Annual Report 2021
IT University of Copenhagen

IT UNIVERSITY OF COPENHAGEN / ANNUAL REPORT 2021

1. UNIVERSITY DETAILS

1.1 UNIVERSITY DETAILS

Institution
IT-University of Copenhagen
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Telephone +45 72 18 50 00
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Website www.itu.dk

CVR-no. 29 05 77 53
Financial Year 1 January – 31 December 2021

Registered office Copenhagen

Board of Directors

Carsten Krogh Gomard
Chairman of the Board of Directors,
Investor and professional board member, born 1966.
Netcompany co-founder

Lars Mathiesen
Deputy Chairman of the Board of Directors,
Director, Frost Management, born 1956.
Member of the Board of Directors of Obton Impact.
Member of the Board of Directors of YOUANDX.
Member of the IT Project Council of the Municipality of Copenhagen,
the IT Council of Danish Regions, It-tilsynet in Skat and KL/KOMBITs
Digitaliseringsråd.
Expert Judge at the Eastern High Court in Copenhagen.

Kristine Stenhuus
Managing Director, Accenture, born 1973.

David Basin
Dr., professor, ETH Zürich, born 1961.

Christina Hvid
CEO, Molio, born 1970.
Chairman of the Board of Directors of Fonden Hornbæk
Kunstmuseum.
2008: Appointed Young Global Leader of World Economic Forum.
Joined the Board of Directors on 1 April 2021.

Mircea Lungu
Associate Professor, IT University of Copenhagen, born 1980.

Lou Nørgaard Rudd
Academic Officer, IT University of Copenhagen, born 1979.
Joined the Board of Directors 1 January 2022.

Mikala Sofie Skoglund Thomsen
Master of Science Student, IT University of Copenhagen, born 1995.

Dagmar Bondo Kristiansen
Bachelor of Science Student, IT University of Copenhagen,
born 1997.
Joined the Board of Directors 1 January 2022.

1.2 EXECUTIVE MANAGEMENT, AUDITORS, ATTORNEYS AND BANK

Executive Management	Jens Christian Godskesen Interim Vice Chancellor Georg Dam Steffensen University Director
Auditor	Rigsrevisionen (The Danish National Audit Office) Landgreven 4 1301 København K
Institutional Auditor	EY Godkendt Revisionspartnerselskab Dirch Passers Allé 36 Postboks 250 2000 Frederiksberg
Attorneys	Advokatfirmaet Poul Schmith Vester Farimagsgade 23 1606 København V CVR 6495281 NP Advokater Strandgade 4 1401 København K CVR 36535946 Damkjær Lauritzen Advokatfirma I/S Frederiksborggade 15, 3. sal 1360 København K CVR 41071354
Bank	Danske Bank A/S Holmens Kanal 2-12 1092 København K

1.3 STATEMENT BY THE BOARD OF DIRECTORS AND THE EXECUTIVE MANAGEMENT

Today the Board of Directors and the Executive Management have discussed and approved the Annual Report of the IT University of Copenhagen.

The Annual Report has been prepared in accordance with the Danish State Accounting Act, etc., Executive Order no. 116 of 19 February 2018 on the State's Accounting, etc., the detailed guidelines in the Ministry of Finance's Financial Administrative Guide, Executive Order on the Universities Act (LBK no. 778 of 08/08/2019), Executive Order BEK no. 1957 of 15/10/2021 on Grants and Auditing etc. of Universities and the guidelines for preparing an annual report issued by the Danish Agency for Higher Education and Science.

It is hereby stated that:

1. The Annual Report gives a true and fair view, i.e. the Annual Report does not contain any material misstatement or omissions, including adequate presentation and reporting on the Strategic Framework Contract.

2. The transactions comprised by the financial reporting are consistent with appropriations granted legislation and other regulations as well as agreements entered into and general practice.

3. Business procedures have been established that ensure financially appropriate administration of the funds and the operation of the institutions comprised by the Annual Report.

Copenhagen, 6 April 2022

The Executive Management of the IT University of Copenhagen

Jens Christian Godskesen
Interim Vice Chancellor

Georg Dam Steffensen
University Director

The Board of Directors of the IT University of Copenhagen

Carsten Krogh Gomard
Chairman, External Member

Lars Mathiesen
Deputy Chairman, External member

Kristine Stenhuus
External member

David Basin
External member

Christina Hvid
External member

Mircea Lungu
Staff-elected member

Lou Nørgaard Rudd
Staff-elected member

Mikala Sofie Skoglund Thomsen
Student-elected member

Dagmar Bondo Kristiansen
Student-elected member

1.4 INDEPENDENT AUDITORS´ REPORT

TO THE BOARD OF DIRECTORS OF THE IT UNIVERSITY OF COPENHAGEN

Opinion
We have audited the financial statements of the IT University of Copenhagen for the financial year 1 January - 31 December 2021, which comprise accounting policies, income statement, balance sheet, cash flow statement and notes, including special statements. The financial statements are prepared in accordance with the Statutory Order no. 116 of 19 February 2018 on State Accounting etc., Statutory Order no. 778 of 8 August 2019 on Universities, Statutory Order no. 1957 of 15 October 2021 on the Grants and Auditing, etc., of universities as well as the Danish Agency for Higher Education and Science's guidelines on the preparation of annual reports (the Danish State's accounting rules).

In our opinion, the financial statements are, in all material respects, correct, i.e. prepared in accordance with the Danish State's accounting rules.

Basis for opinion
We conducted our audit in accordance with International Standards on Auditing (ISAs) and additional requirements applicable in Denmark as well as public auditing standards as the audit was performed on the basis of the provisions of the Danish State's accounting rules. Our responsibilities under those standards and requirements are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence
We are independent of the university in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (IESBA Code) and the additional ethical requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

Management's responsibilities for the financial statements
Management is responsible for the preparation of financial statements that are, in all material respects, correct, i.e. prepared in accordance with the Danish State's accounting rules. Management is also responsible for such internal control that Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the University's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in preparing the financial statements unless Management either intends to liquidate the University or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements
Our objectives are to obtain reasonable assurance as to whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and additional requirements applicable in Denmark as well as public auditing standards, cf. the Danish State's accounting rules, will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit conducted in accordance with ISAs and additional requirements applicable in Denmark as well as public auditing standards, cf. the Danish State's accounting rules, we

exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.

- Conclude on the appropriateness of Management's use of the going concern basis of accounting in preparing the financial statements and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the University's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the University to cease to continue as a going concern.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Statement on the Management's review
Management is responsible for the Management's review (pages 9 - 19), reporting on the Strategic Framework Contract (pages 36 - 37) and financial highlights (pages 38 - 43), in the following referred to as the other reports.

Our opinion on the financial statements does not cover the other reports, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other reports and, in doing so, consider whether the other reports are materially inconsistent with the financial statements or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether the other reports provide the information required under the Danish State's accounting rules.

Based on the work we have performed, we conclude that the other reports are in accordance with the financial statements and have been prepared in accordance with the requirements of the Danish State's accounting rules. We did not identify any material misstatement of the Management's review.

Report on other legal and regulatory requirements
Statement on compliance audit and performance audit
Management is responsible for ensuring that the transactions included in the financial reporting comply with appropriations granted, legislation and other regulations and with agreements entered into and usual practice and that due financial consideration has been taken of the management of the funds and operations of the activities covered by the financial statements.

Consequently, Management is responsible for establishing systems and procedures supporting economy, productivity and efficiency.

In performing our audit of the financial statements, it is our responsibility to perform compliance audit and performance audit of selected items in accordance with public auditing standards. When conducting a compliance audit, we test the selected items to obtain reasonable assurance as to whether the transactions covered by the financial reporting comply with the relevant provisions of appropriations, legislation and other regulations as well as agreements entered into and usual practice. When conducting a performance audit, we perform assessments to obtain reasonable assurance as to whether the tested systems, processes or transactions support due financial considerations in relation to the management of the funds and operations of the entities covered by the financial statements.

We must report on any grounds for significant critical comments, should we find such when performing our work.

We have no significant critical comments to report in this connection.

Copenhagen, 6 April 2022
EY Godkendt Revisionspartnerselskab
CVR no. 30 70 02 28

Morten Weinreich Larsen
State Authorised Public Accountant
mne42791

2. OPERATING REVIEW

2.1 PRESENTATION

The IT University of Copenhagen (hereafter called IT University) is an independent university under the Ministry of Higher Education and Science.

Mission
The mission of the IT University is to provide internationally leading teaching and research, which enable Denmark to become exceptionally good at creating value with IT.

The IT University will create this value mainly via research and education.

Vision
We create and share knowledge that is profound and leads to ground-breaking information technology and services for the benefit of humanity.

2.2 STRATEGY

The main focus of the strategy for 2017-2021 was to increase, as much as possible, the number of people in Denmark creating value with IT in ways that meet the standards of leading-edge IT research.

In concrete terms the IT University works with the following areas of action:

1. Increasing the number of highly educated IT professionals
2. Increasing the number of female IT professionals
3. Increasing quality and relevance of all study programmes
4. Increasing IT research within areas of major societal importance, specifically:
    a. Digitalisation
    b. Information security
    c. Data science
5. Strengthening the IT subjects in primary and secondary education.

Profile of the IT University
The essence of information technology is the creation, sharing and handling of mental concepts by means of digital technology.

Thus, it is the mental concepts of humans, which constitute the core of information technology. Some of these concepts are based in natural sciences and technology, some in the arts and some in the use of IT by the business community. This diversity of specialisation is expressed in the triangle of the IT University:
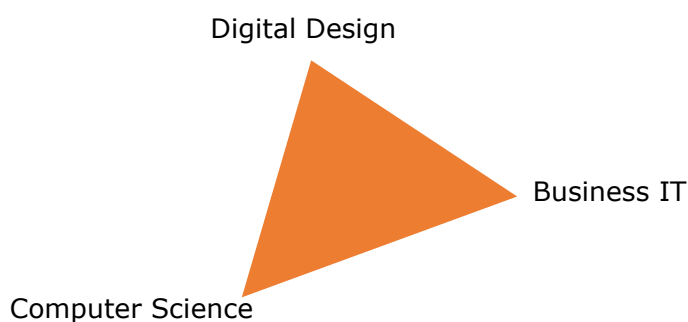
This view is decisive for the ability of the IT University to attract a large number of researchers and students to this area. As a university dedicated to IT, the IT University has the special advantage of being able to gather these very different approaches to IT in one organisation with common targets and strategy. The vision adds that the three different perspectives all

9

must contribute to create and share knowledge that is profound and leads to ground-breaking information technology and services for the benefit of humanity.

The IT University has three departments corresponding to the three corners of the triangle: The Business IT Department, The Computer Science Department and the Digital Design Department.

Work on the quality and relevance of the study programmes
In 2016, the IT University achieved a positive institutional accreditation. The positive institutional accreditation is valid until 2022. With the institutional accreditation, the IT University has systematised its quality assurance work considerably. The IT University's Quality Policy sets quality standards and describes processes to discover and handle any breach of these quality standards. In the autumn of 2021, the process began with the Accreditation Institution towards a new accreditation valid for a 6-year period from late 2022.

On 1 January 2021, a Dean of Education took office in a newly created position. The Dean of Education will, among others, be responsible for the work of ensuring the quality and relevance of the study programmes.

In the spring of 2021, the campus closed due to COVID-19 and all educational activities (teaching, tutoring and exams) was transferred to full online. The campus reopened during the fall semester.

