

Strategy Plan
Department of Digitalization
Copenhagen Business School

Valid 1 January, 2019

This is the Department of Digitalization's strategy plan. It covers 2016 – 2020. This update - late in the strategy period - is due to the department changing its name from Department of IT Management to Department of Digitalization in 2017 and also a reflection of the fast pace by which digitalization is transforming businesses and the economy and hence also research and teaching in digitalization at university level.

Copenhagen Business School (CBS) is one of the largest business schools in Europe. Given its size and broad scope it is truly a business university. The digitalization department is embedded in the fantastic teaching and research environments that constitute CBS. CBS' strategy is Business in Society (BiS) and the DIGI strategy is aligned with the direction set in the general strategy. DIGI contributes to BiS platforms and World Class Research Environments whenever possible and relevant. DIGI actively seeks collaboration and establishes relationships with other CBS departments for example through friendship meetings and engagement in cross-departmental teaching and research.

The core of DIGI's strategy is centered around the belief that individual researchers know themselves how best to spend their time and resources on a daily basis and also what immediate goals to pursue. The DIGI department strategy is consequently to create a context where researchers can accomplish their potential in a supportive and conducive environment with a set of common values, aspirations and directions. This can only be achieved by building a work environment – where the best academics thrive – which is founded on mutual trust and respect.

Our DIGI Values:

- Scholarly work with enduring consequences
- An affirmative work environment
- Diversity and pluralism
- Collective action and collaboration
- Workplace interaction and citizenship

Our mission statement remains:

Co-creating knowledge with enduring consequences through the study of digital interrelationships among people, data and technology

Our aspirations are:

- 1) Publish our results in leading journals

- 2) Organize research around emergent themes
- 3) Strive for engaged scholarship and external funding
- 4) Learning
- 5) Nurturing our doctoral education
- 6) Focus on Technology, data and People
- 7) Attract the best scholars
- 8) Diversity and Equality
- 9) Benchmark against our peers for comparison and assessment

1 Publish our results in leading journals

The Association of Information Systems¹ (AIS) is the core research community of the department of digitalization. The Senior Scholars of AIS have nominated 8 journals² as the top journals for our discipline. The department of digitalization currently ranks first in Europe and number 10 in the world when it comes to publishing articles in Bo8 over the past three years.

3-year period	Europe	World Wide	# articles
2018 – 2016	1	10	21
2017 – 2015	1	15	15
2016 – 2014	1	13	17
2015 – 2013	3	13	16
2014 – 2012	4	31	11

Table 1: Rankings of Schools in Bo8 journals³ since 2012

The department continuously monitors our research output and impact with other core AIS departments. See appendix A and B for an overview of our ranking among peers in Europe and the world.

The AIS community is inclusive and open to all current research of the department. The premier conferences are the European Conference on Information Systems (ECIS) and the International Conference on Information Systems (ICIS) and other related AIS conferences. Other communities are also relevant e.g. Human Computer Interaction (HCI), e-government, learning sciences, IEEE, and ACM that also host relevant conferences. The Academy of Management (AoM) is also relevant both in terms of conferences and associated journals that appear on the FT50⁴ and 4* and 4 on the AJG lists⁵ insofar the publications are related to our mission statement.

¹ <https://aisnet.org/>

² Bo8 Journals: EJIS, ISJ, ISR, JAIS, JMIS, MISQ, JSIS, JIT, source: <https://aisnet.org/page/SeniorScholarBasket> MISQ: FT50, AJG 4* & UTD. ISR: FT50, AJG 4* & UTD. JMIS: FT50 & AJG 4. JAIS: AJG 4. EJIS, ISJ, JSIS & JIT: AJG 3

³ <https://www.aisresearchrankings.org/>

⁴ <https://www.ft.com/content/3405a512-5cbb-11e1-8f1f-00144feabdc0>

⁵ <https://charteredabs.org/academic-journal-guide-2018/>

DIGI faculty are responsible for publishing their research in journals that are the most reputable and yield a high personal h-index. To maintain high visibility and impact of our research, DIGI tenured faculty members are measured by their two best publications over a fixed five-year period (2011-2015 & 2016-2020). This does of course not mean postponing performance reviews or delaying assessments, which are performed continuously but rather provide the possibility to set long-term goals since many research aspirations cannot be achieved in the short time periods but only through long-term dedication and hard enduring work. A five-year perspective also allows the tenured faculty to modify research direction and undertake project or program management, apply for external funding or author a book. The limit of two publications increases the ambition level while also allowing for risk taking. It does not mean that tenured staff is expected to publish only two pieces of scholarly work at the end of the five-year period. Instead, during the five years, many manuscripts are prepared and submitted in an ongoing process. With the low acceptance rate it must be expected that some manuscripts that are prepared and submitted will end up being published in less prominent journals or not published at all. It is expected that one of the two is published in the Bo8 and one in the research niche on BFI level 2. Each researcher decides his or her own research niche where they feel particular comfortable. Colleagues that do not manage to meet the publication expectation of the department enter into a HoD supported research process until they are back on track.

