERM differentiates only between core and enabling capabilities. Some RSU supporting processes align with HERM core capabilities, possibly requiring a review of classification strategies. While most of HERM business capabilities are supported by RSU, some process descriptions are either missing or not fully documented. These gaps highlight an opportunity to improve process documentation. The dependency modelling in ADONIS demonstrated that some RSU processes correspond to multiple HERM capabilities, highlighting the need for a holistic approach to BPM. Certain RSU processes, such as student feedback handling, corresponds both to HERM core and enabling capabilities, demonstrating cross-functional dependencies. The RSU-HERM process alignment study shows how by adopting the HERM framework and ADONIS BPM tool, RSU is in the process of creating an initial benchmark analysis of its processes against international standards.

Additionally, it is important to note that the implementation of ADONIS at RSU is still ongoing, and not all university processes have been fully modelled. Some processes are currently under development, and their alignment with HERM will be continuously refined as the BPM initiative progresses. Future work will focus on aligning HERM recipe cards with RSU processes, integrating HERM data and application domains, and continuous dialogue with stakeholders to improve processes and regularly reviewing process alignments with HERM. To gain more useful insights into how RSU processes support HERM capabilities, future work will include the integration of ADONIS with Power BI to provide real-time reports for university management.

#### 6 References / Citations

- BOC Group. (2025). *ADONIS Business Process Modelling Suite | BOC Group*. Retrieved from ADONIS Homepage: https://www.boc-group.com/en/adonis/
- CHARM-EU. (2024). *High-level IT architecture for CHARM-EU*. Retrieved from https://charm-eu.eu/resource/high-level-it-architecture-for-charm-eu/
- CHARM-EU. (2025). Challenge-driven, Accessible, Research-Based and Mobile European University Alliance.
- EDUCAUSE. (2024, December 17). *The Higher Education Reference Models*. Retrieved from EDUCAUSE: https://library.educause.edu/resources/2021/9/the-higher-education-reference-models
- Le Strat, V., Maltusch, P., Suominen, E., & Ariño Martín, L. (2022). Using enterprise architecture and capability. *EUNIS* 2022.
- Rīga Stradiņš University. (2024, March 4). RSU retains its lead in reputation rankings of Latvian institutions of higher education for eighth year. Retrieved from Rīga Stradiņš University Homepage: https://www.rsu.lv/en/news/rsu-retains-its-lead-reputation-rankings-latvian-institutions-higher-education-eighth-year
- Rouvari, A. (2024). The Capability Models for Steering Execution. EUNIS 2024, (pp. 169-179).
- RSU. (2025). *Rīga Stradiņš University Strategy*. Retrieved from Rīga Stradiņš University Homepage: https://www.rsu.lv/en/about-us/strategy

The Higher Education and Science Information Technology Shared Service Centre. (2025). *The Higher Education and Science Information Technology Shared Service Centre*. Retrieved from The Higher Education and Science Information Technology Shared Service Centre: https://vpc.lv/

# 7 Author Biographies

Ludmila Ziediņa has a master's degree in computer systems and is the IT project manager at RSU IT Department. LinkedIn profile <a href="https://www.linkedin.com/in/ludmilapenicina/">https://www.linkedin.com/in/ludmilapenicina/</a>

Gatis Praličs has a master's degree in computer science and is the leading solutions architect at RSU IT Department. LinkedIn profile <a href="https://www.linkedin.com/in/gatis-pralics/">https://www.linkedin.com/in/gatis-pralics/</a>

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