In the spring of 2021, work began on formulating a student-centered well-being strategy that defines principles for an inclusive and attractive study environment. The strategy contributes to increased quality in the study programmes by ensuring a common focus on student-centered and research-based learning.

In 2021, the IT University received an extra government grant of DKK 400,000 to promote student well-being. The focus in 2021 has been to rebuild social study activities after the lockdown and to strengthen the quality level in teaching through, among others, better introductory processes, increased use of teaching assistants and laboratory activities. The IT University's Learning Support Unit has also contributed to the development of balanced online-onsite learning designs based on an analysis of best practice for online learning.

The work on relevance of the study programmes is carried out in cooperation with the university's five Programme-Specific Employers' Panels and the overlying Executive-Level Employers' Panel. Every panel has met once or twice in 2021 and have submitted reports to the university with assessments and recommendations.

2.3 WORK OF THE BOARD OF DIRECTORS

The composition of the Board of Directors until the end of September 2021 was as follows: Carsten Krogh Gomard (Chairman), Lars Mathiesen (Deputy Chairman), Kristine Stenhuus, David Basin, Christina Hvid (joined the board per 1 April 2021), Anaya Mourad Jensen, Mircea Lungu, Sebastian Mateos Nicolajsen and Mikala Sofie Skoglund Thomsen.

Anaya Mourad Jensen resigned from the Board of Directors at the end of September 2021 and is per 1 January 2022 replaced by Lou Nørgaard Rudd. Sebastian Mateos Nicolajsen resigned from the Board of Directors at the end of 2021 and is per 1 January 2022 replaced by Dagmar Bondo Kristiansen.

Based on the IT University's overall strategy for 2017-2021, the Board of Directors has also in 2021 had a special focus on the role of the IT University to meet the demand for highly skilled IT specialists in Denmark, as well as building research capacity within digitisation, information security and data science. The Board of Directors and the management have had

the ambition to increase the number of admitted students on the university's study programmes and have worked purposefully to create the necessary framework for this. The IT University has investigated the possibility of starting a new campus in Vejle with up to 1550 IT students, when fully implemented, in a partnership with Vejle Municipality and DANDY Business Park. This opportunity, which harmonised well with the implementation of the politically concluded agreement "More and better educational opportunities in all of Denmark", is unfortunately not possible to achieve.

At the Board of Directors' meeting in June 2021 the board adopted the IT University's upcoming strategy for 2022-2025 with three overall strategic targets: "Educate more IT professionals and IT researchers", "Engage in research and education activities that help shape a sustainable digital future" and "Enable all students and staff to thrive and excel together".

The Board of Directors of the IT University has continued to focus on the gender balance among students, and in 2021, just like in 2020, targets have been set for the number of female students on the BSc study programmes in Software Development and Data Science.

Finally, the Board of Directors has continued to discuss the IT University's work with information security, including the general threat level for the sector.

2.4 STRATEGIC FRAMEWORK CONTRACT

The year 2021 is the fourth and final year in the period of the Strategic Framework Contract for 2018-2021. In the contract period, the strategic targets for the IT University are:

1. Increasing the capacity of research-based education of technical IT professionals
2. Increasing the number of female technical IT professionals
3. Achieving a high learning outcome for all students
4. All graduates should achieve good career opportunities
5. Strengthening IT research within areas that reflects societal needs
6. Strengthening the IT subjects in primary schools and high schools by co-operation and exchange of knowledge.

For each of the six strategic targets, the IT University has prepared an assessment of the Target Fulfilment in the Strategic Framework Contract at the end of the contract period 2018-2021. The conclusions of the Target Fulfilment are presented in the below chapter "4. The Strategic Framework Contract for 2018-2021".

2.5 FINANCIAL RESULTS FOR THE YEAR

The IT University's total income of DKK 381.2 million exceeded the budget by DKK 25.6 million (7 per cent), which is mainly due to an extraordinary government grant of DKK 10.0 million for research and development and an increase of DKK 12.1 million in turnover of external research funding based on grants awarded in 2020. In addition, there is increased study activity, especially among MSc students in their final year of study, which results in grants per student of DKK 4.3 million more than expected.

The IT University's total costs of DKK 377.0 million exceeded the budget by DKK 13.0 million (4 per cent). Of this, DKK 9.3 million relates to the employment of primarily academic staff on externally funded research projects. In addition, the IT University continues to adapt its expanded campus, IT support and administration to the increase in study and research activities in recent years.

The increase in study and research activities in recent years is reflected in the IT University's increased operating income, which has grown from DKK 276.0 million in 2017 to an expected DKK 395.7 million in 2022 (corresponding to an increase of 43 per cent).

The IT University considers the profit for the year of DKK 6.3 million to be satisfactory.

TABLE 1: FINANCIAL RESULT OF THE YEAR (DKK M)

	Realised 2021	Budget 2021	Budget 2022
Income	381.2	355.6	395.7
Government grants and tuition fees	314.7	301.3	310.3
External research funding	52.4	40.3	68.1
Other income	14.2	14.0	17.3
Costs	377.0	364.0	405.4
Personnel costs	259.6	240.6	271.2
Ordinary operating costs	117.4	123.4	134.1
Profit before financial income and costs	4.3	-8.4	-9.7
Financial income and costs	2.0	0.9	0.9
Profit	6.3	-7.5	-8.8

Cash holdings

The IT University's cash holdings have decreased from DKK 88.0 million to DKK 64.6 million which is primarily due to a decrease in prepaid restricted grants for externally funded research. The prepaid restricted grants for externally funded research have been recognised as income concurrently with the agreed research activities being carried out.

2.6 ACADEMIC PERFORMANCE FOR THE YEAR

RESEARCH

Research at the IT University has also in 2021 had a great impact. This has been achieved, among others, through active participation in the public debate, dissemination efforts in the media and at conferences, as well as through participation in the establishment of a new pioneer center within artificial intelligence. It is also extremely positive that the researchers at the IT University once again have attracted external research funding of a magnitude as never seen before. In addition, all of the IT University's research publications are registered as Open Access publications for the third year in a row.

Below is a short status on research at the IT University in 2021.

Strengthening the reputation

Several researchers have received awards and acknowledgements for their research in 2021.

Associate Professor Nutan Limaye is the co-author of a research article that has been awarded the Best Paper Award at the Foundations of Computer Science's (FOCS) IEEE Symposium. The award is one of the world's most prestigious awards in theoretical computer science, and it is awarded for the first time to researchers at Danish universities. The results presented in the research paper are a step towards understanding the answer to one of the basic questions in computational complexity, namely the question of P versus NP, which in short is about understanding the limitations of computers and the nature of calculation complexity itself.

Associate Professor Morten Hjelholt completed a research project on the challenges of vulnerable older people in the digital society, and the conclusion is not encouraging. With a video campaign and a book entitled "Dét skal du ordne på nettet – om digitalt udsatte ældre", written in collaboration with research communicator and author Jari Kickbusch, Morten Hjelholt focuses on the many digital initiatives that permeate society and for many of us have become part of the daily routine, but for others are insurmountable challenges.

Associate Professor Leon Derczynski leads the Danish Gigaword Project together with Manuel R. Ciosici from the University of Southern California. The project aims to improve the quality of everything from machine translation to tracking fake news in Danish. The target is to create a data set of one billion Danish words, as they appear in a broad representation of written sources, which can subsequently be used for more precise training of algorithms and for

building Danish language models, which is otherwise only possible within a high-resource language, such as e.g. English. The written sources are described in more detail in the scientific article "The Danish Gigaword Corpus", which the researchers behind the project presented at the "Nordic Conference on Computational Linguistics".

In 2021, Barbara Plank, Louise Barkhuus and Dan Witzner Hansen were appointed professors at the IT University. Barbara Plank is researching in how natural language processing can become more open and inclusive regarding smaller language areas. Louise Barkhuus is researching in user experiences and personal data problems, as they unfold in the encounter with location-based applications and social media. Dan Witzner Hansen researches the information that the eye emits and how this information can be used in future applications in a digitised world.

IT plays a crucial role in meeting climate targets – both in relation to how IT and the rapidly increasing amounts of data burden the environment and consume large amounts of energy, and in relation to how IT can be used to reduce resource consumption and create sustainable solutions. The IT University has therefore put extra focus on the climate-related research dissemination under the term "Climate IT". For example, assistant professor James Maguire, who among others researches the imprints left by the big tech companies' huge data centers on Danish soil, talks about future environmentally friendly options for data storage in a podcast.

The Center for Digital Welfare launched a podcast series in which digital welfare is put up for debate. Under the term "Digital welfare - what is it?" the center focuses on how digitalisation has changed the premises of our welfare. In addition to creating debate, the podcast series should serve to capture and document the views and cultural perceptions associated with digital welfare. The perspectives range from analysis of the power the big tech giants have gained on the global stage, to more individual-oriented rights perspectives with a focus on power, control, inclusion and exclusion mechanisms. The podcast series is made in collaboration with journalist Anders Kjærulff.

From 30 November to 1 December 2021, the Digital Tech Summit was held in Øksnehallen, the Nordic countries' largest research and technology fair, where the IT University was one of the co-organisers. In total, there were more than 350 speakers from 200 tech startups and eight Danish universities on the agenda. More than 70 companies and organisations had stands at the summit. The IT University was represented at nine of the sessions of the summit, and the university's researchers spoke about diversity and IT education, cyber security in business, inclusion and the digital welfare state, software security and design.

Denmark has an indicator for Open Access publication of research results. When releasing the indicators in 2021, the IT University was again a clear number one among all Danish universities. For the third year in a row, all publications of the IT University were registered as Open Access publications, while the second best Danish university had registered 73 per cent of its publications as Open Access publications and the national average was 63 per cent.

External research funding
In 2021, the IT University received external research funding for a total of DKK 96.7 million, which again this year is record high. Listed below are some of the externally funded projects that were realised in 2021 or will be realised in 2022, as well as the allocated grants for each of them.

Associate Professor Jörn Christiansson is leading the newly established research project CAPE (Civic Agency in Public E-service innovation), which aims to improve existing public e-services in the Nordic countries and to highlight the potential for user-driven digital services in the future. The project is funded by NordForsk with a total grant of EUR 1.5 million and consists of the following partners: The IT University, Aalborg University, Ballerup Bibliotekerne, Malmö University (Sweden), Stadsbiblioteket in Malmö (Sweden), Aalto University (Finland) and Helsinki City Library (Finland).

Associate Professor Vasilis Galis is in charge of the project CUPP (Critical Understanding of Predictive Policing), which in addition to the IT University consists of the trade union PROSA as well as universities and research centers in Estonia, Latvia, Norway and the United Kingdom. The project has received a grant of EUR 1.0 million from NordForsk. The purpose of the project is to investigate the police's use of big data, face recognition, surveillance and other data-driven tools in relation to social conditions, ethnicity, human rights and fundamental freedoms rights.

Professor Brit Ross Winthereik is in charge of the SOS project "Infrastructures for partially digital citizens: Supporting informal welfare work in the digitized state", which with a grant of EUR 1.0 million from NordForsk will investigate partially digitized citizens' need for help in matters to their contact with public institutions and authorities via digital self-service solutions. The project is established as a collaboration between the IT University, University of Agder (Norway), University of Gothenburg (Sweden), the Agency for Digitisation, Aarhus Municipality, Arendal Municipality (Norway), Grimstad Municipality (Norway), Microsoft and Implement Consulting Group.

