Strategic Plan

Library and IT Services

2018 - 2021

Introduction

The present strategic plan for the Library & IT Services Division (SPLIS) has its origins in the strategy of the university and the Schools. Their goals will determine the focus of LIS activities over the next few years, in addition to themes arising from the specific work of the division itself.

The SPLIS is structured in such a way that it is consistent with the institution-wide structure and that of the Schools, which means that the contribution of LIS to realizing the plan is immediately clear.

This plan was developed on the basis of input from all LIS staff and represents a further step in the One Page Strategy (ADD LINK)

Mission / Vision / Ambition

Mission:

LIS facilitates the full spectrum of information: from content to technology and everything in between

Vision:

LIS is a trusted partner for the university in achieving its goals in relation to information technology.

Ambition:

LIS is a trusted partner that offers outstanding support to the primary process and operational excellence in standard business processes.

LIS, Strategy and Objectives

Education

<table>
<tr><td>Strategy

Implement DEEP objectives and create an appealing new Learning Center</td></tr>
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The Digital Education Enhancement Profile (DEEP) strengthens TiU's education profile and enables sustainable innovation.
Its goals are to:
- upgrade / replace the digital tools that are currently used to facilitate learning. This is being achieved through the launch of a range projects such as selecting and implementing a new Learning Management System (LMS), digital assessment and various other tools.
- promote, facilitate, realize and communicate innovative forms of education at Tilburg University, both digital and non-digital, by setting up an Education Innovation Lab (Edu*i*Lab). Edu*i*Lab has a transformative role in kick-starting and promoting a sustainable culture of educational innovation at Tilburg University.

Objective 1: To make Edu*i*Lab a success by providing support and expertise

The Edu*i*Lab is at the heart of TiU's educational ambition and realizing TiU's vision for education (knowledge, skills and character) and a culture of innovation; it serves four goals:
1) **Diffuse** (teacher development): equip faculty members with basic/essential digital skills (making them digitally savvy) by organizing and providing workshops, individualized support, an annual education bazaar, conferences featuring renowned international speakers, knowledge transfer, community building (expand Xperience Shared, which is already in place); educating teachers to learn the right skills to use the new eLearning infrastructure that is being implemented by the DEEP program; sending newsletters and organizing lunch meetings on specific topics; sharing market trends; involving staff and students in supporting teachers in developing their ideas as fully as possible.
2) **Experiment**: Fund new ideas (grass-roots projects) and introduce and validate these in an evidence-based manner. "It's OK to fail, but please share your experiences with others".
3) **Innovate**: The level of innovation depends on individual staff members: for some faculty members, using a new LMS is a major innovation, whereas for others a fully augmented reality-based skills course represents a radical innovation. We make a distinction between: a) (digital) innovation savvy b) fast followers and c) leading innovators. The

latter group is characterized by doing something new/unique within a set of European/Dutch peer institutions.

4) **Education analytics**: The aim is to support education, not to write scientific papers. Significant support for joint work on Learning Analytics as part of student-centricity (informing students how they are doing compared to their cohort), and improving educational quality to give teachers more insight. Also relies on knowledge within schools (MTO, JADS, Econometrics, TESC ... ..)

LIS supports Edu*i*Lab with its technological challenges in the area of IT and Audio Visual (AV) when starting experiments and innovation projects.

Objective 2: To implement a new eLearning infrastructure: LMS and digital examination

TiU wants to replace Blackboard with a new Learning Management System (LMS), an up-to-date system that supports students and teachers according to their current needs. LIS will coordinate the project, and organize the tender procedure, the technical implementation of the platform and data exchange between the various systems that are connected.

The task of LIS is to put in place the infrastructure needed to embed this within student administration processes. The infrastructure consists of an examination platform, the set-up and design of two lecture halls in the new Cube Building with a total of about 480 workstations for digital examinations, which can be transformed into student study places when no digital examinations are taking place during the day. A separate project is being initiated and led by Academic Services to implement digital examinations within the educational process.

Objective 3: Make the new Education Building a modern and valued environment for students and teachers

Expectations for the new Education Building (called Cube) are high as a result of the excellent facilities in the lecture rooms and the opportunities for collaboration. In close consultation with academic staff and students, LIS will ensure a modern and supportive IT and AV (Audio Visual) environment.

