

Audit of Lappeenranta-Lahti University of Technology LUT

3.1 Quality system support for strategic management

LUT's quality management system supports strategic development

The LUT university clearly describes its vision, mission, values, objectives, principles, and responsibilities across different governing documents. The university's strategy, *System Earth 2030* emphasises a multidisciplinary approach to addressing global sustainability challenges across four focus areas. LUT's vision is to be a high-impact, internationally recognised institution that excels in research, education, and societal engagement. The vision, together with related documents, addresses national and international challenges and opportunities while highlighting the university's strengths. The audit evidenced LUT's strong culture of ambition and a clear drive to excel as a key strength based on multiple interviews. This is visible across the organisation, from leadership to staff, and reflected in daily practices.

LUT could, however, better explain in the documentation how the vision, objectives, principles, and values are interconnected. Currently, the documentation provides limited explanation of how these elements reinforce one another or how the chosen values are expected to contribute to the achievement of the vision and strategic objectives. Readers are partly left to interpret these relationships themselves, which can make it harder to form a fully coherent understanding of the university's future direction and the way forward.

While some interview groups agreed with the audit team's analysis and conclusions, others expressed different views. For example, one group noted that although *Courage to succeed* is not explicitly stated in policy documents, it is still seen as important and reflected in the university's bold goals. This is visible, for instance, in the university's partnerships with big companies and in investments in developing new types of company platforms and collaborative models that differ from traditional ways of working with industry.

The four strategic action plans, Leading Research University, Student-Focused Research University, One LUT, and High Impact University, define concrete actions for achieving the strategic targets in the vision and measures to track progress. The university has clearly defined general key performance indicators aligned with international standards, such as the number of scientific publications, external funding, and the number of students and graduates at bachelor's, master's, and PhD levels. The key performance indicators also reflect the national funding indicators of universities. However, these indicators are not that clearly linked to the vision, mission, values, or the four focus areas outlined in the LUT strategy.

The quality management system thus provides limited assessment criteria for the continuous monitoring of whether the university is progressing in the right direction and achieving its objectives and stated values at the higher system level. For example, the Student-Focused Research University action plan does not include specific performance indicators to measure its success. Instead, progress is assessed through general indicators, together with elements of the educational strategy and the student perspective. At the same time, the university has successfully translated some of its strategic ambitions into tangible results,

including increased external research funding and internationalisation. In these areas, LUT demonstrates effective delivery of its vision through clear goals and assessment criteria. The audit team recommends that the university establishes indicators and assessment criteria that explicitly reflect its vision, mission, values, and strategic priority areas, and enable systematic monitoring of progress towards achieving its vision, mission, and university values.

LUT demonstrates a shared understanding of the PDCA approach and an institutional commitment to continuous improvement

LUT has established the principles, objectives, and responsibilities of its quality management system, which supports its strategy and forms the foundation of its quality work. LUT's quality policy provides a concise framework for quality management, emphasising alignment with the university's mission, values, and strategy. It also highlights the importance of staff and student well-being, continuous improvement, and responsible, transparent, and stakeholder-oriented operations. The quality policy is openly accessible on LUT's website and intranet. The relationship between the core concepts in the quality policy and the university's strategy could be further clarified, particularly in terms of how the quality policy supports the achievement of LUT's strategy, System Earth 2030.

The quality management system is clearly structured and described in the Quality Manual. The purpose of the system is to support the achievement of the university's strategic goals and ensure the high quality of its operations and results, while also supporting university management and the overall pursuit of its goals. Quality management is integrated into the university's regular activities, guided by the principle of continuous improvement in line with the Plan–Do–Check–Act cycle. The system covers the university's three main functions—scientific research, academic education, and societal interaction—as well as its support services. The university adopts an integrated and developmental approach to quality management. Rather than relying on highly formalised quality assurance processes, responsibility for quality is distributed across institutional roles and embedded within normal university activities. The audit showed that there is a strong institutional commitment to continuous improvement, which is supported by an embedded quality culture and a shared understanding of the PDCA approach.

The responsibilities of different actors are clearly defined in policy documents and on the intranet, and were confirmed in interviews with management, teachers, and support staff. All members of the university community have quality management responsibilities related to their roles. Goals for staff are set through the university's strategy, strategic action plans, annual operational targets, and development discussions, while student goals are defined in personal study plans. The rector is responsible for maintaining and developing the quality management system, supported by a steering committee for quality and sustainability management systems, which is chaired by the provost.