Associate Professor Luca Maria Aiello received DKK 5.0 million from the Carlsberg Foundation's prestigious Young Researcher Fellowships, which will be used for the research project "COCOONS: COllective COordination through ONline Social media". The target of the project is to create a basis for online platforms that let users come together on common key issues such as climate changes and the prevention of global pandemics.

Professor Sebastian Risi and Associate Professor Anders Sundnes Løvlie were awarded DKK 3.0 million from the VILLUM FONDENS's Synergy grant for the project "Algorithmic Ways of Seeing: Improving Image Recognition by Training on Art Images". The purpose of the project is to investigate two significant challenges: first the lack of sufficiently large data sets consisting of non-photographic images to be used to train computers, and then the ethical and cultural field of tension in relation to computers and people's way of seeing.

Professor Steffen Dalsgaard received a grant of DKK 2.9 million from the Independent Research Fund Denmark for the project "Amazônia 4.0: A technology-Driven Green Transition in Brazil". The purpose of the project is, based on ethnographic work in the Amazon, to investigate how sustainable transition can take place in practice. The Amazon is a key global area when it comes to climate change and the fight for a more sustainable global economic system.

Associate Professor Veronika Cheplygina and Assistant Professor Therese Graversen have each received a grant of just over DKK 2.9 million from the Independent Research Fund Denmark's Inge Lehmann Programme, which aims to cultivate talent and promote gender equality in Danish research environments. Veronika Cheplygina will by use of machine learning technology use her grant to develop better methods for analyzing medical images by, among others, focusing on metadata. Therese Graversen's research project aims to improve the accuracy of the DNA analysis used in the work with evidence in court cases.

Associate Professor Marco Carbone received DKK 2.8 million from the Independent Research Fund Denmark for the project "MECHANIsation of Session Types". The aim of the project is to develop mathematical models for the prevention of errors in critical software from the health and transport sector for communication and energy supply.

Assistant Professor Oksana Kulyk received DKK 2.0 million from the Villum Experiment Programme for the project "Communicating trust in the security of election technologies". The purpose of the project is to investigate how trust mechanisms work in relation to cryptography-based electronic voting systems, how voters build trust in election technologies, and how to communicate trust effectively and transparently.

Associate Professor Lars Rune Christensen and PhD Student Hasib Ahsan received DKK 1.9 million for the project "Syrian mHealth" from the Novo Nordisk Foundation to create a digital

platform for mental health care among Syrian refugees in Jordan, which will be used to ensure that more refugees receive the treatment they need.

New research centers
New AI Pioneer Center
The IT University will participate in building up a new pioneer center for research in artificial intelligence. The Pioneer Center will be the largest Danish investment in research in artificial intelligence to date. With funding of DKK 352.4 million from the Danish National Research Foundation, the Novo Nordisk Foundation, the Carlsberg Foundation, the VILLUM FONDEN and the Lundbeck Foundation, the IT University, together with Aalborg University, Aarhus University, the Technical University of Denmark and the University of Copenhagen, will make Denmark an international AI front-runner within 10 significant societal challenges, e.g. prediction – and thus prevention – of diseases, monitoring of climate change and biodiversity as well as energy and infrastructure. The pioneer center will be located in Østervold, which is the astronomical observatory from 1861 at the Botanical Garden in Copenhagen.

Contributing valuable research
Michael Szell, Associate Professor of data science at the IT University, is researching population mobility on a very large, data-driven scale in order, among others, to improve conditions for cyclists in big cities. He is the co-author of a ground-breaking article on movement patterns recently published in the international scientific journal Nature. "By using mobile phone data, we are able to demonstrate a legitimacy in the way people move around cities. We can deduce that populations move along a curve which our mobility law explains. If we know one point on the curve, we can determine the other points on the curve from there", Michael Szell explains. The mobility law can be of great importance when applied practically as a model. For example, municipalities can use the model to calculate and predict the movement patterns of populations and on that basis expand infrastructure and sharpen road safety. In the same way, the business community can use the model to determine where, for example, it pays to open a store in the city.

In August, a closing conference was held on the 4-year EcoKnow project, which was to investigate whether the use of artificial intelligence and big data could make case management systems better – and how? The project, which consisted of a wide range of partners from both the public and private sectors as well as three universities, including the IT University, where the project has been anchored, has achieved several interesting results. Among others, a digital tool has been developed by the project's researchers in collaboration with the project partners, which is today separated into an independent company, DRC Solutions. The tool can support the caseworkers' work by guiding them in accordance with applicable laws and regulations. Specifically, the tool gives the caseworker a pat on the back to remind the person about which actions the law ascribes – or a checklist that can help the caseworker to create an overview of the things that the law requires the person to do, e.g. in relation to compliance with deadlines for replies.

There has been an increase in the number of bibliometric points, BFI, which are calculated by the Danish Agency for Higher Education and Science with a delay of almost one year. For 2020, a total of 220 points were calculated versus 194 the year before, cf. table 2. As a result of a political agreement from 3 December 2021, the current administrative set-up around BFI will be terminated with effect as of 2021. There has been a major increase in terms of the number of peer-reviewed publications, as in 2021 362 peer-reviewed publications were registered versus 254 in 2020.

Where again in 2021 there have been 100 externally funded research projects, there has been an increase in cooperation projects with the business sector from 33 projects in 2020 with a consumption of DKK 16 million to 37 projects in 2021 with a consumption of DKK 19 million.

No inventions were registered in 2021, against one in 2020. Similarly, no patent applications were submitted in 2021, and the IT University had no patents issued, cf. the table with key financial figures and ratios.

Collaboration with external partners
At the IT University, there is a long tradition of interacting with external organisations and companies, both in relation to the design and implementation of the study programmes and in working with the underlying research. Collaborations can be established in several ways e.g. in direct collaboration with students, researchers and lecturers or most recently as an external member of the IT University's research centers.

Center for Digital Welfare
A focus in 2021 has been the implementation of a new research center collaboration model. The Center for Digital Welfare was established in autumn of 2020 with the purpose of creating new solutions for the digital welfare society that are inclusive and appreciates diversity among people, perspectives and practices. At the same time, part of the center's work is to offer interaction with external partners through thematic working groups, where knowledge and data can be exchanged for mutual benefit. By the end of 2021, 10 external organisations and companies have become members of the center and have participated in working group meetings, external guest lectures and excursions. In the upcoming years, this collaboration model will be implemented in more IT University research centers.

External "Innovation Hubs" at the IT University
As part of the IT University's desire to create more interfaces with the surrounding world it is possible for companies to establish themselves physically at the IT University. The daily presence on campus will make it easier for researchers and students to access business collaborations. In 2021, the IT University has been able to welcome the Alexandra Institute and Novo Nordisk Digital Innovation Hub.

Entrepreneurship and innovation projects
For students and researchers who want to explore the innovation and commercialisation potential of ideas and research in more detail, there are several offers at the IT University to support this process.

The efforts are coordinated and supported by the IT University's Innovation Unit, which, among others, handles the funding opportunities via the business clusters DigitalLead and Copenhagen Fintech as well as Spin-outs Denmark, where the IT University is an Associated Partner.

The Innovation Unit operates in practise as part of the project "Open Entrepreneurship", in which the IT University participates together with the other universities in Denmark. Since the project started in 2017, Open Entrepreneurship has helped more than 60 research-based start-ups into the world, built a pipeline with 80 cases with commercialisation potential, raised DKK 85 million in funding for newly established companies and established an E-corps of more than 70 entrepreneurial advisors from the business world. Results that have contributed to the Danish Industry Foundation at the end of 2020 have extended their funding of the project by almost two years until the summer of 2023, which means that the IT University's part of the funding for the period 2021 to 2023 ends at almost DKK 2.5 million.

In 2021, several researchers at the IT University received external funding for further development of their innovation projects. These include, among others:

- Associate professors Martin Pichlmair and Miquel Angel Sicart, who received just under DKK 1.5 million from Innovation Fund Denmark's Innoexplorer program for the project LAIKA, "Machine Learning for Writers"

- Associate Professor Bernardo Machado David, who received DKK 0.2 from Copenhagen Fintech for the project P2DEX: "Privacy-Preserving Decentralized Cryptocurrency Exchanges"

- Assistant Professor Cancan Wang who also received DKK 0.2 million from Copenhagen Fintech for the project "Vidensbro".

TABLE 2: Research full-time equivalents, PhD theses and publications

	2017	2018	2019	2020	2021
Number of admitted PhD students	15	13	20	22	25
Approved PhD theses	11	13	10	12	12
PhD students (full-time equivalents)	39	33	40	41	54
VIP: Assistant professors, associate professors and professors (full-time equivalents)	77	86	94	107	112
Number of publications (peer-reviewed)	230	256	234	254	362
Publication points *	248	255	194	220	*

* Figures from the Danish Agency for Higher Education and Science, which do not calculate publication points after 2020.

The PhD School

In 2021, the IT University admitted 25 new PhD students and 12 PhD students graduated. Several of the PhD students received positive attention in 2021. PhD Student Dominic Francis Stephen Ford received an EliteForsk travel grant of DKK 200,000, which was partly used for a hybrid (in-person and virtual) stay at Jagiellonian University, Department of Polish Studies, Krakow, Poland. Dominic researches games with a specific focus on myths as a way to understand cultural sense in games.

With the survey "Quality in the PhD programme at ITU", the PhD School in 2021 initiated an internal quality development process built around a quantitative and a qualitative part, which results in an action plan for the PhD area at the IT University. The aim of the survey is to gain broad insight into the students' experiences and benefits of the PhD study and to formulate new initiatives in the field. In general, 2021 was marked by COVID-19, and the PhD School maintained the increased social effort by holding monthly online lunch meetings in the first half of the year. To the great joy of the PhD School and the participating PhD students at the IT University, it was possible in the autumn of 2021 to hold the annual PhD symposium on campus.

EDUCATION

In 2021, the IT University offers 10 fulltime study programmes, of which four are BSc study programmes and six are MSc study programmes. There has once again been an increase in the number of applicants and graduates as well as study activity in the form of full-time student equivalents for both BSc and MSc study programmes in 2021, cf. table 3.

The IT University has again in 2021 had a very high number of applicants for the study places that the university's financial framework allows for. In 2021, there was a record high number of applicants for the BSc study programmes. Already in the first year there was a high number of applicants for the IT University's new MSc study programme in Data Science. Once again, the other MSc study programmes have also had an increase in the number of applicants.

The number of admitted BSc students peaked in 2020 with 433 admitted due to additional admissions via temporary STEM and COVID-19 grants. In 2021 COVID-19 grants once more allowed for a small number of additional admissions for a total of 396 admitted. 550 were admitted to the MSc study programmes, which is the highest number of MSc students admitted in a single year at the IT University. One third of the admitted MSc students have an BSc degree from the IT University, while the rest have a BSc degree from a different Danish or foreign educational institution. 37 out of the 550 admitted MSc students were admitted to the new MSc study programme in Data Science.

Again in 2021, there have been periods of lockdown of the IT University's buildings as well as restructuring of teaching and examinations to take place online. The experiences from periods of online teaching have contributed to the formulation of the IT University's future concept for "balanced learning".

In recent years, there has been a major increase in full-time student equivalent earnings, including also in 2020-2021, where there have been periods of COVID-19 related lockdown and online teaching.