Research

Strategy

- Stimulate Open Science and Research Data Management
- Support the Research IT ambitions of the Schools

Objective 4: Encourage and facilitate researchers to achieve TiU's Open Science goals

Open Science is the trend towards making scientific research and data freely accessible to societal stakeholders (not only to academics). To be a frontrunner in the international Open Science movement, LIS aims to work on the following activities to encourage researchers to put Open Science into practice.
1. Launch experiments with Open Science Labs (self-publishing journals, open books, open education materials, publication of preprints)
2. Launch an Open Access Fund for publishing in Gold Open Access Journals (to pay Article Publishing Costs (APC))
3. Develop Open Science skills training on Open Science literacy and Research Data literacy for students, PhD candidates and academics in the earlier phase of their careers
4. Increase awareness of Open Science and establish a Tilburg University Open Science Network.
5. Participate in networks that stimulate open access

Objective 5: Implement the Research Data Management policy

Research Data Management (RDM) defines the common principles for the responsible management of research data. The Executive Board approved the RDM policy in 2017. The aim of the RDM Regulations is to ensure that research data are easier to find, more accessible, and more easily exchangeable and reusable. The regulations also ensure compliance with existing legislation and regulations in this area. Good data management promotes the integrity and confidentiality of research data.
The following actions will be taken:
- Awareness campaign
- Needs assessment
- Establishment of a Research Data Office as a virtual one-stop shop for researchers and Schools with any questions regarding RDM
- Establishment of a special interest group

Objective 6: Initiate a program on Research IT (RIT)

The Schools' strategic plans demonstrate an increasing demand for IT facilities to support research (e.g. new methods of data collection). Support for research is usually provided on a tailored basis because all research is unique and has specific support needs. The services provided by LIS focus on customer intimacy rather than on operational excellence, whereby shared building blocks are sought that can be used again. A platform for Research IT (RIT) will be set up for this new service.
The goals of RIT are:

- to facilitate IT research support as effectively as possible
- to match supply and demand
- to streamline and promote basic services (data collection, storage, processing and analysis)
- knowledge sharing
- better insight into the needs of researchers
- continuous focus on innovation / renewal / adaptation in research

Impact

> **Strategy**
>
> - Support the university in its ambition to make societal impact more visible

Objective 7: Support researchers in making their societal impact more visible

In order to make the contribution of our university to society visible we will:
- Make it possible to find Open Access Publications by Tilburg scientists in the most commonly used search engines
- support branding by setting up and enriching profile pages for researchers
- report on open access

Growth

> **Strategy**
>
> - Facilitate predicted growth

Objective 8: Scalable and flexible services

The anticipated growth in student numbers will affect the services provided by LIS. LIS services are provided (or purchased) in such a way that they can be deployed flexibly.
Any additional deployment of personnel is accommodated through the use of resources that have been allocated in tandem with the allocation of direct funding.
The expected growth in student numbers will affect accommodation and therefore also the facilities that are required in the buildings. This will involve extensive refurbishment / renovation projects, which are set out in a long-term plan for real estate. In order to estimate the integrated costs associated with this, LIS provides an estimate of the costs in the ICT fund.

Location

Objective 9: Develop and Strengthen our Campus

Our campus is a meeting place for members of our academic community. Students are increasingly studying on campus. LIS will ensure that basic facilities are in place by making available IT infrastructure and tools that will make spending time on campus an attractive option for students.
Together with colleagues from the Facility Services division, we will prioritize tools that provide students with information on the availability of study workstations (with or without a PC).

In order to ease the pressure on study workstations (especially during examination periods) in the library building, entrance gates will be placed in the library so that only students (and staff) of Tilburg University can gain access to the building (and workstations) during busy periods.

Governance & Culture

Objective 10: Annual Business Information Plan for each school and at US level

A Business Information Plan (BIP) describes, from a business strategy perspective, the desired future situation for operational management and information provision in relation to one another, as well as describing the current situation and the migration path to be taken to achieve the desired situation. This is shown schematically in the diagram below.
LIS will ensure that an up-to-date BIP for the Schools is drawn up periodically and support the divisions in drawing up their information plans.
At the university level, changes will be made to the governance model in order to better embed the management of information services within the organization.

Objective 11: Campus-wide increase of (IT) security awareness and behavior

The information security policy has been stipulated by the Executive Board. LIS updates this policy every two years and draws up a security awareness campaign every year, so that employees and students are aware of what is and is not permitted in relation to the information and resources available to them.

In the planning period, LIS will develop an online tool that enables employees to test and further develop their knowledge of information security.

Objective 12: Develop a continuous improvement program for security

The security of IT systems and data requires a constant focus from various disciplines. This necessitates a structure in which tasks, responsibilities and competences are assigned unambiguously. LIS will take the initiative to develop governance in this respect.

LIS participates in the national audit for information security (SURF IT audit). Recommendations that result from this audit will be integrated into a revised information security policy and, where necessary, processes will be adapted accordingly.

Information services remain vulnerable. Due to increasing cyber threats, technical and organizational measures must remain an ongoing focus in order to ensure the continuity of the operational processes. Security issues are complex and expertise is scarce. National-level cooperation with peer institutions and SURFnet will be intensified in order to ensure that knowledge continues to meet the appropriate standards.