A third contribution is expected with a practice oriented focus. This can take several forms. For example, an article in MISQE, CACM, HBR, or SMR or it can be the publication of teaching cases, video or popular books or e-publications. The criterion is that the result has to reach a large number of professionals and make an impact. This is to support and legitimize the proper allocation of time to such activities.

2 Organize research around emergent themes

DIGI takes advantage of its size and co-location in the same building to organize our research to create synergy effects. Therefore we organize our work to create opportunities for collaboration while accommodating for the fast moving pace and radical innovation that characterizes the digital field.

Our way of achieving this, is to organize research around themes rather than traditional research groups or research disciplines. Themes are emergent, topical, popular, inter-disciplinary and dynamic in nature. They are usually active for 3 – 7 years and then they transform into other themes or dissolve altogether. Themes emerge from bottom up activities where colleagues find that they share a common excitement about a new digital phenomenon. In order to initiate a theme, three or more tenured staff members must declare that they dedicate a substantial part of their research time to the theme.

Current research themes

- Cashless Society
- IT challenges in Mergers and Acquisitions
- Big Social Data Analysis
- Internet of Things

- Cloud Business
- Sharing Economy
- Digital Transformation of Work
- Blockchain
- Sports Digitalization

Theme participants are expected to meet regularly for research discussions, to attract visitors and apply for external funding from national and international sources. It is also expected that research themes undertake thesis supervision and offer electives. However not everything is a theme. It is quite common that individual research projects will not acquire the status of a department theme but are accommodated anyway as individual research interests.

For the disciplinary development of researchers, it is furthermore natural for researchers - that feel they belong to the same research area - to meet and discuss central research questions and other issues of common interest like joint publications, conference organization, editorial appointments etc.

3 Strive for engaged scholarship and external funding

DIGI has a high level of collaboration with representatives of industry and society. Practice is both an important source and destination of our research. This is achieved by engaging in collaborative research projects and therefore it is an important activity to apply for and get external funding from national and international sources. We see our internal peer quality review process as an important resource for learning, collaborating and building DIGI's participation in grant-seeking.

To enhance the collaboration with external partners DIGI has formed a partnership with the Alexandra Institute⁶ (AI). The partnership supports this collaboration in three ways. First, form industry networks around the research themes of the department. Second, make research applications for funding and third, support contract research for DIGI faculty. The partnership with AI is primarily for tenured staff.

DIGI has also entered into two additional partnerships with innovation networks. One is with INFINIT⁷ and the other is with the Lifestyle and Design Cluster⁸.

It is the strategy of DIGI to continuously have a broad and comprehensive project portfolio that creates value to DIGI and CBS. The portfolio embraces network-partners and includes universities/departments, companies, media, public institutions, NGO's and engaged citizens for example according to the Triple-Helix Model for co-operative research, learning, innovation and entrepreneurship.

⁶ <https://alexandra.dk/uk>

⁷ http://www.infinet.dk/dk/infinet_in_english/

⁸ <http://ldcluster.com/en/home/>

It is important to DIGI to hold influential positions in the AIS community and plan for the succession of DIGI AIS officers. DIGI will also assume greater responsibility for organizing conferences and workshops in the future.

The intention is to have most tenured faculty members being engaged in creating, participating and running projects with external partners.

DIGI also wishes to be visible in the public debate via interviews with media for the dissemination of research results and branding of the department and CBS.

4 Learning

CBS is a teaching heavy business university. Much of our time at work is allocated to teaching or preparing for teaching. Ideally, we teach what we do research in and vice versa! At DIGI we want to be among the first departments to use advanced IT and digital tools in the class room for exploration and exploitation.

We acknowledge the mutual dependency between the educations we contribute to and the department. If one thrives, the other one thrives too. This means that we should organize our teaching resources as a collective in order to maximize our utility.