The number of MSc graduates is at a record high in 2021. The increased number of admitted MSc students in recent years, together with this year's high study activity, has contributed to the high number of MSc graduates.

TABLE 3:
Enrolled students, full-time student equivalents, graduates and completion times

	2017	2018	2019	2020	2021
Applicants for the MSc study programmes	1,707	1,217	1,130	1,195	1,342
Admitted MSc students	498	517	507	536	550
Enrolled MSc students	1,049	1,088	1,123	1,164	1,157
Graduated MSc students	470	380	391	454	488
Completion time. MSc students (years)	2.0	1.8	1.8	1.8	1.8
Applicants for the bachelor study programmes	1,715	1,787	1,577	1,807	1,853
Admitted bachelor students	333	341	364	433	396
Enrolled bachelor students	762	861	963	1,099	1,114
Graduated bachelor students	169	156	169	228	249
Completion time. Bachelor students (years)	2.8	2.8	2.8	2.8	2.8
Number of full-time student equivalents	1,357	1,445	1,582	1,702	1,867
Admitted master's students	52	40	42	41	24
Enrolled master's/diploma students	493	431	243	200	189
Number of full-time student equivalents obtained by part-time students	75	94	68	54	47

Note: Full-time student equivalents are calculated at 31 August. Students and graduates are calculated at 30 September. The completion time, which is 1.8 years for MSc students, is calculated as the median of the number of commenced study months for graduates who complete their MSc degree in the period 1 October to 30 September. The same method is used for bachelor students.

The IT University offers a part-time study programme, the Master's study programme in IT Management. The master's study programme has been revised and the first students were admitted in 2021. While in each of the previous years approximately 40 students a year were admitted, 24 students were admitted in 2021. The lower number of admitted master's students has contributed to the decreasing trend in study activity among part-time students in 2021.

2.7 OUTLOOK FOR THE COMING YEAR

In 2021, the IT University obtained a new strategy for the period 2022-25. The strategy contains three overall targets: "Educate more IT professionals and IT researchers", "Engage in research and education activities that help shape a sustainable digital future", and "Enable all students and staff to thrive and excel together". In 2022, work on implementing the strategy will begin.

The agreed Strategic Framework Contract with the Ministry of Higher Education and Science expired in 2021. It is expected that the negotiations on a new Strategic Framework Contract for the period 2022-2025 will be completed at the beginning of 2022.

The IT University expects to continue to attract many qualified students to the university's attractive study programmes, where the graduates are highly valued.

In 2021, the Government and the Danish Parliament entered into an agreement in which all universities were required to draw up a plan to relocate or close study places by up to 10 per cent until 2030. On 22 March 2022, a settlement was reached on the implementation of the relocation agreement on higher education. The IT University is not going to relocate study places or reduce the number of study places in Copenhagen.

In 2021, the IT University has again increased the total volume of attracted externally funded research projects, and in 2022 the university will continue the implementation of the external funds and continue to work on attracting externally funded research projects, considering the financial sustainability of the institution.

Many students and researchers at the IT University have a great interest in the green agenda, so it is expected that the IT University's activities regarding the green agenda will be intensified in 2022.

The budget for 2022 is shown in table 1. The expected operating income is DKK 395.7 million, which includes a major increase in the turnover of external research funding. The increase in the turnover of external research funding is based on a corresponding major increase in the grants awarded in recent years, which is recognised as income as the agreed research activities are carried out.

The expected deficit is DKK 8.8 million, which is primarily due to an increased admission of students based on the government's implementation of the financial grant related to COVID-19 in previous years. The implementation of the financial grant related to COVID-19 does not fully cover the actual costs of research-based teaching.

In the upcoming years, the IT University will continue to adapt both the administrative and academic departments to the increased study and research activity.

3. FINANCIAL STATEMENTS

3.1 APPLIED ACCOUNTING POLICIES

BASIS OF ACCOUNTING
The IT University's Annual Report is prepared in accordance with the Danish State Accounting Act, etc., Executive Order on the State's Accounting, etc. (BEK no. 116 of 19/2/2018), the guidelines in the Ministry of Finance's Financial Administrative Guide, Executive Order on the Universities Act (LBK no. 778 of 08/08/2019), Executive Order on Grants and Auditing etc. of Universities (the Executive Order on Subsidies and Auditing) (BEK no. 1957 of 15/10/2021) and the guidelines for preparing an annual report issued by the Danish Agency for Higher Education and Science.

The Annual Report is presented in DKK 1,000.

CHANGE IN ACCOUNTING POLICIES
The applied accounting policies are consistent with those of previous year.

ESPECIALLY REGARDING THE TRANSITION TO THE COMMON CHART OF ACCOUNTS
The IT University has implemented the common chart of accounts for educational institutions under the Ministry of Higher Education and Science with effect from 1 January 2021.

The implementation of the common chart of accounts does not entail a change in recognition and measurement, cf. the basis of accounting.

The common chart of accounts includes the dimensions nature (state chart of accounts), sub-accounts, place, and purpose. The common chart of accounts is used in accordance with the Danish Agency for Higher Education and Science's accounting and distribution guidelines, incl. associated models and guides.

The financial year 2021 is a pilot year for the application of the common chart of accounts. During the financial year, the IT University has implemented the purpose dimension in the financial system. From 1 January 2022, all income and costs will be assigned purpose number in connection with the bookkeeping.

ESPECIALLY REGARDING THE IMPLEMENTATION OF A NEW ANNUAL REPORT TEMPLATE
The Annual Report for 2021 has been prepared in accordance with the common annual report template for educational institutions under the Ministry of Higher Education and Science.

Comparative figures in the annual accounts have been adapted to the common annual report template for educational institutions under the Ministry of Higher Education and Science. The exceptions are:

- Distribution of costs by purpose in the note to the income statement: In previous financial years, the IT University has divided costs by purpose according to the Ministry of Higher Education and Science's Guidance "Vejledning om hovedområde og formålsfordeling af universiteternes omkostninger" from December 2012. The distribution of costs by purpose in 2021 cannot be compared with previous years due to the new distribution methods, cf. the section on transition to a common chart of accounts. Therefore, comparative figures for 2020 are not disclosed.

- The special statement on management salaries: The disclosure requirement for management full-time equivalents and management salaries has been introduced as of the Annual Report 2021. Therefore, comparative figures for 2020 are not disclosed.

DISPENSATIONS

The IT University has received the following accounting dispensations from the general basis of accounting:

- Costs in the income statement are divided into the statements on Personnel costs, Rent, Depreciations and Other operating costs.

- The note to the statement on Sale of goods and services is not divided into Course activities and Other sales of goods and services.

- The note for the statement on Deposits is divided into the items Deposits regarding leases and Other deposits.

- The note to the statements on Securities is not divided into the items Bonds and Other securities.

The dispensations only apply to the financial year 2021.

SPECIFIC AREAS

The section describes accounting policies in specific areas.

Foreign currency translation

Receivables, payables and other items denominated in foreign currencies that have not been settled at the balance sheet date are translated using the exchange rate at the balance sheet date.

Income Statement

Operating income

Income is recognised in the year to which the income relates.

The IT University receives government grants in accordance with section 19.22.45 of the Danish Finance Act.

Government grants are paid on an ongoing basis as monthly payments on account, which are adjusted before the end of the year on the basis of the actual production of student full-time equivalents, fulfillment of performance targets and other adjustments to the annual government grant.

Other grants, including income from cooperation agreements subject to conditions of use by the grantor, are recognised as income as the costs are paid. Grants that are not subject to conditions are recognised as income at the time of receipt.

Sales of goods and services and other income are recognised in the year to which the income relates.

Operating costs

Operating costs are recognised in the year they relate to.

Goods and services are recognised in the year they are delivered.

Financial income and costs

Financial income and costs are recognised in the year they relate to.

Returns from investment fund certificates, including interest and dividends from shares and bonds as well as value adjustments, are recognised based on the individual securities' official prices on the balance sheet date.

Assets
Assets are recognised in the balance sheet when it is probable that future economic benefits will flow to the university and when the value of the asset can be measured reliably.

Intangible and tangible fixed assets
The IT University recognises acquisitions with a total acquisition cost of DKK 100,000 or more if the acquisition is intended for permanent ownership and use.

The acquisition cost includes the purchase price and costs directly related to transport as well as external assistance for installation and preparation.

Intangible and tangible assets are measured at purchase price less accumulated depreciation. Depreciation is allocated on a straight-line basis over the expected life of the asset, which is set at:

Software	5 years
Leasehold improvements	10 years
Installations	20 years
IT equipment	3 years
Other equipment	5 years

The IT University does not aggregate assets.

The carrying amount of intangible and tangible assets is subject to an annual test for indications of impairment. Impairments are recognised as write-downs in the income statement.

Fixed asset investments
Entities in which the university holds the majority of the votes or in some other way exercises control are considered subsidiaries.

Investments in subsidiaries are measured at cost price at the time of acquisition.

The carrying amount of financial assets is subject to an annual test for indications of impairment. Impairments are recognised as write-downs in the income statement.

Receivables
Receivables are measured at nominal value less write-down for bad debt losses.

The IT University recognises incurred costs relating to externally funded activities in progress, where the fundings have not yet been paid in, as receivables from externally funded activities.

Write-downs to offset losses are calculated on the basis of an individual assessment of the individual receivables. In addition, the IT University recognises a general provision to meet unforeseen losses relating to externally funded activities in progress.

Prepayments and accrued income under receivables comprise prepaid expenses relating to activities to be incurred in subsequent financial years.

Securities
The IT University's securities portfolio comprises investment fund shares, which are recognised in accordance with the individual securities' official exchange rates on the balance sheet date, including the associated interest rate.

IT UNIVERSITY OF COPENHAGEN / ANNUAL REPORT 2021

Liabilities

Liabilities are recognised in the balance sheet when an outflow of economic benefits is probable and when the liability can be reliably measured.

Provisions

Provisions are recognised when the university, as a result of a previous event, has a legal or constructive obligation where it is probable that the obligation will be settled.

Short-term liabilities

Liabilities other than provisions are measured at amortised cost, which is in all material respects equivalent to the nominal value.

Grants paid in respect of externally funded activities, where the costs have not yet been incurred, are recognised under prepaid restricted grants.

The holiday pay obligation consists of earned special holiday days from the previous financial year, but which have not yet been taken, special holiday days earned in the current financial year as well as earned but not taken holiday in accordance with the new Holidays Act with simultaneous holiday. In addition, the special holiday allowance for the current financial year that has not been paid out is included, as well as frozen holiday allowance that has not been transferred to the Holiday Allowance Fund.

Prepayments and accrued income under short-term liabilities comprise prepaid income relating to activities to be incurred in the following financial year.

Contractual liabilities and contingent liabilities

Under contractual obligations and contingent liabilities, the carrying amount of lease agreements entered into as well as pending cases raised against the university are disclosed, which it is not considered probable that the university will settle.

Cash flow statement

The cash flow statement shows cash flows for the year divided into operating, investing and financing activities, as well as how these cash flows have affected the year's cash holdings.

The cash flow statement is prepared according to the indirect method and is based on the profit for the year.