New applications will be tested in advance against the requirements set by the standards of the information security policy (security by design).

To maintain vigilance within the organization, we will cooperate with the internal (IT) audit department and information security will be periodically reviewed by independent external parties.

Objective 13: Pro-active employees with knowledge of customer needs and a 'can-do' mindset

The employees of LIS are enterprising and will need to identify creative solutions. There will be continuous coordination with clients in order to identify clearly where LIS can provide added value. Employees are encouraged to research and develop new services in collaboration with fellow institutions and the SURF organization.
LIS employees will require the following competences:
- Inventiveness (devising new or original ideas, approaches or solutions)

- Collaboration (contributing to a collective result with other people or groups, even if this is not of direct personal interest)
- Networking skills (making and maintaining contacts within and outside their own organization)
- Results-orientation (focus on achieving goals and on qualitative and quantitative results)
- Customer involvement (recognizing client needs and preferences, and demonstrating this through their actions)
- Enterprise (identifying opportunities for the development of new knowledge and areas of application or for new services. Acting on this and being prepared to take responsible risks)

This requires a change in culture that will take the following form:
- Working on awareness
- Employees are to be given the freedom to look beyond their own field
- Solutions to issues will increasingly emerge from multi-disciplinary teams
- The development of the competencies outlined will become part of the R&D cycle

Operational Excellence

Strategy

- Outsource commodity services in collaboration with partners to reallocate resources
- Achieve a uniform information landscape
- Improve and evolve organization maturity

Objective 14: A greater emphasis on strategic coordination in the IT organization

In the coming years, LIS expects to see a change in the activities taking place within the IT organization: from an administrative organization towards an organization that provides more strategic coordination and leadership. The focus of internal IT services will be on activities and services that provide added value to the primary process. Together with other universities and SURF, efforts are being made to outsource commodity IT. By this, we mean services that can be left to the market (where this is demonstrably the case) and offer no unique added value to the university. Examples include e-mail, data storage, Microsoft document sharing (known as Office365) and the purchase of a server infrastructure. In IT terms, this is known as IaaS and SaaS. The impact of this on LIS as an organization will be significant. LIS employees will increasingly focus on providing specialist support for the primary process, managing suppliers and ensuring connectivity between different systems.

As a result, less will be invested in our own equipment and software, and more will be invested in scalable pay-per-use services. This will require a different approach to financial planning. Due

to the change in the nature and content of the work, LIS will be reorganized in order to accommodate this new coordinating role.

The coordination role will also include further expansion into applications that are specifically contracted for Schools and/or service departments.

In relation to the outsourcing of IT services, there will be increased collaboration with other universities, through SURF.

Objective 15: Enable and support new services and innovation

LIS will keep a close eye on external developments, be actively involved in national-level cooperation and, where necessary, take the initiative to promote such cooperation. LIS will identify trends, assess them on suitability for TiU, ensure that there is support and initiate projects. LIS wishes to impress the university with new services on the basis of positive advice from our stakeholders.

In order to meet students' needs, LIS's student advisory board (SALIS) remains crucial.

Objective 16: Develop a transition plan on data centers

Data centers are the heart of IT. They house servers and network facilities, and store data. In order to guarantee the continuity of IT services as effectively as possible, the university has several (redundant) data centers on the campus that it manages itself. These data centers provide back-up services in the event of an outage. Both data centers are subject to stringent requirements in relation to matters such as power supply, cooling and fire safety. One of the data centers no longer meets these requirements and must either be extensively upgraded or outsourced. In view of the expected transition to IT services purchased as a service (SaaS/IaaS), which means that hardware will no longer be housed in a dedicated on-site data center, a time will come when it is no longer viable to maintain our own data center. A future strategy for the data centers will be drafted during the strategy period.

Objective 17: Harmonize support processes and ensure efficient process design

LIS is constantly looking for opportunities to optimize processes, and this includes outside its own division.

The purchase of end-user (IT) equipment differs between Schools / Divisions. This situation is suboptimal in terms of the efficient provision of services. The ambition is to guarantee optimal, efficient and predictable services at the lowest possible cost, eliminating redundant processes wherever possible. This service will be developed further during this planning period and implemented campus-wide.

Objective 18: Rationalize the information landscape, implement application lifecycle management

An advantage of bundling all IT within one service department is that it has provided a clearer overview of the application landscape. An extensive review process has revealed a highly fragmented application landscape with extensive overlap and even duplication in the functionalities provided and in process support. Many legacy applications have not been maintained since being put in place, which places the continuity and security of these applications at risk. These applications are classified according to the TIME model, whereby a decision is made in relation to the future of every application (Tolerate, Invest, Migrate, Eliminate).
The goal is standardization and a more manageable IT landscape, consisting of a number of (standard) core systems, with tailored services for the primary process where necessary.
To achieve this, an Application Lifecycle Management (ALM) project will be launched.

