DIGITALISATION THAT SHAPES SOCIETY

STRATEGY 2016–2022 // UNIVERSITY OF BERGEN

INTRODUCTION 3

UiB IN A DIGITALISED SOCIETY 4

OVERALL GOALS OF UiB'S DIGITALISATION 6

FIVE STRATEGIES FOR DIGITALISATION 8

INTRODUCTION

This digitalisation strategy shall support and complement the University of Bergen's strategy for 2016–2022 "Ocean, Life, Society".

The digitalisation strategy describes how the University of Bergen (UiB) shall take advantage of the opportunities provided by digitalisation to achieve our goals, and how we can utilise the structural changes afforded by digitalisation.

Digitalisation constitutes more than just digital tools, digital storage and digital processing of data and information. Digitalisation changes work processes, organisation and collaboration, both internally and externally. Digitalisation changes our culture and the way we conduct our business.

Digitalisation shapes the university's activities across the areas of education, research, communication, innovation and administration. Therefore, the digitalisation strategy has been divided into five basic strategies:

1. An Underlying Digitalised Infrastructure
2. User-Oriented Digital Services
3. The Digitally Accommodating University
4. A Self-Service University Administration
5. A Culture of Change and Implementation

Approved by the University Board on 20 October 2016

UiB IN A DIGITALISED SOCIETY

UiB's strategic vision, "Knowledge that Shapes Society", identifies knowledge as the cornerstone of the university's endeavours. Tools, methods and knowledge in the development and dissemination of research-based expertise are therefore vital to the university. Digitalisation and modern communications technology change these tools and methods. Through utilisation, these can contribute to new knowledge, new understanding, new learning and innovation.

An interconnected, digitalised world has opened up collaboration across geographic and institutional boundaries. Our students and employees are linked in new ways, both internally and externally. We participate in global and local networks. Much of this interconnection takes place beyond UiB's control and with tools not owned or governed by UiB. New cultures are being established, along with organisational, technological and professional platforms and ecosystems in which students, employees and the university participate. This creates opportunities as well as challenges. The university must utilise and facilitate this participation, and strengthen its ability to take advantage of this for its own benefit.

Digitalisation entails the accumulation of large quantities of research data and other data. The handling, processing and publication of such data should be based on the principle of open access, within strict ethical frameworks. Open access to research results should be the norm.

Digitalisation offers the possibility to collect, store and process large volumes of detailed information, including information about individuals. We handle sensitive information in a multitude of contexts. Information that is not initially sensitive may easily become so through new tools and interconnection with other information. UiB must ensure that all digitalisation and use of information technology takes place in an ethical and lawful manner which protects privacy.

Technological and political developments have led to increased monitoring of activities in digital forums. UiB must prevent electronic monitoring or the fear of such from impeding academic activities or restricting academic freedom.

New digital platforms must be based on established standards and built in ways that facilitate cooperation.

OVERALL GOALS OF UiB'S DIGITALISATION

Digitalisation at the University of Bergen shall contribute to achieving the university's strategic goals. Digitalisation shall facilitate excellence in research and research-based education. UiB shall be at the forefront of digitalisation in education. Digitalisation shall contribute to quality and better resource utilisation, and shall offer UiB a competitive advantage.

By simplification, reuse and interconnection of data and services, and by making data and services accessible, digitalisation shall facilitate focus on the university's core activities.

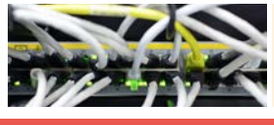
At present, many of the university's students and employees have good general knowledge of information technology as a tool used to accomplish daily tasks. At the same time, digitalisation is changing society dramatically. This change necessitates that university employees and students have the requisite digital literacy to utilise and further develop digital services. It is important to promote research-based knowledge and to stimulate the consideration and comprehension of employees and students in this respect.

In order for digitalisation to be implemented successfully, knowledge of the concept needs to be deepened. Research-based knowledge is necessary within digitalisation and at the juncture between digitalisation, business, society, culture and the economy. The university must be able to contribute such knowledge.

Higher education in Norway is undergoing change. New national guidelines may set a framework for digitalisation at UiB. UiB's strategic choices for digitalisation must be able to withstand organisational changes and framework changes.

FIVE STRATEGIES FOR DIGITALISATION

By implementing five underlying strategies for digitalisation, UiB shall utilise digitalisation to successfully achieve our goals.

DIGITALISATION THAT SHAPES SOCIETY				
1 AN UNDERLYING DIGITALISED INFRASTRUCTURE	2 USER-ORIENTED DIGITAL SERVICES	3 THE DIGITALLY ACCOMMODATING UNIVERSITY	4 A SELF-SERVICE UNIVERSITY ADMINISTRATION	5 A CULTURE OF CHANGE AND IMPLEMENTATION
				

1 AN UNDERLYING DIGITALISED INFRASTRUCTURE

Scientific equipment, research and education facilities, libraries and collections, as well as other infrastructure must be designed for and facilitate digitalisation. They must support the digital collection, storage, processing and dissemination of data and information, including digital operation and management. The infrastructure must be linked so that data collection, calculations, governance and utilisation can be carried out in contiguous chains. Each employee and student must have access to digital services in all contexts. Our infrastructure must be able to link to outside resources, wherever this is secure and appropriate.