3.2 INCOME STATEMENT 1 JANUARY – 31 DECEMBER

Note		2021 DKK '000	2020 DKK '000
1	Government grants	308,233	289,809
2	Other grants	56,961	38,625
3	Sale of goods and services	6,869	7,906
4	Other income	9,176	6,311
	Total operating income	**381,239**	**342,652**
	Personnel costs	259,589	236,623
	Rent	38,308	35,033
	Depreciations	1,622	1,348
	Other operating costs	77,456	75,043
5	**Total operating costs**	**376,976**	**348,047**
	PROFIT BEFORE FINANCIALS	**4,264**	**-5,395**
6	Financial income	2,295	2,389
7	Financial costs	273	325
	Total financial income and costs	**2,022**	**2,064**
	PROFITT/LOSS FOR THE YEAR	**6,286**	**-3,331**

DISTRIBUTION OF PROFIT

	2021 DKK '000	2020 DKK '000
Predisposed to retained earnings	6,286	-3,331
Total distribution of profit	**6,286**	**-3,331**

3.3 BALANCE SHEET AT 31 DECEMBER

ASSETS AT 31 DECEMBER

Note		2021 DKK '000	2020 DKK '000
	Software	73	520
8	**Total intangible fixed assets**	**73**	**520**
	Installations	1,771	0
	Leasehold improvements	6,671	4,483
	IT equipment	1,004	575
	Other equipment	1,177	1,217
9	**Total tangible fixed assets**	**10,622**	**6,275**
	Investments in subsidiaries	3,500	3,500
10	**Total fixed asset investments**	**3,500**	**3,500**
	TOTAL FIXED ASSETS	**14,196**	**10,295**
11	Deposits	7,740	7,740
12	Receivables from sales of goods and services	7,314	7,816
13	Receivables from ongoing externally funded activities	7,811	2,052
14	Other receivables	2,977	3,244
	Interim balance with the Ministry of Higher Education and Science	0	159
	Other prepaid costs	2,495	717
	Total receivables	**28,338**	**21,728**
15	**Securities**	**118,758**	**116,811**
16	**Cash holdings**	**64,627**	**88,024**
	TOTAL CURRENT ASSETS	**211,723**	**226,563**
	TOTAL ASSETS	**225,919**	**236,858**

EQUITY AND LIABILITIES AT 31 DECEMBER

Note		2021 DKK '000	2020 DKK '000
	Initial capital 1 January 2005	16,454	16,454
	Retained earnings	69,998	63,712
17	**Total equity and liabilities**	**86,451**	**80,166**
18	**Total provisions**	**1,342**	**1,833**
	Salary due	4,762	3,094
	Holiday allowance *	35,201	33,686
	Prepaid restricted grants	47,170	63,119
	Interim balance with the Ministry of Higher Education and Science	28,870	29,050
	Other prepaid income	328	439
	Suppliers of goods and services	16,337	20,609
19	Other short-term liabilities	5,458	4,862
	Total short-term liabilities	**138,126**	**154,859**
	TOTAL EQUITY AND LIABILITIES	**225,919**	**236,858**

* In 2021, frozen holiday allowance amounts to DKK 18,587 thousand of the total holiday pay allowance and in 2020 DKK 18,400 thousand.

20	Collateral
21	Contractual liabilities
22	Contingent assets and liabilities

3.4 CASH FLOW STATEMENT 1 JANUARY TO 31 DECEMBER

Note	2021 DKK '000	2020 DKK '000
Profit/loss for the year	**6,286**	**-3,331**
Profit and loss by sale of fixed assets	1,622	1,348
Reversal of items with no cash flow effect	**1,622**	**1,348**
Change in receivables excl. externally funded activity in progress	-851	-4,227
Change in ongoing externally funded activities	-5,759	3,699
Change in provisions	-491	-2,446
Change in short-term liabilities excl. prepaid restricted grants	-785	6,951
Change in prepaid restricted grants	-15,949	44,963
Change in working capital	**-23,834**	**48,940**
CASH FLOWS FROM OPERATING ACTIVITIES	**-15,927**	**46,957**
Purchase and sale of intangible assets	0	701
Purchase and sale of tangible assets	-5,522	-3,766
Cash flows from investing activities	**-5,522**	**-3,065**
CASH FLOW OF THE YEAR	**-21,449**	**43,891**
Cash holdings incl. securities in total per 1 January	204,835	160,944
CASH HOLDINGS INCL. SECURITIES IN TOTAL PER 31 DECEMBER	**183,386**	**204,835**

3.5 NOTES TO THE FINANCIAL STATEMENTS

1. GOVERNMENT GRANTS

	2021 DKK '000	2020 DKK '000
Education grants, full-time education	175,894	168,744
Education grants, part-time education	1,463	1,668
Grants for other purposes *	-13,937	-14,701
Grants for research and development	144,814	134,099
Total government grants	**308,233**	**289,809**

Grants for other purposes include a permanent grant reduction regarding the SEA rent reform with effect as of 1 January 2020. The grant reduction in 2021 amounts to DKK 16,417 thousand and DKK 16,300 thousand in 2020.

2. OTHER GRANTS

	2021 DKK '000	2020 DKK '000
Research funding from Danish public sources	26,080	16,142
Research funding from Danish private sources	15,792	13,326
Research funding from EU	6,498	6,156
Research funding from foreign sources	4,016	2,824
Grants for other activities	4,397	0
External requester payment	178	176
Other grants in total	**56,961**	**38,625**

3. SALE OF GOODS AND SERVICES

	2021 DKK '000	2020 DKK '000
Other sale of goods and services	6,869	7,906
Sale of goods and services in total	**6,869**	**7,906**

4. OTHER INCOME

	2021 DKK '000	2020 DKK '000
Tuition fees, full-time education	550	350
Tuition fees, part-time education	5,724	5,254
Rental of premises and equipment	1,765	648
Other income	1,137	59
Other income in total	**9,176**	**6,311**

5. OPERATING COSTS

	2021 DKK '000	2020 * DKK '000
Education	125,137	-
Research	113,226	-
Dissemination and exchange of knowledge	18,789	-
General common costs	45,473	-
Buildings and building operations	74,351	-
Total operating costs	**376,976**	**348,047**

* In previous financial years, the IT University has distributed costs by purpose according to "Vejledning om hovedområde- og formålsfordeling af universiteternes omkostninger" (Guidelines on classification by main area and purpose of the costs of the universities) issued by the Ministry of Higher Education and Science in December 2012. The distribution of costs by purpose in 2021 cannot be compared with previous years due to the new distribution methods. Therefore, comparative figures for 2020 are not disclosed.

6. FINANCIAL INCOME

	2021 DKK '000	2020 DKK '000
Return on securities portfolio, profit	2,272	2,388
Other financial income	23	1
Total financial income	**2,295**	**2,389**

7. FINANCIAL COSTS

	2021 DKK '000	2020 DKK '000
Return on securities portfolio, loss	182	281
Other financial costs	91	44
Total financial costs	**273**	**325**

8. INTANGIBLE FIXED ASSETS

	Acquired software DKK '000	Total intangible assets DKK '000
Purchase price at 1 January	8,403	8,403
Additions during the year	0	0
Disposals during the year	-522	-522
Purchase price at 31 December	**7,881**	**7,881**
Accumulated depreciations at 1 January	7,883	7,883
Depreciations during the year	447	447
Reversed depreciations	-522	-522
Accumulated depreciations at 31 December	**7,808**	**7,808**
Book value at 31 December	**73**	**73**

9. TANGIBLE FIXED ASSETS

	Installations DKK '000	Leasehold improvements DKK '000	IT equipment DKK '000	Other equipment DKK '000	Total tangible fixed assets DKK '000
Purchase price at 1 January	0	5,300	4,416	1,425	11,141
Additions during the year	1,809	2,723	725	266	5,522
Disposals during the year	0	0	-2,193	0	-2,193
Purchase price at 31 December	**1,809**	**8,023**	**2,948**	**1,691**	**14,471**
Accumulated depreciations at 1 January	0	817	3,841	208	4,866
Depreciations during the year	38	535	296	306	1,175
Reversed depreciations	0	0	-2,193	0	-2,193
Accumulated depreciations at 31 December	**38**	**1,352**	**1,945**	**514**	**3,848**
Book value at 31 December	**1,771**	**6,671**	**1,004**	**1,177**	**10,622**

10. FIXED ASSET INVESTMENTS

	ITU Business Development A/S	Total fixed assets investment
	DKK '000	DKK '000
Purchase price at 1 January	5,000	5,000
Additions during the year	0	0
Disposals during the year	0	0
Purchase price at 31 December	**5,000**	5,000
Accumulated depreciations at 1 January	1,500	1,500
Depreciations during the year	0	0
Reversed depreciations	0	0
Accumulated depreciations at 31 December	**1,500**	1,500
Book value at 31 December	**3,500**	3,500

Investments in subsidiaries (DKK '000)	2021	2020
Contributed capital in the financial year	0	0
Accumulated contributed capital at 31 December	3,500	3,500
Book value of the ownership share	3,500	3,500
Income in the financial year	1,760	2,482
Costs in the financial year	2,003	3,295

The IT University has established the subsidiary ITU Business Development A/S (ITU BD) in accordance with LBK no. 580 of 1 June 2014 and has an ownership interest of 100 per cent. The IT University has contributed capital of DKK 5,000 thousand to ITU BD in 2014. In 2019, the value of the IT University's investment is written down to DKK 3,500 thousand.

11. DEPOSITS

	2021	2020
	DKK '000	DKK '000
Deposits regarding leases listed as current assets	7,730	7,730
Other deposits listed as current assets	10	10
Receivables from the sale of services in total	**7,740**	**7,740**

12. RECEIVABLES FROM SALES OF GOODS AND SERVICES

	2021	2020
	DKK '000	DKK '000
Receivables from sales of goods and services	7,314	7,816
Receivables from sales of goods and services in total	**7,314**	**7,816**

13. RECEIVABLES FROM ONGOING EXTERNALLY FUNDED ACTIVITIES

	2021 DKK '000	2020 DKK '000
Receivables from ongoing externally funded activities	10,430	3,974
Provision for losses on ongoing externally funded activities	2,619	1,922
Receivables from ongoing externally funded activities in total	**7,811**	**2,052**

14. OTHER RECEIVABLES

	2021 DKK '000	2020 DKK '000
Receivables, interim salaries and reimbursements	285	1,122
Other receivables	2,692	2,122
Other receivables in total	**2,977**	**3,244**

15. SECURITIES

	2021 DKK '000	2020 DKK '000
Securities	118,266	116,383
Deposited cash holdings	492	428
Securities portfolio in total	**118,758**	**116,811**

16. CASH HOLDINGS

	2021 DKK '000	2020 DKK '000
Cash holdings at bank	64,627	88,024
Cash holdings in total	**64,627**	**88,024**

17. EQUITY

	2021 DKK '000	2020 DKK '000
Initial capital by 1 January 2005	16,454	16,454
Retained earnings at 1 January	63,712	67,043
Retained earnings, this year	6,286	-3,331
Total equity	**86,451**	**80,166**

18. PROVISIONS

	2021 DKK '000	2020 DKK '000
Salary – tenure	1,342	1,338
Other provisions	0	495
Total provisions	**1,342**	**1,833**

19. OTHER SHORT-TERM LIABILITIES

	2021 DKK '000	2020 DKK '000
Salary due	3,466	3,063
Print payable, students	21	34
VAT payable	245	510
Deposits	1,438	987
Other payables	289	269
Total other short-dated payables	**5,458**	**4,862**

20. COLLATERAL
The IT University has not provided any mortgages or collateral.

21. CONTRACTUAL LIABILITIES
In May 2015, the IT University concluded a rent agreement with the Danish Building and Property Agency. Section 60(1) of the Danish Business Lease Act applies to the lessee's conditions. As a main rule, the lease can only be terminated in its entirety. The period of notice is six months for removal on the first day of a month. In December 2019, the IT University signed a rental agreement with DR Byen. The period of notice is six months for removal on the first day of a month. The lease can be terminated at the earliest April 2022 for removal October 2022.