What do we understand by learning at DIGI?

- The focus of teaching is learning.
- Learning means dialogue, discussion, reflection, engagement and lecturing
- Learning means promoting critical thinking
- Learning builds on the innovation of ideas

At DIGI we design innovative courses that demonstrate teaching excellence and digital tools to inspire students and colleagues at other departments. We experiment with the latest learning techniques (such as MOOCs) and blended learning. The department supports teaching buddy activities of collegial supervision of teaching. An average teaching evaluation of 3.5 on a five-point scale is usually expected.

Before filling a tenured or tenure track positions we invite selected candidates to give a lecture to our regular students in courses to assess their suitability for a Danish teaching university environment.

The department wishes to stimulate a learning environment where part-time teachers from practice (DVIPs) are an integral part of the department's research and teaching. See appendix D for details on Recruitment, Integration, Quality Assurance and Development of DVIPs.

5 Nurturing our doctoral education

PhD education is a central activity and essential for the vitality of any academic department. The quality of the PhD candidates is a direct reflection of the department. We therefore manage the PhD education carefully so that our candidates obtain the best results regardless

of whether they continue in academia or venture into industry. This can only be achieved by close academic collaboration between the supervisors and the PhD fellow that together should set ambitious research goals for their mutual benefit.

To provide a common platform for all our PhD fellows. DIGI offers a fundamental AIS course that all our PhD fellows take in the beginning of their studies. The course is primarily taught by DIGI faculty.

We would like to further discussion and academic discourse and see this as an important part of the doctoral training. It is therefore compulsory for all PhD fellows to attend and participate in all department meetings and our renowned scholar seminar series.

Training of industrial PhD fellows is a cornerstone in the DIGI strategy. The industrial PhD, which is funded partly by a company and partly by the ministry, is an attractive venue for establishing and maintaining relationships with industry and for attracting talent (PhD fellows). Typically, the project will have a high level of attention from the management of the company, and it is a good way to assure and expand contacts to industry. We expect the alignment of the PhD project with the strategic interests of the company as well as those of the department to lead to interesting research results.

The few CBS sponsored PhD scholarships are usually opened in research areas that are less likely to attract external funding. We only hire the best candidates as PhD fellows. For expectations see appendix C. We wish to place our PhD candidates at comparable universities and in R&D units in organizations around the world to strengthen our ties and increase our collaboration.

At DIGI we believe that it is particular important to have worked in several academic environments and hence we usually do not hire our own PhDs into permanent positions. This is also to avoid academic inbreed. Our own PhDs can apply for Post Doc positions and non-permanent assistant professorship positions but starting date can only be after the thesis has been submitted.

PhD fellows have a main supervisor and a co-supervisor. Industrial PhD fellows usually have a main supervisor and two co-supervisors (one from industry and one academic). For industrial PhDs the main supervisor is the researcher named on the application form. An additional supervisor is usually appointed during the first year. PhD supervisors are expected to continuously develop their supervisor skills.

The assessment committee consists of scholars of both genders from reputable universities and business schools with one from Denmark/Scandinavia and one from further away.

6 Focus on Data, Technology and People

The DIGI department cares about the interaction of people, data and technology in all of its manifestations. We study how individuals, groups, organizations and society can grow and prosper by capitalizing on digitalization.

As digitalization becomes omnipresent, other departments also do research and teach on digitalization issues. This is inevitable and should be seen as an opportunity to collaborate with other disciplines and departments. However, it also means that DIGI must differentiate itself and be explicit about its expertise and unique contribution. Therefore, IT and digitalization should always play a central role in our research and teaching. We do not focus solely on technical aspects, on organizational or management aspects, but rather take a socio-technical perspective and a multidisciplinary approach to address a range of strategic, structural, and operational activities involved in gathering, processing, storing, distributing and use of data and its derivatives in organizations and society.

We wish to experiment with IT and for that purpose we have labs at the department to explore, build and test IT.

7 Attract the best Scholars

We wish to attract excellent faculty from the departments and universities that we wish to compare ourselves with. We hire on the open international competitive job market. We primarily hire the absolutely best qualified PhD candidates as CBS international tenure track assistant professors. DIGI is an attractive work place because we provide opportunities to excel in research and teaching for international career academics and it currently ranks first in Europe and 15th worldwide in terms of publishing in the Bo8 journals.

