



# Digital Transformation at Hasselt University: Strategy, Governance, and Lessons from the European Context

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## Abstract

Digital transformation in higher education is a complex, multi-year journey that requires strategic vision, robust governance, and a culture of continuous adaptation. Hasselt University has embarked on a comprehensive digital transformation program, aiming to become a data-driven, future-proof institution. This paper presents the university's approach, including its strategic roadmap, governance structures, organizational change management, and integration projects. Drawing on recent European best practices and EUNIS conference literature, we situate Hasselt University's experience within the broader context of digital transformation in higher education, highlighting key challenges, lessons learned, and recommendations for other institutions.

## 1 Introduction

Digital transformation (DT) is reshaping higher education institutions (HEIs) across Europe and beyond. The convergence of new technologies, evolving student expectations, increasing demands for efficiency and innovation, and an escalating threat to cybersecurity have made DT a strategic imperative for universities. At Hasselt University, the journey towards a digitally enabled, data-driven organization began with a recognition of the need to modernize legacy systems, streamline processes, and foster a culture of agility and collaboration.

This paper outlines Hasselt University's digital transformation program, situating it within the European landscape and referencing recent EUNIS research on strategy, governance, interoperability, and organizational change [Roussos et al., 2025]. By sharing our roadmap, challenges, and lessons learned, we aim to contribute to the ongoing dialogue on effective digital transformation in higher education.

## 2 Strategic Vision and Governance

### 2.1 Hasselt University's Roadmap

Hasselt University's digital transformation is embedded in the broader Institutional Strategic Plan 2025–2029, where digitalization is positioned as a key enabling objective to realize the university's ambition of becoming a data-driven university, complemented by the integration of human-centered AI tools. In that strategic context, the 2025–2030 multi-year roadmap was co-developed through extensive stakeholder engagement across central services, faculties, schools, and research institutes translating institutional priorities into an actionable program. The roadmap comprises approximately 80 initiatives organized along three complementary tracks: (i) optimizing end-to-end processes, (ii) scaling digital capabilities and foundational platforms, and (iii) enabling transformative change through integrated, best-of-class core systems—such as a new Student Information System (SIS), Identity and Access Management (IAM), and integrated CRM solutions. This transformation is driven by clear institutional needs: the current fragmentation of systems, limited availability of real-time insights, and the need for more integrated decision-making. Moreover, delivering innovative education and valorization, and meeting the expectations of students, researchers, and external partners for intuitive and seamlessly connected digital experiences, requires a smart, integrated digital infrastructure as the foundation for data-driven operations.

The transformation plan is iterative, with annual reviews and adjustments based on evolving needs and budgetary realities. A key principle is the alignment of digital initiatives with the university's strategic objectives, ensuring that technology investments directly support education, research, and operational excellence.

### 2.2 Governance Model

Effective governance is central to Hasselt University's approach. The university has established a program management office (PMO) and a portfolio management structure to oversee project selection, prioritization, and execution. Decision-making is distributed, with clear roles for the Board of Directors, ICT leadership, and business stakeholders. Quality gates and regular reporting ensure transparency and accountability.

This governance model mirrors best practices identified in recent EUNIS literature, such as the updated IT governance approach at Münster University [Vogl & Richter, 2025] and the distributed leadership approach at the University for the Creative Arts [Nottingham & Nottingham, 2025]. Both cases emphasize the importance of stakeholder involvement, agility, and continuous alignment between IT and institutional strategy.

### 2.3 Stakeholder Engagement

A distinguishing feature of Hasselt's transformation is the active involvement of diverse stakeholders. The roadmap was co-created through workshops and consultations, ensuring buy-in from academic, administrative, and technical staff. This collaborative approach fosters a sense of ownership and facilitates change management, echoing findings from EUNIS studies on digital culture change [Nottingham & Nottingham, 2025].

## 3 Organizational Change and Skills Development

### 3.1 Structural Reorganization

In 2024, Hasselt University merged its former Application Development and Operations departments to create a unified ICT organization. This restructuring aimed to break down silos, enable agile project delivery, and better support the integration of new systems. The adoption of DevOps principles and the creation of cross-functional teams have accelerated project execution and improved collaboration between ICT and business stakeholders.

### 3.2 Skills and Competency Development

Recognizing that people are the key asset in digital transformation, Hasselt University has invested in both technical and soft skills development. External expertise has been brought in to address immediate gaps, while on-the-job training ensures knowledge transfer and sustainability. The university uses business capability models to map current and target competencies, identifying gaps and prioritizing development actions—a methodology aligned with recent EUNIS research [Kähkipuro, 2022].

### 3.3 Culture and Change Management

Cultural change is often the most challenging aspect of digital transformation. Hasselt University's approach emphasizes open communication, distributed leadership, and a willingness to experiment and learn from failure. Initiatives such as agile training, on-the-job learning, and the establishment of communities of practice support the development of a digital mindset across the organization [Nottingham & Nottingham, 2025].

## 4 Digital Ecosystem and Interoperability

### 4.1 Integration Projects

A core objective of Hasselt University's transformation is the creation of an integrated digital ecosystem. Major projects include the workspace migration to Microsoft 365 from the existing Google-environment, the rollout of multi-factor authentication, the implementation of a new SIS, and the development of an integrated CRM and research portal. More migrations from legacy software to best-of-class solutions are planned in the coming years; These initiatives are designed to break down data silos, improve user experience, and enable data-driven decision-making and effective AI use.

### 4.2 Interoperability and European Initiatives

Hasselt University's efforts align with broader European trends towards interoperability and digital ecosystems. The university participates in initiatives such as Erasmus Without Paper and adopts standards for data exchange and identity management. Lessons from European University Alliances and national platforms, as documented in EUNIS publications [Benzinger et al., 2025; Mincer-Daszkiewicz, 2024; Tothova et al., 2025], strongly influence Hasselt University's approach to integration, scalability, and sustainability.