22. CONTINGENT ASSETS AND LIABILITIES
For 52 co-funded PhD students of a total of 70 PhD students ultimo 2021, the IT University guarantees payment of the students' salaries for the 3-year or 4-year period in which their employment contracts are non-terminable by the university. The liability may become relevant if the payroll costs are not covered by companies or institutions with which education agreements have been concluded.

The IT University is comprised by the government self-insurance principle and has taken out liability insurance for members of the Board of Directors.

3.6 SPECIAL STATEMENTS

1. TYPES OF ACTIVITIES

	2021 (DKK '000)	2020 (DKK '000)	2019 (DKK '000)	2018 (DKK '000)
Ordinary activities				
Income	322,809	299,749	298,937	263,278
Costs	319,017	306,566	295,702	265,958
Profit	**3,792**	**-6,818**	**3,234**	**-2,681**
Grant funded research activities				
Income	47,770	35,628	33,908	27,252
Costs	47,770	35,628	33,909	27,252
Profit	**0**	**0**	**0**	**0**
Other grant funded activities				
Income	1,931	593	0	0
Costs	1,931	593	0	0
Profit	**0**	**0**	**0**	**0**
Commercial activities				
Income	8,728	6,681	7,690	8,372
Costs	8,256	5,259	4,442	6,241
Profit	**472**	**1,422**	**3,248**	**2,131**
Accumulated profit per 31 December	**21,283**	**20,811**	**19,389**	**16,141**

Supplementary note

The IT University's commercial activities comprise rental of premises, events, and courses etc.

The accumulated profit regarding commercial activities is based on the year 2007 as the first year of accrual, cf. letter of 15 December 2021 from the Danish Agency for Higher Education and Science with Guidance for the annual report template for educational institutions under the Ministry of Higher Education and Science.

In the guidelines for the 2021 annual report, the Danish Agency for Higher Education and Science has specified calculation methods for types of activities. Comparative figures for the period 2018-2020 have been corrected.

2. MANAGEMENT SALARIES

	2021 (DKK '000)	2020 (DKK '000)
Board of Directors		
Number of external board members	5	5
Board fee paid to chairman	131	130
Board fee paid to other external board members	247	260
Managers		
Number of managers, full-time equivalents	23.8	-
Management salaries incl. pension	22,068	-
Supplementary note		

The disclosure requirement for full-time equivalents for managers and salaries has been introduced as of Annual Report 2021. Therefore, comparative figures for 2020 have not been stated.

The Vice Chancellor of the IT University has resigned per 31 December 2021. Therefore, the IT University has recognised the expected severance pay as salary payable in the annual accounts 2021. The expected severance pay is not included in the management salaries incl. pension.

3. STUDENT POLITICAL ACTIVITIES

	2021 (DKK '000)	2020 (DKK '000)
Student political activities	684	664
Other student activities	0	0
Total	684	664

4. FREE UNIVERSITY PLACES AND SCHOLARSHIP FUNDS

	2021	2020
Government grants rate 3		
Number of students enrolled in full or partial free university places per 30 September	9	5
Number of recipients of scholarships in the period 1 January to 31 December	8	10
Government grants and consumption (DKK '000)		
Government grant from the Danish Agency for Higher Education and Science	1,553	1,494
Total amount paid as free university places	495	593
Total amount paid as scholarships	417	722
Profit	641	180
Accumulated profit per 31 December	2,639	1,998
Supplementary note		

The IT University only has free university places in government grants rate 3 and has not transferred profits regarding foreign payment students.

5. STAFF FULL-TIME EQUIVALENTS

	2021	2020
Staff (full-time equivalents) incl. employees on social terms	456	417

6. OTHER SPECIAL STATEMENTS

The IT University is not responsible for carrying out the secretariat function for scholarships and the like.

The IT University has not contributed funds to foundations whose main purpose is to establish dwellings close to universities.

The IT University does not incur costs for administration of foundations and associations, including commercial foundations and associations in accordance with section 11(1) of the Danish Act on the Commercial Activities and Co-operation with Foundations of Public Research Institutions.

3.7 KEY FINANCIAL FIGURES AND RATIOS

Income statement (DKK '000)	2021	2020	2019	2018	2017
Government grants	308,233	289,809	287,395	250,783	235,498
Other grants	56,961	38,625	36,287	30.046	24.350
Sale of goods and services	6,869	7,906	9,158	8.821	6.550
Other income	9,176	6,311	7,696	9.252	9.630
Total operating income	**381,239**	**342,652**	**340,535**	**298,902**	**276,029**
Personnel costs	259,589	236,623	210,367	191,892	177,654
Rent	38,308	35,033	39,052		
Depreciations	1,622	1,348	1,421	1,457	2,048
Other operating costs	77,456	75,043	83,213	106,102	101,679
Total operating costs	**376,976**	**348,047**	**334,053**	**299,451**	**281,381**
Profit before financial income and costs	**4,264**	**-5,395**	**6,482**	**-549**	**-5,352**
Profit	**6,286**	**-3,331**	**9,257**	**-1,981**	**-2,066**

Balance sheet (DKK '000) *	2021	2020	2019	2018	2017
Fixed assets	14,196	10,295	8,578	6,676	7,781
Balance total	225,750	236,858	190,721	177,481	172,713
Equity	86,451	80,166	83,497	74,240	76,221

* The IT University has no long term debt.

Economic key figures (per cent)	2021	2020	2019	2018	2017
Profit margin	1.6	-1.0	2.7	-0.7	-0.7
Liquidity ratio	205.9	187.0	242.9	228.5	233.5
Robustness ratio	38.3	33.8	43.8	41.8	44.1

Staff (full-time equivalents)	2021	2020	2019	2018	2017
Academic staff	222	192	171	160	150
Part-time academic staff	48	51	44	40	43
Technical and administrative staff	185	174	162	152	140
Total	**456**	**417**	**376**	**352**	**333**

Study activity – ordinary study programmes	2021	2020	2019	2018	2017
Number of full-time equivalents (including guest students)	1,867	1,702	1,582	1,445	1,357
Number of enrolled in BSc study programmes	396	433	364	341	333
Number of enrolled in MSc study programmes	550	535	507	517	498
Number of students enrolled in ordinary study programmes per 30 September	2,271	2,263	2,086	1,949	1,811
Number of BSc graduates	249	228	169	156	169
Number of MSc graduates	488	454	391	380	470

Study activity - part-time study programmes	2021	2020	2019	2018	2017
Number of full-time students equivalents obtained by part-time students	47	54	68	94	75

Study activity, income covered business	2021	2020	2019	2018	2017
Study activity, income covered business, turnover (DKK '000)	2,066	1,222	1,661	1,195	1,348

Internationalisation	2021	2020	2019	2018	2017
Number of outbound students (exchange students)	17	41	75	71	46
Number of inbound students (exchange students)	12	39	35	38	28
Number of foreign students on entire study programmes in Denmark	336	302	296	318	299

Research education	2021	2020	2019	2018	2017
Number of PhD students enrolled	70	61	54	50	52
Number of PhD students admitted during the year	25	22	20	13	15
Number of approved PhD theses for the year	12	12	10	13	11

Research and communication	2021	2020	2019	2018	2017
Number of research publications with BFI classification *	*	199	181	213	212
Number of patent applications	0	0	1	1	1
Number of patents issued	0	0	0	0	1
Number of inventions for which application for registration has been filed	0	1	1	0	4
Number of projects with enterprises	37	33	37	29	21
Number of external projects	102	100	95	87	71
Economic co-operation with business community (DKK´000)	19,019	15,668	15,094	10,322	5,788

Danish Agency for Higher Education and Science does not compile research publications with BFI classification after 2020. BFI is the abbreviation for bibliometric research indicator.

Building	2021	2020	2019	2018	2017
Total building area (gross area calculated in m^2)	32,618	32,618	23,352	23,352	23,352

4. REPORTING

THE STRATEGIC FRAMEWORK CONTRACT FOR 2018-2021

The Strategic Framework Contract is valid for 2018-2021 and includes six strategic targets:

1. Increasing the capacity of research-based education of technical IT professionals
2. Increasing the number of female technical IT professionals
3. Achieving a high learning outcome for all students
4. All graduates should achieve good career opportunities
5. Strengthening IT research within areas that reflects societal needs
6. Strengthening the IT subjects in primary schools and high schools by co-operation and exchange of knowledge.

In 2021, which is the last year of the contract period, the IT University assesses that all six strategic targets are achieved, cf. the table below:

Strategic target	Achieved	Not achieved
1	x	
2	x	
3	x	
4	x	
5	x	
6	x	

In relation to the first two targets, there have been large increases in the technical IT study programmes during the contract period in both the total number of admitted students and the number of admitted female students. The third target shows that the IT University's current students find that the quality of their study programmes and their learning outcome are high – although with a slightly declining trend in 2021. The IT University assesses that the students' changed study experience is related to the long periods of home and online studies during the COVID-19 lockdown of the IT University.

The fourth target shows that the unemployment rate among the IT University's MSc graduates has decreased significantly during the contract period, and that their assessment of the relevance of the study programmes has increased during the contract period – and that the assessment is still high in 2021.

In the research area, the IT University has more than doubled the number of researchers in both the research field information security and the research field data science during the contract period. In addition, research centers have been established within, among others, digitisation and information security. During the contract period, there has been a significant strengthening of research-based teaching.

Below, the IT University's progress and fulfillment of each of the six strategic targets in the period 2018-2021 are elaborated.

4.1 STRATEGIC TARGET 1

Strategic target 1:
Increasing the capacity of research-based education of technical IT professionals.
The IT University will, if the government grants in the future provides the opportunity herefore, increase the capacity of research-based education of technical IT specialists to meet the demand and support Denmark's digital growth.

In the period 2018-2021, there has been a major growth in the number of admitted technical IT students compared to the baseline in 2017, while the drop-out rate during the first study year has been fairly stable in the period compared to the baseline. On that basis it is the IT

University's assessment that the target has been achieved, as there has been a clear progress within this strategic target during the framework contract period.

The foundation for the increase in the capacity of research-based education of technical IT specialists was laid in 2018 with the increased base grants. These grants, as well as the temporary grants from the national STEM Pool starting in 2019 and the extra study places created in 2020 and 2021 as a result of COVID-19 grants, have meant a significant increase in the number of admitted BSc students.

For the technical BSc study programmes, the target of the IT University was to increase the number of admitted students during the period. This target was achieved, as in the years 2018-2021 there has been an average increase of 19 per cent admitted BSc students corresponding to a total of additional 156 admitted BSc students in the period 2018-2021:

- On the BSc study programme in Software Development a total of 81 additional students was admitted in the period 2018-2021. With 147 admitted students as the baseline in 2017, this corresponds to an average of 167 admitted students in each of the years 2018-2021.

- On the BSc study programme in Data Science a total of 75 additional students was admitted in the period 2018-2021. With 56 admitted students as the baseline in 2017, this corresponds to an average of 75 admitted students in each of the years 2018-2021.