To fill a position is to welcome a colleague into the work community of the department. It is important that a new colleague does not only fulfill numeric requirements for the position, but also contributes to the collective work environment. For example, that his/her work can support current research and that the individual is willing to work theme based and is willing to perform administrative duties for the department. In order to discuss this with the potential new faculty members, we will conduct an extensive interview before filling a position. The job interview also provides an opportunity to raise any concerns about the applicant.

The colleagues we hire as tenure track assistant professors, we hope and expect will become tenured associate professors. DIGI will not burden tenure track assistant professors with heavy academic duties and DIGI will do its utmost to ensure that courses are taught repeatedly to minimize the administrative overhead of preparing for courses.

Associate professors that wish to get promoted to professor must usually become professor WSR (with special responsibility) for a period of five years with the possibility of becoming extended for an additional three years. The associate professor and the HoD identify the WSR together. Usually the WSR is of strategic nature to the department. A Memorandum of Understanding captures the satisfactory condition of the WSR and it is subject to annual adjustment. After four (or seven) years the HoD decides if the WSR objectives in terms of MoU and research is satisfactory.

See appendix for tabular overview of responsibilities & job description and entry criteria for various research positions at DIGI.

DIGI wishes to maintain a relationship with retired colleagues in the form of professor emeritus. This is to facilitate mentoring and the sharing of knowledge with - in particular - junior faculty, but also out of respect for the many years of services that the retired colleagues have contributed to DIGI/CBS. The professor emeritus follows the CBS guidelines.

8 Embrace Diversity and Equality

We embrace diversity as it reflects the environment in which DIGI is situated and hence makes the department more balanced. The department should reflect a globalized world and therefore the department is not only multi-cultural but we should deliberately seek to hire faculty members that represent different parts of the world.

To support a healthy work-life balance we have a five-year time horizon. The intention is to remove the pressure of trying to achieve everything every year and allow better career planning.

The department has a balanced representation from Asia but does not have a significant representation from Eastern Europe or South America. It is a goal to reach the BRIC countries. We also actively seek to achieve a balance between genders even though IT in the past has been dominated by one gender.

9 Benchmark against our peers for comparison and assessment

We strive to stay competitive among the top AIS institutions in Europe and across the globe. Therefore, we annually benchmark against peer departments at other European universities for comparison and assessment. We perform an analysis based on publicly available information from the departments' webpages and search engines e.g. Google scholar, ResearchGate, Academia, and rankings based on AIS senior scholar's basket of journals (Bo8).

Appendix A European Top Rankings of Schools in Bo8 journals (2016-2018)

Rank	University	Normal Count	Adjusted Count	Country
1	Copenhagen Business School	21	9.5	Denmark
2	University of Warwick	14	6.08	UK
3	University of Jyväskylä	11	5.42	Finland
4	Erasmus University Rotterdam	10	4.75	Netherlands
5	ESSEC Business School	9	5	France
5	Loughborough University	9	5.75	UK
5	TU Darmstadt	9	4.28	Germany
5	University of Cologne	9	4.33	Germany
5	University of Liechtenstein	9	4.02	Liechtenstein
10	Aalto University	8	2.9	Finland
10	London School of Economics and Political Science	8	3.53	UK
10	University of Innsbruck	8	4.03	Austria
13	Goethe University Frankfurt	7	4.83	Germany
13	HEC Paris	7	4.17	France
13	University of London	7	3.67	UK
16	Kassel University	6	4	Germany
16	University of Oulu	6	3.32	Finland
18	IT University of Copenhagen	5	2.17	Denmark
18	Karlsruhe Institute of Technology	5	2.27	Germany
18	University of Bamberg	5	3.33	Germany
18	University of Manchester	5	2.17	UK
18	University of St Gallen	5	2.6	Switzerland
23	ESC Rennes School of Business	4	1.03	France
23	Ozyegin University	4	1.67	Turkey
23	SKEMA Business School	4	1.25	France
23	Stockholm School of Economics	4	1.42	Sweden
23	University of Augsburg	4	2.5	Germany
23	University of Bern	4	1.62	Switzerland
23	University of Lausanne	4	2.53	Switzerland
23	University of Mannheim	4	1.58	Germany

Journals: EJIS, ISJ, ISR, JAIS, JMIS, MISQ, JSIS, JIT, source: <https://myvisionresearch.com/>

MISQ: FT50, AJG 4* & UTD. ISR: FT50, AJG 4* & UTD. JMIS: FT50 & AJG 4. JAIS: AJG 4. EJIS, ISJ, JSIS & JIT: AJG 3

Appendix B Global Top Rankings of Schools in Bo8 journals (2016-2018)