Objective 19: Comply with KPMG recommendations

KPMG carried out a baseline measurement in 2016. Based on this baseline measurement, LIS has formulated the following ambitions that must be realized by the end of the strategy period:
- Organization and control: institution-wide organization and control of the support organization, tailored to the needs of the primary process;
- Processes: the processes and services have been standardized and defined in a product services catalog. As a result, those working in the primary process have greater clarity regarding what they can expect from support. The support organization is in control;
- Technology: maintain current level where multiple ERP systems are being used in combination with other IT systems;
- Outsourcing and location: there is a clear, fully implemented strategy with regard to the optimum place of activities inside/outside the organization. This strategy has been aligned with the primary process with a view to adding the greatest value for the primary process;
- Performance management: LIS is externally oriented. Together with the primary process, definitions have been established for quality and efficiency. On the basis of these definitions, periodic monitoring will take place, whereby results and desired improvements will be shared and discussed with the primary process;
- People and competences: LIS employees have a role in both implementation and policy-setting. There is a certain degree of mobility between the various functions, so that employees can develop and look beyond their own responsibilities and department.

Objective 20: Clients should know what to expect from LIS

For the benefit of our clients and the students, LIS will aim to position its products and services more visibly and accessibly. A new arrangement in the form of a products and services catalog (PDC), which describes standard services, will make this possible. The purpose of this PDC will be to ensure that content is brought to the user organization level, that services and related

products are made available in a way that is accessible and easy to understand, and that they are delivered in accordance with the delivery times specified.

Library

> **Strategy**
>
> - Improve library information services

Objective 21: Make more Tilburg University output digitally available, findable and accessible (e.g. lectures)

Traditionally, the library has generally focused on registering and making available information in the form of books and articles. However, the university also has information that is not yet accessible such as video material, video lectures, proceedings, photographs and academic heritage. The expectation is that open educational resources will be added in the coming years. The ambition of LIS is to also make these sources digitally available and accessible.

Objective 22: Rethink library collections

The physical collection of the university library is housed in three different buildings / depots. There is very limited scope for future growth to house the constantly expanding number of books, and it is not possible to accept new collections. Acquiring new funding for extra storage space is not considered a realistic way forward. To create space for new collections and disciplines (such as data science), part of the collection will need to be redeveloped. In the forthcoming planning period, LIS will draw up a policy for de-collecting and make a start on its implementation.

policy on collecting, depot and cleaning up
Make space available to create more study workstations for students
Renovation of collection building
Paper vs. digital
Support for new disciplines (e.g. Data Science)

Objective 23: Implement new tools and services

The collection policy of the library focuses on the purchase of digital sources. Making these accessible to users who are off-campus is problematic because suppliers generally grant access to their collections on the basis of IP addresses. Using the digital library remotely on modern devices such as tablets or mobile phones is also an issue. By using new techniques, LIS wishes to simplify access to the digital library.

LIS will aim to make as much information as possible from the library available digitally. Much of this information concerns books. Scanning and making these scans available ourselves is a huge task and the costs would be very high. By cooperating with the National Library of the Netherlands (Koninklijke Bibliotheek, KB), it is possible to participate in a national project whereby Google is digitizing books published before 1900 and making these available to the KB. LIS is participating in this Google Conversion Project.

Communication with students takes place in various ways, including orally, in writing and by e-mail. There is not yet any means of communicating via instant messaging, but this would be consistent with the way in which students prefer to communicate. It is fast, efficient, accessible and increasingly popular. A survey has confirmed that instant messaging is popular among students. Given that there are initiatives in at least three places in the organization to enable an instant messaging function, it is important to opt for a single solution or platform and implement this collectively.

Objective 24: Continuously develop the Library and learning centers as essential parts of the living campus

Discussions with students show that the library building is their preferred place to study and meet. This is due to its pleasant atmosphere, extensive opening hours, good facilities and the variety of student workspaces and workstations (ranging from quiet areas to workspaces for collaboration and teamwork). Due to the expected growth in student numbers, pressure on facilities (especially workstations) in the library will increase. To meet the increasing demand for student workstations, the following measures will be taken:

- Redevelopment of certain areas of the library;
- Installation of entrance gates so that at peak times, only TiU students will be able to access the library;
- Remove and store parts of the library collection to create more space for workspaces and workstations.

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Although the strategic real estate plan has not yet been drawn up, when this plan does come to be drafted, it can be assumed that more space is required for offices, educational buildings and student workspaces and workstations. LIS will continue to provide a modern level of facilities that is consistent with the ambitions of the university.