For the technical MSc study programmes, in the years 2018-2021 there has been an average increase of 41 students, corresponding to an increase of 26 per cent. With 160 admitted students in 2017, this corresponds to an average of 201 admitted students in each of the years 2018-2021.

The increased allocation of base grants in 2018 as well as temporary STEM grants in 2020 and COVID-19 grants in 2020 and 2021 have thus in the contract period meant an increased admission of a total of 321 technical IT students at the IT University compared to the number admitted at baseline in 2017.

Throughout the period, it has been the IT University's target that there was a maximum drop-out rate of 20 per cent after the first year of study on the two technical BSc study programmes. This target has been reached, as the drop-out rates after the first year of study on the BSc study programme in Software Development in the contract period have been between 9 and 17 per cent, and the drop-out rates after the first year of study at the BSc study programme in Data Science have been between 12 and 19 per cent. On both BSc study programmes, there have been an increase in the drop-out rates after the first year of study of 7 percentage points in the last year of the contract period. This increase is considered by the IT University to be related to the long period of home and online studies during the COVID-19 lockdown of the IT University.

As a supportive activity, a significant effort has been made throughout the period aimed at high school students in order to increase interest in studying a technical IT study programme at the IT University.

4.2 STRATEGIC TARGET 2

Strategic target 2:
Increasing the number of female technical IT professionals to enhance the quality of society's digitalization.
The IT University will increase the proportion of female students and by becoming even better at retaining female students on the study programmes.

During the first three years of the contract period, there has been clear progress within this target. There was a major improvement in the indicator on retaining female students on the BSc study programme in Software Development and a slight increase in the indicator on the

proportion of admitted female students in the study programme. In the last year of the contract period, there is a major decrease in the indicator on retaining female students. In general, the IT University assesses that the target has been achieved, as this decrease, as in strategic target 1, is affected by the long period of home and online studies during the COVID-19 lockdown of the IT University.

During the contract period, the IT University has worked purposefully to increase the proportion of female students compared to the baseline of 22 per cent in 2017. Over the years, it has turned out to be quite difficult – despite a targeted effort – to increase the proportion of female students on the BSc study programme in Software Development. This was achieved in a single year in 2020, where the proportion of admitted female students reached 24 per cent, which is the highest proportion of female students since the study programme was established in 2007. During the other years the level was almost kept with a single exception in 2019, where the proportion of admitted female students was 17 per cent.

However, during the period the IT University has succeeded in reducing dropouts after the first year of study among female students on the BSc study programme in Software Development. The IT University's target of having a maximum dropout rate of 20 per cent was achieved throughout the period except in 2021. In 2018 and 2019, the dropout rate among female students was 13 per cent, while it was reduced to only 4 per cent in 2020. In 2021, the last COVID-19-affected year of the contract period, the dropout rate increased to 22 per cent.

As a supportive activity, significant efforts have been made throughout the period aimed at female high school students to increase interest in taking a technical IT study programme at the IT University.

4.3 STRATEGIC TARGET 3

Strategic target 3:
Achieving a high learning outcome for all students.
The IT University will strengthen the research coverage of certain study programmes and maintain a high degree of quality, seen with the students' eyes.

The IT University has made significant progress in this strategic target, as the research coverage has been strengthened during the contract period. With a total VIP/DVIP ratio for all study programmes in the range 4.7-5.5, the IT University in each of the years 2018-2021 has been well above both the 2017 baseline level of 3.5 and above the standard of a total ratio of 3.0 in the IT University's Quality Policy. In addition, the quality of the study programmes and the learning outcome of the teaching seen from the students' point of view are at the same high level as the 2016 baseline with minimal fluctuations. The IT University therefore assesses that the strategic target has been reached.

The individual study programmes have also been successful in securing research coverage. Throughout the period, most of the study programmes have been far above the Quality Policy's target of a VIP/DVIP ratio of at least 2.4. In 2018, a single study programme, the BSc study programme in Software Development, could not live up to the Quality Standard, and the focus was subsequently on increasing the study programmes research staffing. In both 2019 and 2020, all study programmes lived up to the quality target. In 2021, a single study programme, the Master's study programme in IT Management, has not quite reached the target. The study programme, which is offered in Danish, was revised in 2021, and work is done to recruit and retain more Danish-speaking researchers in order to increase the VIP/DVIP ratio.

It has almost been achieved to maintain an experienced high degree of quality and learning outcome of teaching seen from the students' points of view. The national education evaluation, Education ZOOM, was carried out in 2018, 2020 and 2021. The indicator "The quality of my study programme is overall high" has been maintained at the same – or higher – level than the 2016 baseline of 4.1 throughout the contract period. At the same time, the IT University's target of a score of at least 4.0 on a scale from 1-5 has been achieved all the years. The indicator "My learning output is high" has been on level with the 2016 baseline and lived up to

the IT University's target in 2018 and 2020, but not quite in 2021, where the score has dropped to 3.8.

For both the Education ZOOM indicators, there are a slight decrease in 2021. The IT University estimates that students' experience of declining learning outcome and quality may be affected by the long period of home and online studies during the COVID-19 lockdown of the IT University and its influence on the study and teaching environment.

In 2018-2021, the IT University has initiated a number of activities that are considered to have contributed to supporting a high learning outcome and a high quality of education. Among other things, it can be emphasised that the Study Labs arrangement has been expanded, so that all BSc and MSc students are now offered targeted assistance in addition to teaching. In addition, laboratory-based learning has been strengthened and there have been experimented with new forms of teaching.

4.4 STRATEGIC TARGET 4

Strategic target 4:
All graduates should achieve good career opportunities.
The IT University will reduce the unemployment among graduates on those MSc study programmes that don't already have low unemployment. This will be done through revision of the study programmes in close dialogue with the employers.

The IT University assesses that the target has been reached during the contract period. The IT University has made significant progress in the indicators of this target with a declining average graduate unemployment in 2018-2021, an improved assessment of the study programmes usability in the labour market from a graduate perspective and a strengthened dialogue with employers.

The average of the last three years' MSc unemployment rate calculated 4-7 quarters after graduation has decreased from the baseline in 2017 at 11.2 per cent to 7.8 per cent in 2021. At the same time, it is worth noting that the IT University's MSc unemployment rate throughout the period has been well below the national average. Where the national average for unemployment has decreased by 10 per cent in the period from 12.5 per cent at baseline in 2017 to 11.3 per cent in 2021, the unemployment rate at the IT University has decreased by as much as 30 per cent.

The national education evaluation, Education ZOOM, where graduates assess whether "My study programme has equipped me for my current or most recent job", has been carried out three times during the contract period. In the first part of the contract period, there was a slight decrease in this indicator from the score of 3.9 on a scale from 1-5 at baseline in 2016 to 3.7 in 2018. In the last part of the contract period, the score has improved to 4.1 in both 2020 and 2021, just as the IT University's target for the indicator of 4.0 has been achieved in this part of the period.

The indicator on the relevance of the study programmes seen from an employers' perspective has been prioritised by the IT University through a close dialogue with the employers. The dialogue has not least taken place under the auspices of the IT University's employers' panels, which each year during the contract period have evaluated and approved labour market ticket of each study programme. The recommendations of the employers' panels have contributed to several study programmes being revised during the contract period. In the last half of the contract period, there has also been a strengthening of the close cooperation with the employers' panels in connection with the revision of the labour market ticket itself.

In addition, the IT University as a supportive activity has carried out a number of career-relevant activities and events and has had an increased focus on strengthening communication to both employers and students about what competencies graduates from the IT University achieve and what jobs they can handle. It is the IT University's assessment that these efforts have contributed to promoting the graduates' career opportunities and reducing their unemployment.

4.5 STRATEGIC TARGET 5

Strategic target 5:
Strengthening IT research within areas that reflects societal needs.
The IT University intends to educate and recruit more researchers in the field of digitalisation and, if the prerequisite for strategic target 1 is met also in the field of information security and data science.

The IT University has made significant progress within this target in the period 2018-2021, as a significant build-up of research environments with permanent employees has taken place in both the field of data science (computational statistics, machine learning, natural language processing, network science), information security (Center for Information Security and Trust, CISAT) and digitisation (Research Center for Government IT). The IT University therefore assesses that the target has been achieved.

The progress has been made through new appointments, in the employment of affiliated assistant professors as associate professors and in the employment of affiliated associate professors as professors. In addition, significant external grants have been received for all three research fields, which has enabled the employment of PhD students and postdocs.

The IT University's major strengthening of the research environment within the field of data science has taken place through the new appointment of four assistant professors and eight associate professors during the period, as well as the employment of affiliated associate professors as full professors, so the staff today is 13 researchers, which is more than doubling the number of employees since the 2017 baseline of five researchers. Significant external research funding has also been raised from the Independent Research Fund Denmark, the VILLUM FONDEN, the Carlsberg Foundation, Team Denmark, the Aage and Johanne Louis-Hansen Foundation and others. Furthermore, the research fields have contributed to the establishment of the national pioneer center for AI and the Danish Data Science Academy. During the contract period, PhD students and postdocs have also been recruited.

During the period, the IT University has strengthened the research environment within the field of information security. This means that the IT University's Center for Information Security and Trust now employs two full professors, four associate professors and two assistant professors, a total of eight researchers at at least assistant professor level, which is more than doubling the number of researchers since baseline in 2017, where there were three researchers.

In the first part of the contract period, the IT University established a Research Center for Government IT in collaboration with the Agency for Digitisation. Short courses for public managers have subsequently been developed, but as these short courses have not yet been carried out, there has not been the desired progress within this part of the indicator. In the last part of the contract period, work has instead been done on a long-term strengthening of the Research Center for Government IT, by obtaining a grant of DKK 31 million in the form of a Villum Kann Rasmussen professorship. This allows research in digitisation and large public IT projects to be continued at an internationally leading level.

A crucial prerequisite for being able to increase the staffing of the research environments has been the strengthening of the IT University's base grants from the beginning of the contract period. Strengthened dialogue with several large private foundations and companies on research projects and collaborations in the last part of the contract period has also led to increased education of researchers and research staffing.

Generally, the IT University assesses that the target of strengthening the IT research in areas that reflect societal needs has been fully achieved. In the area of digitisation, target achievement has taken place in a more long-term way than planned in the indicators of the target.

4.6 STRATEGIC TARGET 6

Strategic target 6:
Strengthening the IT subjects in primary schools and high schools by co-operation and exchange of knowledge.
During the term of the contract, the IT University will teach high school teachers and provide academic input for strengthening IT subjects in primary schools and in high schools.

Overall, the IT University assesses that the target has been achieved, as within this target there has been a significant improvement during the contract period. In addition to having participated in the teaching of high school teachers, the IT University has also entered into a collaboration on a new Master's study programme in Informatics Teaching for high school teachers. In addition, the IT University has been active in capacity building in relation to the subject of Technology Literacy in the primary school and has established the Center for Computing Education Research.

In 2018 and 2019, the IT University, in collaboration with It-vest, offered a further education course, which was completed by a total of approximately 70 high school teachers. The further education course was not carried out in 2020 and 2021, which means that there has been a decrease in the target indicators in the last two years. On the other hand, from 2020, the IT University has contributed to the establishment of the new Master's study programme in Informatics Teaching, which is anchored at Aarhus University and specifically aimed at education with a view to informatics teaching in the high school.

