

# 2023-2026 Strategic Plan

## Internet Interdisciplinary Institute (IN3)

10/07/2023  
Version 1.0



## **1. Preamble**

The Internet Interdisciplinary Institute's (IN3) strategic plan for 2023-2026 aims to consolidate the institute as a spearhead in the field of research into digital society. This research focuses both on the role of digital technologies in shaping contemporary society and on the social, cultural and economic dimensions that make up these technologies. The uniqueness of the IN3 lies in its interdisciplinary research, fostering joint work, dialogue and collaboration between engineering, social sciences and humanities.

### **1.1 Background**

In the last decade there has been an increase in the use of online platforms for communication and collaboration, and in the adoption of technologies to automate and optimize processes. This has forced many organizations to adapt to increasing digital demands, and more online sales and digital payments. In general, there has been a major acceleration in the digital transformation of many organizations, which has highlighted the importance of adapting to new technologies in order to survive in an increasingly digital environment.

The Universitat Oberta de Catalunya's (UOC) IN3 institute is particularly well-positioned to deal with this digital transformation on a global scale, as its mission is to study how society and technology, especially the internet and information and communication technologies (ICTs), intertwine and shape each other. Beyond their commitment to scientific rigour, the IN3's studies and research lines seek to help people and organizations understand and address the problems, opportunities and challenges presented by the growing digitalization of society.

In addition to its mission to study and research the implications of technology, the IN3 also aims to play a leading role in digital transformation on a global scale. Therefore, as well as observing and analysing trends and developments in digital society, it is firmly committed to co-producing and sharing research results to contribute to a fairer, more prosperous and more sustainable society. This must be done through an open model that encourages sociotechnological collaborations with groups, organizations and companies that are committed to these values.

### **1.2 Methodology**

This strategic plan was drawn up by means of a participatory process that began in November 2019 and allowed the main aims to be discussed and agreed with various groups. Between November 2019 and July 2022, several working sessions were held with the research groups to carry out a strategic analysis of the new plan and agree on its main aims. This process was also presented and discussed at various IN3 plenary meetings.

However, the plan is considered a living document in which actions will be reviewed and readjusted according to the achievement indicators, any new challenges that may appear, or strategic and operational changes. In addition, the IN3 also aims to foster and implement responsible ways of assessing research through international movements such as the San Francisco Declaration on Research Assessment (DORA) and the Coalition for Advancing Research Assessment (COARA).

The design of the new strategic plan sought to involve not just the IN3's research groups but also their individual members, thus trying to include as many visions, fields of knowledge, talents and roles from the institute as possible.

This process also included an analysis of the main documents that are relevant to the institute's strategic plan, including institutional documents and reflections on the UOC's more general strategic plan, feedback from the IN3's Scientific Committee, and international frameworks and initiatives of special relevance to the IN3's strategic plan.

### 1.3 Thematic focus

Digital society is a concept that describes the transition towards a society in which digital technologies are ubiquitous and become a key factor in shaping our contemporary technological, social and cultural interactions, ecosystems and environments. This society is characterized by the widespread use of the internet and other digital technologies, and by the ability to process, store and share networked information.

Therefore, it appears to be clear that a research institution such as the IN3 – whose groups and members possess expertise in social sciences, humanities and computer engineering in equal measures – is an ideal ecosystem not only to study how digital society takes shape but also to actively contribute to its development, thus becoming an agent of change and transformation for a fairer, more prosperous and more sustainable society.

### 1.4 A clear commitment to interdisciplinarity

Interdisciplinarity is a methodological and philosophical approach that involves collaboration and cooperation between different disciplines in order to address complex problems and global challenges. This approach seeks to combine perspectives, methodologies and knowledge from each of the different disciplines to generate a more integrated understanding of the problem or challenge in question. Interdisciplinarity involves building bridges between different disciplines in order to foster dialogue, collaboration and mutual learning.