Rank	University	Normal Count	Adjusted Count	Country
1	Georgia State University	45	18.62	USA
2	City University of Hong Kong	32	13.8	China
3	Arizona State University	27	11.15	USA
3	University of Minnesota	27	11.37	USA
5	University of Maryland	25	12	USA
5	UNSW Sydney	25	8.68	Australia
7	University of Arizona	24	10.5	USA
8	Temple University	23	10.67	USA
8	University of Texas at Dallas	23	12.33	USA
10	Copenhagen Business School	21	9.5	Denmark
10	University of Arkansas	21	9.12	USA
12	McGill University	20	9.27	Canada
12	National University of Singapore	20	9	Singapore
14	Indiana University	18	7.48	USA
15	Bentley University	17	7.45	USA
16	Hong Kong University of Science and Technology	16	8.75	China
17	New York University	15	7.57	USA
17	University of Florida	15	6.9	USA
17	University of Texas at Austin	15	5.98	USA
17	University of Washington	15	5.25	USA
21	University of Warwick	14	6.08	UK
22	University of Georgia	13	5.45	USA
23	University of British Columbia	12	5.78	Canada
23	University of Hong Kong	12	3.95	China
23	University of Virginia	12	4.45	USA

Journals: EJIS, ISJ, ISR, JAIS, JMIS, MISQ, JSIS, JIT, source: <https://myvisionresearch.com/>
MISQ: FT50, AJG 4* & UTD. ISR: FT50, AJG 4* & UTD. JMIS: FT50 & AJG 4. JAIS: AJG 4. EJIS, ISJ, JSIS & JIT: AJG 3

Appendix D: DVIP: Recruitment, Integration, Quality Assurance and Development

DIGI increasingly employ external teachers (DVIPs). The extent of each DVIP's teaching varies considerably – but together these colleagues constitute a vital human resource, adding competencies and practical experience that complement DIGI' VIP teachers, but, importantly, also making up for the shortage of digital VIP teaching and supervision capacity.

Recruitment

- DIGI is regularly approached by practitioners, who are interested in engaging with CBS as teachers. If the CV is relevant, the HoD will invite these people to a cup of coffee and a talk to clarify whether there is a basis for collaboration and to get a first idea of their potential as teachers. If the first impression is positive, the HoD asks the relevant DIGI course coordinator to conduct a second interview.
- When openings occur, these candidates, often in competition with candidates proactively identified through DIGI's networks, compete for the positions announced together with other applicants.
- Once the Assessment Committee has submitted its evaluations of applications received for a particular opening, it is the HoD, in consultation with the relevant DIGI VIPs, who makes a shortlist of candidates. The preferred candidate(s) are invited for a formal interview with the HoD and/or relevant course coordinator before a decision is made.
- When a DVIP is recruited to supervise master level theses, this person's academic credentials will be subject to a particular scrutiny, in coordination with the relevant thesis supervisor coordinators.

Integration into DIGI/CBS

- Once an external teacher has been employed, the day-to-day responsibility for preparing the teacher for his/her teaching assignment and interacting with him/her rests with the relevant course coordinator, backed by DIGI's teaching support staff and HR coordinator.
- 1-2 annual events for DVIPS, addressing various academic, professional and/or pedagogical topics, typically organized as interactive workshops led by DIGI/CBS staff and with time for networking and peer learning.

Quality Assurance and Development

- Ongoing dialogue with the relevant course coordinator is the most important and efficient way of monitoring and developing an external teacher's performance. In addition to this the course coordinator, the relevant Study Board and the Head of Department monitor all DVIPs' student evaluations. If results are not satisfactory, the course coordinator will take action, involving the DVIP in question to jointly arrive at an understanding of such challenges that may have to do with the course design and/or the perceived quality of the DVIP's performance.
- DVIPs are invited to participate in all relevant academic activities at DIGI: PhD defenses, inaugurals, guest lectures, workshops, seminars and conferences. DVIPs are also encouraged to regularly consult courses/workshops offered by CBS Teach beyond the obligatory 'Learn to Teach' course.
- Continuous monitoring of DVIPs' PROPHIX hours and status of their affiliation (e.g. timely renewal of temporary contracts; transfer to permanent contracts). The HoD is always involved in decisions regarding renewal of DVIP contracts and transfer to permanent DVIP positions.
- An annual update of DVIP CVs is mandatory.