Throughout the contract period, the IT University has been an active partner in the collaboration between university colleges and universities on capacity building in relation to Technology Literacy in primary schools. In order to achieve a general strengthening of research and development of IT teaching, in 2020 the IT University also built a new research center within the target area, the Center for Computing Education Research. This new research center is researching in teaching in IT and computer science at university, high school and primary school level, and also broadly in teaching IT and computer science for target groups who do not have to be IT professionals, software developers, etc.

The focus of this target has changed significantly during the contract period from having indicators on carrying out and evaluating of a further education course for high school teachers to participating in the establishment of an entire Master's study programme in Informatics Teaching and building a completely new research center for IT teaching. The completely new possibilities to be achieved by these changes also in the future are the reason why the IT University assesses that there has been a major improvement within this target.

APPENDIXES

APPENDIX 1: MANAGEMENT STRUCTURE OF THE IT UNIVERSITY 31 DECEMBER

The IT University is governed by a Board of Directors and an Executive Management.

The Board of Directors
The Board of Directors of the IT University includes a chairman, a deputy chairman and seven members. The chairman, deputy chairman and three members are external members, one member is elected by and among the academic staff at the IT University, one member is elected by and among the technical/administrative staff at the IT University, and two members are elected by and among the students at the IT University.

The Board of Directors is the highest authority of the IT University. The Board of Directors protects the interests of the IT University in its role as an educational and research institution and establishes guidelines of its organisation, long-term activities and development.

Board meetings are public. However, cases which fall within the statutory provisions on secrecy in public administration, all cases related to persons and cases which include information on contract negotiations with private parties or similar negotiations with public partners are handled in confidence.

Vice Chancellor
The Vice Chancellor answers to the Board of Directors on all matters and is responsible for the day-to-day management of the IT University within the framework stipulated by the Board of Directors. This right of management includes all staff employed by the IT University.

The Vice Chancellor must ensure that the IT University acts in accordance with the legislation and regulations in force from time to time and is obliged to carry out all other actions, which are required in order to ensure that the IT University is managed in a good and proper manner.

Pro-rector
The Pro-rector supplements the Vice Chancellor in all types of tasks carried out by the Vice Chancellor.

University Director
The University Director is responsible for ensuring that the entire administration supports research and education to the widest possible extent. The University Director is accountable to the Vice Chancellor for the observance of the legislation in force in the administrative area and for ensuring cohesion between the administrative processes across the administrative departments.

The University Director is in charge of all large inter-disciplinary projects of the administrative departments and represents the administration in relation to the external world.

Executive Management
The Executive Management includes the Vice Chancellor, the Prorector and the University Director. The Executive Management is responsible for the preparation of the strategies of the IT University and the preparation and negotiation of the Development Contract with Ministry of Higher Education and Science.

The Executive Management is responsible for ensuring that the development of the IT University is supported optimally within the financial framework provided by the Board of Directors. The work of the Executive Management results in cohesion between research, education and administration. In its day-to-day work, the Executive Management works on the

promotion of the three core values of the IT University: Trend setting, responsibility and openness, throughout the organisation.

Academic Council

The Vice Chancellor appoints an Academic Council. The Academic Council includes a chairman and four members and chooses its own chairman among the members of the council. Two members are elected by and among the academic staff at the IT University, and two members are elected by and among the students at the IT University.

The Academic Council answers to the Vice Chancellor in the areas of central strategic research and education and plans the exchange of know-how, awards the degrees PhD and doctorate and may issue statements on all academic matters of material importance to the activities, etc., of the IT University.

Study Committee

The Vice Chancellor appoints one or more study committees, including members in identical numbers of academic staff (VIP) and students. Each study committee appoints a chairman among its VIP members and a deputy chairman among its student members. The chairman and the deputy chairman are approved by the Vice Chancellor.

The study committee carries out planning, implementation and development of courses and tuition, including quality assurance and quality development of courses and tuition, preparation of draft curricula and amendments to these and approval of plans for preparation of courses and tests, etc.

PhD Council

The Vice Chancellor appoints a PhD Council, including members in identical numbers of science staff (VIP) and students. The chairman and the deputy chairman are appointed by the Vice Chancellor on recommendation of the PhD Committee.

The PhD Council approves PhD courses, issues statements on the evaluation of the PhD programme, and provides guidelines to the Head of the PhD Programme and approves applications for merit and exemption, etc.

Heads of Department

The Heads of Department are appointed and dismissed by the Vice Chancellor. The Head of each Department is responsible for the day-to-day management of the department, including the planning and allocation of tasks. The Head of Department may request staff to carry out specific tasks. When academic staff is not occupied with such tasks, they carry out independent research within the strategic framework of the IT University.

A Head of Department ensures quality and cohesion in research and education and must include the Study Committee and the Head of studies in its evaluation of education and tuition.

Dean of Education

The Dean of Education is employed by the Vice Chancellor. The Dean of Education has the overall responsibility for all the IT University's educational activities, their organisation, implementation, quality assurance and development. In addition, the Dean of Education is responsible for leading the renewal of teaching and educational activities, including the development of new study programmes, and the management of the organisational changes that are needed to achieve targets and meet quality standards.

Cooperation and Safety Committees

The safety and cooperation organisation of the IT University consists of a Main Co-operation and Safety Board (H-SiSu) and two subcommittees: the Administrative Co-operation and Safety Board (A-SiSu), which covers the administrative section, and the Research Cooperation and Safety Board (F-SiSu), which covers the department, plus two safety groups in each sub-committee.

In general, subjects related to members of staff are handled by H-SiSu, including policies, strategies, workplace assessments (APV), staff satisfaction evaluations (MTU) and drafts for staff development meetings (MUS). Subjects relevant to administration or research only are handled by A-SiSu and F-SiSu, respectively. As a rule, subjects relating to health and safety at work are handled by A-SiSu and F-SiSu.

Close cooperation between the "SiSu"s are presupposed. Discussion of topics may be delegated by H-SiSu to A-SiSu or F-SiSu, respectively, and topics which have been discussed in A-SiSu and F-SiSu may be handled by H-SiSu if this is considered necessary.

APPENDIX 2: MEMBERS OF THE EMPLOYERS´ PANELS OF THE IT UNIVERSITY

EXECUTIVE-LEVEL EMPLOYERS´ PANEL:

Tine Thorn (chairman)
IT Udviklingschef, AP Pension

Michael Aagaard Biermann
CIO, Ørsted

Rikke Hvilshøj
CEO, Danish IT Society

Anders Peter Kierbye Johansen
Global R&D HR Director, Unity

Mads Kjøller Damkjær
Managing Partner, Tomorrow projects

Signe Caspersen
Vicedirektør, Økonomistyrelsen

Gert Sylvest
Co-founder, VP of Network Products, Tradeshift

Malene Højbjerre
Vice President, Biostatistics 1, Novo Nordisk

BACHELOR IN SOFTWARE DEVELOPMENT (SWU), BACHELOR IN DATA SCIENCE (DS), CAND.IT., SOFTWARE DESIGN (SD), CAND.SCIENT. COMPUTER SCIENCE (CS) AND CAND.SCIENT. DATA SCIENCE:

Christian Bjerre Nielsen (chairman)
Chief Product Officer, uQualio ApS

Casper Hovard
Senior Engagement Manager, KSP Nordic

Niels Hallenberg
Director, Architect Manager, SimCorp

Morten Zohnesen
Managing Architect, Netcompany

Bodil Biering
Independent Consultant

Kaare Brandt Petersen
Director of Learning Analytics, Laerdal Copenhagen

Søren Ilsøe
CEO, Jayway by Devoteam

Mikkel Muhldorff Sigurd
Optimization Manager, Maersk Line

Mille Østerlund
Chef for Civil rådgivning, CFCS – Center for Cybersikkerhed

Galina Ianchina
Vicedirektør for IT, Roskilde Universitet

Jane Eriksson Dahl
Head of IT-development, Domstolsstyrelsen

Maiken Lykke
Country Manager, Sopra Steria

Massimo Guilio Caterino
Lead Software Architect, Otion Medical

BACHELOR IN DIGITAL DESIGN AND INTERACTIVE TECHNOLOGIES (DDIT) AND CAND. IT., DIGITAL DESIGN AND INTERACTIVE TECHNOLOGIES (DDIT):

Rie Scheuermann Christensen (chairman)
Head of UX, Leo Innovation Lab

Nanna Engberg
Partner and User Experience Director, Manyone

Britt Rifbjerg Hertsdahl
Head of Large Corporates Digital, Nordea

Michael Harboe
Strategic Advisor and CEO, Virsabi

Jens Christiansen
Lead UX Designer, Designit

Sarah Kirkeby
Kontorchef, Digitaliseringsstyrelsen

Brian Ravn
People Manager – UX & Product Solutions, R&D Software, FOSS

Cecilie Dannisøe
User Experience Director, 1508

CAND.IT., GAMES (GAMES):

Astrid Refstrup (chairman)
CEO, Tripple Topping

Adam Mechtley
Lead Software Developer, Unity Technologies

Simon Jon Andreasen
Head, DADIU

Jonathan Bonillas
Lead User Researcher, Nordisk Film

Marina Surdu
Talent Acquisition Specialist, IO Interactive

Hannah Nicklin
CEO, Die Gute Fabrik

Christos Iosifidis
VP of Product Management, Vivino

Kelly Griffin
HR, Tactile

Anders Tankred Holm
Sr Technical Lead, LEGO Games

BACHELOR IN GLOBAL BUSINESS INFORMATIC (GBI) AND CAND.IT., DIGITAL INNOVATION AND MANAGEMENT (DIM):

Kirsten Nielsen (chairman)
Talent Pipeline Management-Programme Manager, Nordea Markets, Nordea

Tanja Danner
Strategic Advisor, STAYRELEVANT-IT

Simon Kiilerich Vedel
Director, Zero North

Nicolai Meelby
Underdirektør, eBusiness, Topdanmark

Jan Struwe Poulsen
Dep. Head of Office, KL

Joacim Jeppesen
Chief Growth Officer, Valtech

Janus Sandsgaard
Fagchef, Digitalisering, Dansk Erhverv

Nina Husfeldt Clasen
Kontorchef, Digitaliseringsstyrelsen

MASTER IN IT MANAGEMENT (ILM):

Ghita Thiesen (chairman)
Kontorchef, KL

Martin Jensen Buch
Chefkonsulent, IT-Branchen

Erik Møberg
Director, Rambøll Management Consulting

Stig Lundbech
Direktør, Koncern IT, Københavns Kommune

Lars Hagerup
IT-direktør/Chef for Klinisk IT, Odense Universitetshospital (OUH)

Pernille Juel Sefort
HR-direktør, Naviair

Lisbeth Nielsen
Direktør, Sundhedsdatastyrelsen

IT UNIVERSITY OF COPENHAGEN / ANNUAL REPORT 2021

APPENDIX 3: WHISTLEBLOWER SCHEME AT THE IT UNIVERSITY

Based on EU directive 2019/197 of 23 October 2019, the IT University has established an internal whistleblower scheme. The IT University has chosen to make use of external assistance for the whistleblower scheme from Damkjær Lauritzen Advokatfirma I/S. Going forward, the assistance consists of receiving / screening of reports and specific interpretation, while the IT University's lawyers in the Management Secretariat have been appointed as an internal whistleblower unit and thus the internal unit that receives and initiates investigations and more at the IT University.