LUT's quality management system provides relevant information that meets identified needs and is used across organisational levels to support strategy implementation and decision-making. Outcomes and feedback are regularly reviewed through transparent and accessible monitoring systems, supporting continuous and structured institutional development and learning. For example, the management team reviews monthly performance indicators at each meeting, with a particular focus on publications, key outcomes, funding, and degrees. The management team also monitors the number of invention proposals and patenting processes, and accepted research projects to gain insight into the composition and development of their research portfolio. In addition, management, teachers, and support staff reflect, for example, on whether their activities contribute measurably to the green economy.

LUT effectively identifies societal changes and risks in its operations

According to the university, the central principle of internal control is risk management, which includes risk anticipation, identification, assessment, and response. Systematic risk management, along with its underlying principles, is part of the university's performance management and internal control in accordance with good governance practices. The aim is to ensure the continuity of the university's operations and the implementation of its strategy. Recognised strategic risks are discussed and evaluated in management team meetings twice a year and are regularly reported to the board. Strategic and annual planning are guided by performance indicators, feedback, and an understanding of emerging risks and changes in the operating environment.

Foresight, risk management, risk sharing with external actors, and the forecasting of key indicators are integral parts of the university's strategic model and its activities, such as strategic and operational planning, performance management, and financial forecasting. LUT also aims to establish a more systematic approach to foresight to consistently identify changes, risks, and opportunities that may affect the university in both the short and long term.

In early 2025, LUT piloted a foresight method based on the PESTEC² tool with school management teams to identify risks and opportunities and to increase understanding of the challenges and opportunities the university may face. The aim was to build a diverse knowledge base to support foresight work more broadly. This work has been applied in strategic and operational planning as well as in risk management. One example is the identification of potential risks related to the university's ambitious increase in international student recruitment.

The interviews included many concrete examples of how societal changes and trends are identified and how risk assessments are carried out at different levels of the organisation. The process by which the university analyses the future competence needs of different organisations, both in relation to existing programmes and the future pool of potential students nationally and internationally, was particularly strong. Based on these analyses, possible solutions are developed, and their associated risks are assessed. This iterative process has informed the strategy for international student recruitment as well as the development of new degree programmes. As noted in interviews, when the groundwork is carried out thoroughly and the university's position in the market is clearly defined, its offerings can be aligned with how people want to study and with the needs of society and industry.

The interviews also provided similar examples of foresight and risk management related to the employability of international students and decisions to enter new academic or research areas. For example, the expansion into the social sciences was based on similar analyses and risk assessments. As noted in interviews, the decision to enter new academic or research areas is based on a thorough understanding developed through extensive discussions at the national level and with key stakeholders. The audit provided examples in which new programmes were designed to respond to clearly identified needs.

Internationalisation is a clear strategic priority and is visible across LUT's operations

Internationalisation is a major strategic priority at LUT and a key driver of institutional development. LUT's decision to select internationalisation as a cross-cutting audit theme reflects its growing strategic importance, earlier audit feedback on the university's international development, and the need to examine how rapid international growth can be promoted in a sustainable way.

LUT has taken major steps to increase its international profile in education, research, partnerships, and recruitment. The rapid growth is particularly visible in student intake: LUT reports that 43% of all new students in autumn 2025 came from outside Finland, compared with 10% in 2021. The rapid growth in international student numbers over a short period is particularly impressive, demonstrating strong alignment between strategic intent and implementation. The audit evidence indicated that this focus has been effectively translated into practice, with internationalisation clearly reflected in student and staff recruitment, partner networks, English-language degree provision, double and triple degree cooperation, mobility opportunities, integration support for students and staff, and the increasing diversity of the campus. It was also evident during the audit visit that there was a strong commitment to internationalisation across the university.

A clear strength is that LUT is both ambitious in its internationalisation growth objectives and mindful of the conditions and risks associated with its growth. The university recognises that internationalisation raises questions related to responsibility, partner selection, academic freedom, security, sustainability, integration, language, employability, and inclusion. The self-assessment expressly also acknowledges that the difficulties brought forth by this quick internationalisation must be carefully considered. At the same time, audit visit and workshop discussions suggest that the experience of an international campus culture varies across groups, programmes, and campuses, indicating a need to further reflect on how this growth is experienced and managed in everyday university life.

There is scope to clarify how responsible internationalisation is embedded in LUT's governance, quality management, and risk management processes. LUT has established principles linking internationalisation to ethical, transparent, and risk-aware cooperation with partners, and has developed a partnership management process to coordinate partner selection and related activities across units. However, the evidence does not clearly show how these principles are reviewed and applied in decision-making, or how they connect to existing partnership, quality assurance, and risk management frameworks.