### 4.3 Benchmarking and Collaboration

Benchmarking against other European universities reveals that Hasselt University’s ICT investments have historically been below average, partly due to scale and funding constraints. The transformation program aims to close this gap through targeted investments and increased collaboration with external partners, including vendors and peer institutions. With support from the Board of Directors we could ensure the allocation of necessary resources.

## 5 AI, Data, and Future Readiness

### 5.1 The Role of AI

Artificial intelligence (AI) is increasingly central to higher education digital strategies. At Hasselt University, this is explicitly framed within the Institutional Strategic Plan 2025–2029 (ISP2529), which positions digitalization as a key enabler for becoming a data-driven university and stresses that digital tools should strengthen people and support meaningful human interaction. In this context, AI is approached as a human-centered capability that augments decision-making and service quality rather than a goal in itself, by generating insights from integrated data to support education, research, valorization, and policy-making. Concretely, Hasselt University explores AI-enabled process automation and analytics to improve administrative efficiency and responsiveness, while also pursuing AI-supported digital interactions and relationship management with students, prospective learners, alumni, and partners through more personalized and accessible information provision. In education, the ISP highlights the strategic use of data and technology to enable online/hybrid learning environments, personalized learning, feedback and learning-progress monitoring—areas where human-centered AI can help scale support and provide timely insights. Beyond operational improvement, Hasselt University also considers AI-supported knowledge accessibility as a strategic direction, including tools that translate complex research outputs into more understandable language to increase societal reach and impact.

### 5.2 Data Governance and Ethics

With greater reliance on data and AI comes the need for robust governance, ethics, and trust frameworks. Hasselt University’s ISP explicitly links digital transformation to overcoming the current fragmentation of systems, the lack of real-time insights, and the need for integrated decision-making — all of which require a reliable data foundation and clear accountability for data use. Accordingly, the strategy emphasizes establishing central data governance to ensure that information is reliable and integrated, supported by dashboards and AI-enabled applications that provide actionable insights across education, research, and impact-oriented activities. In addition, the ISP’s governance “carrier” explicitly commits to strengthening strategy execution through data-driven monitoring supported by role clarity (who does/decides/advises/is informed) and a team that provides relevant data and insights — principles that directly translate into data governance practices. Hasselt University is developing policies for data privacy, security, and ethical AI use, drawing on international guidelines and best practices [Roussos et al., 2025]. Security and privacy are treated as essential conditions for trusted digital operations: the digital infrastructure priorities include ensuring high IT security, modern infrastructure and services, and a robust, up-to-date digital environment, reinforcing that ethical and secure deployment is part of “future-proof” design rather than an afterthought. Finally, the ISP stresses that governance is also socio-technical: Hasselt University will invest in data literacy training, co-creation with end users, and an adoption culture to ensure that data- and AI-enabled solutions are meaningful, transparent, and broadly trusted in daily practice.

### 5.3 Future-Proofing the Organization

Future readiness requires continuous investment in infrastructure, skills, and culture. The Institutional Strategic Plan frames “digital infrastructure” as one of the core carriers that enables Hasselt Universities broader ambitions, and explicitly states that the current digital landscape—characterized by system fragmentation and limited data integration—constrains agility and institutional impact if not addressed structurally. As a result, future-proofing is pursued through a deliberate transformation towards a smart, integrated digital infrastructure that breaks fragmentation via an integrated data layer, supports dashboards and human-centered AI applications for insight generation, and enables reliable data-driven decision-making across core missions. The ISP also connects future-readiness to education and learning innovation: it points to the need for digital platforms that support personalized, flexible learning pathways and blended-learning environments, and highlights that education should become increasingly dynamic and data-driven, continuously adjusted based on feedback and societal developments. Organizationally, future-proofing is reinforced by the governance commitments in the ISP: systematic monitoring via a PDCA cycle, clear role definitions, and a forward-looking posture that includes continuous adjustment and “early warning” scanning for changes in the environment—ensuring the institution remains strategically agile in a volatile context. Finally, the strategy recognizes that sustained transformation depends on people: it explicitly prioritizes building adoption and participation through training, ambassadors, and co-creation, aligning technological renewal with a culture of innovation, learning, and engagement.

## 6 Challenges, Risks, and Mitigation

### 6.1 Key Challenges

Hasselt University has encountered several challenges in its digital transformation journey, including:

- Skills gaps and resistance to change,
- Legacy systems and data silos,
- Budgetary constraints and competing priorities,
- Regulatory compliance and data privacy concerns.

These challenges are common across the sector, as highlighted in EUNIS research on digital transformation frameworks and anti-patterns [Winterholler et al., 2025].

### 6.2 Risk Mitigation Strategies

To address these risks, Hasselt University has implemented:

- Comprehensive change management and communication plans,
- Phased project delivery with clear milestones and quality gates,
- Investment in skills development and external expertise,
- Robust governance structures and regular risk assessments.

Continuous benchmarking and participation in European networks provide additional support and validation for the university’s approach.

## 7 Conclusion and Outlook

Hasselt University's digital transformation is an ongoing, iterative process that requires strategic vision, effective governance, and a culture of collaboration and learning. By aligning its roadmap with institutional goals, investing in people and technology, and engaging stakeholders at all levels, the university is building a future-proof, data-driven organization.

Lessons from the European context, as documented in recent EUNIS literature, underscore the importance of interoperability, ethical governance, and continuous adaptation. Hasselt University's experience offers valuable insights for other institutions embarking on similar journeys, highlighting the need for clear strategy, stakeholder engagement, and a commitment to learning and innovation.

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