Research and education are working with large volumes of data at an ever-increasing rate. UiB's infrastructure must be able to facilitate and keep up with this development.

WE SHALL ACHIEVE THIS BY:

- Building connected value chains from data collection, through storage, processing and access, to publishing and evaluation.
- Providing students, employees and visitors with good access to digital services throughout the university campus and in our knowledge clusters.
- Further developing digital learning arenas and lecture rooms for effective teaching and collaboration.
- Introducing standards and procedures conducive to the secure handling of all research data at UiB.
- Establishing and managing norms, rules and practices for information security which appropriately fulfill our ethical and legal obligations.
- Utilising and contributing to the development of cloud technology and cloud services with a combination of internal, sector, and public services.

2 USER-ORIENTED DIGITAL SERVICES

UiB intends to use digitalisation as a means to fulfil our strategic goals within research, education and dissemination. The digital services and solutions shall be at the forefront but, if we are to succeed, they must be used. This requires that prioritisation, design and deployment must be fundamentally user-oriented.

Students and employees live in a digital world and expect their education, workplace and the university's other endeavours to be equipped for this. Digital services shall, to the greatest extent possible, be self-explanatory based on the requirements they are to satisfy. The university's teaching staff and students shall have a learning environment that promotes research insight, collaboration and learning outcomes, and which gives them the knowledge and skills needed to keep up with a digital workday.

WE SHALL ACHIEVE THIS BY:

- Basing the realisation of digital services on user needs, user-friendliness and user experiences.
- Continuing and strengthening UiB's efforts in new and innovative forms of teaching, assessment, and dissemination, and using our cluster cooperations in these efforts.
- Strengthening UiB's applicable competency in user-friendliness and user experiences.
- Ensuring a universal design of digital services so that they can be understood and utilised by everyone.
- Enabling students and employees to develop their digital literacy and capabilities.

3 THE DIGITALLY ACCOMMODATING UNIVERSITY

UiB's vision "Knowledge that Shapes Society" shows that we aim to be open and relevant to our surroundings. UiB shall use digitalisation as a key means to facilitate collaborative research, to engage in global education and cooperation, and to open us up to the society around us. Digitalisation shall contribute to cooperation and sharing – locally, nationally and internationally. Digital channels and ecosystems will enable us to link past, present and future students more closely to the university.

WE SHALL ACHIEVE THIS BY:

- Utilising, developing and taking advantage of digital, organisational and cultural platforms for cooperation between the university and other parties in the knowledge clusters, and by facilitating knowledge and infrastructure sharing with these and others.
- Enabling services in the sector to be shared, and taking a national responsibility for digital services and resources wherever it is desirable to support research and education.
- Sharing our data and collections with collaborative partners and the world at large by means of open data and archives for research and observational data.
- Utilising digital services and external ecosystems to create a stronger link between students and the university thorough the cycle from application for admission to completed studies and further education.

4 A SELF-SERVICE UNIVERSITY ADMINISTRATION

New administrative services shall be user-friendly and designed to be accessible to all where they need them. Processes shall be automated wherever possible and existing information shall be reused. Self-service in administrative processes and services shall be pursued wherever this is possible and tenable. The potential for the realisation of quantitative and qualitative benefits shall form the basis of prioritisation.

UiB will continue to cooperate with other universities with regard to procurement of administrative support systems. The goal is to have as far as possible identical processes across the universities in the pursuit of greater efficiency and cooperation. UiB shall also be an active advocate for the digitalisation and rationalisation of administrative processes in shared national systems.

WE SHALL ACHIEVE THIS BY:

- Promoting self-service and automation as an underlying objective for UiB's administrative systems and services. All administrative processes shall be paper-free by 2020.
- Reusing known information so as to avoid asking users the same thing multiple times and to ensure consistent information in all systems.
- Digitising processes in a way that creates value for UiB and contributes to the realisation of our strategic goals.
- Building further on public architectural principles and actively supporting the sector's implementation of these. Establishing an integrated and coherent system architecture and operational architecture for our administrative systems.

5 A CULTURE OF CHANGE AND IMPLEMENTATION

Qualitative and quantitative benefits offered by digitalisation require change. New digital tools, systems and services result in changes to working methods, processes, culture, and organisation. We will need to implement such changes for our digitalisation to succeed.

Students, employees and our surroundings expect new digital services to be realised and adopted into use quickly. Expectations regarding speed are ever-increasing, and traditional methods for realising and introducing IT systems can often come up short. We must be able to seize, utilise and broaden the use of technology, standardisation and methods across our organisation. For UiB to achieve its goals within digitalisation, we must increase our speed and expand our capabilities.

WE SHALL ACHIEVE THIS BY:

- Further developing UiB's capacity for change and implementation capabilities.
- Bolstering digital literacy among our staff and by establishing change leadership throughout our organisation.
- Establishing a shared model, methodology and approach for change, organisational and IT projects.
- Implementing flexible and needs-based development processes with an emphasis on realising benefits.
- Adapting the sizes of projects in order to reduce the time it takes to develop new services while also minimising risks.

Design: Communication Division, UiB **Photo:** Colourbox.com

uib.no/en