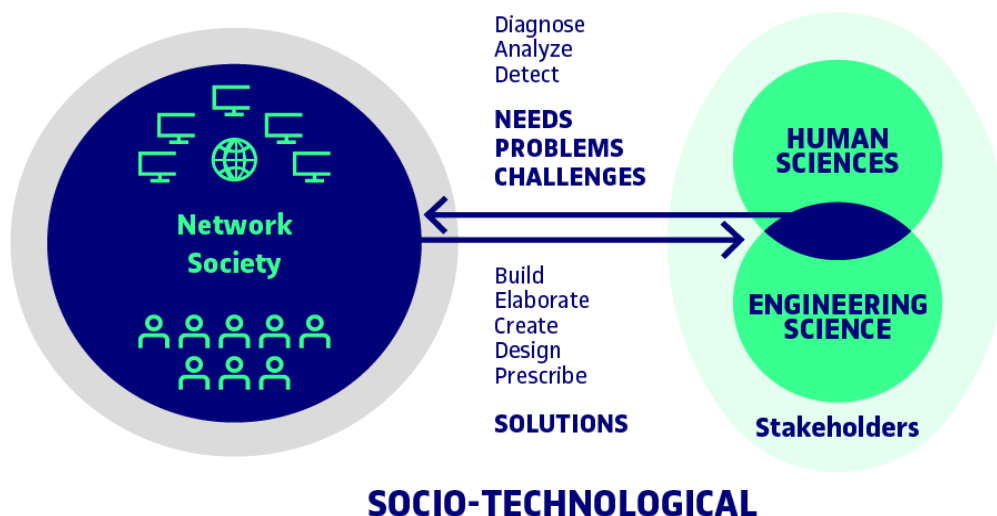


Figure 1. Interdisciplinarity in the context of digital society

Breaking down the disciplinary barrier between ICT engineering, social sciences and humanities requires the promotion of collaboration and dialogue between the various disciplinary fields. This can be done, for example, by creating interdisciplinary teams to carry out joint research projects. These teams will be made up of researchers with expertise in different disciplines, who will work together to address complex problems or challenges from different perspectives.

In addition, interdisciplinarity should not be limited to the IN3's members and groups, but will also include the UOC's faculties and research centres and beyond (UOC+), contributing to interinstitutional projects with the participation of experts from the various disciplines.

In order for all this to happen, an interdisciplinary theme will be promoted within the IN3 to provide members with tools and examples of good practices in interdisciplinary research that will help them acquire a broader and more diverse vision of the problems and challenges they address.

The creation of spaces for dialogue and collaboration, such as forums, working groups or interdisciplinary networks of researchers, will also be fostered. These initiatives will enable researchers from different disciplines to share ideas, collaborate on joint projects and establish synergies that can lead to new lines of research and challenges.

Finally, we want to promote the implementation of responsible and inclusive research assessment methods. This includes diversifying the assessment criteria to take into account interdisciplinary aspects, the dimensions of gender equity and the gender perspective, and the promotion of initiatives that value research based on its capacity to have a societal impact and not only on its contribution to scientific knowledge.

## 1.5 Roadmap

In accordance with this strategic plan, it is important to establish a roadmap with three key elements:

1. Firstly, it is important to go beyond the organization of the institute into research groups and create meeting spaces around shared challenges when it comes to making sense of digital society. Throughout the process of shaping this strategic plan, up to four main pillars that should constitute the starting point for finding more interdisciplinary and collaborative lines of research for the IN3 have been discussed and agreed upon. These pillars are equity, sustainability, well-being and participation. These four pillars can also bring a uniqueness and distinct identity to the IN3 in the international network of centres with a similar focus.
2. Secondly, the previous strategic plan for the IN3 proposed evolving from a model of juxtaposition of groups and disciplines combined under a multidisciplinary umbrella towards a more collaborative and interdisciplinary model in which dialogue and a greater integration of disciplines would be possible. In this strategic plan, the aim is to go a step further and go deeper, especially through these interdisciplinary pillars, with an increasingly porous and integrated collaboration model that is capable of transcending disciplines and groups' organizational structure to create an increasingly transdisciplinary space. In relation to other similar institutes and research centres, succeeding with this working model can make the IN3 unique in terms of both academic excellence and societal relevance. This model will also make it possible to take greater advantage of the diversity and wealth of knowledge and disciplines already contained and integrated in the various research groups and in the institute as a whole.
3. Thirdly, in order to support these ambitious aims, it is also important for the institute to promote and implement its own research assessment system that assesses these transformations and their impacts in terms of excellence, collaboration, equity and societal relevance, thus bringing its assessment into line with international movements for the reformation of research assessment such as the San Francisco Declaration on Research Assessment (DORA) and the Coalition for Advancing Research Assessment (COARA). The IN3 is establishing the objective of promoting and implementing responsible research assessment methods.

## **2. Elevator pitch**

The Internet Interdisciplinary Institute (IN3) is the UOC's research centre specializing in the study of digital society. The IN3's research integrates engineering – especially computer science and telecommunications – with social sciences, life sciences, human sciences, the arts and, in general, all those disciplines that study human activity, through an interdisciplinary approach.

The IN3 examines and interacts with digital society to contribute to its study and development by means of an interdisciplinary approach that combines engineering, social sciences and humanities. This approach involves close collaboration between the various disciplines to analyse the problems and challenges related to human activity in the digital world and to develop innovative strategies and technologies committed to progress, sustainability and the well-being of society.

The IN3 thus carries out sociotechnical research to build knowledge and develop technology in areas as diverse as the design of new smart cities, gender equality in the use of ICTs, digital humanities, crisis management, care for older people, social analysis through the tools of complex systems, technological and energy sustainability, the internet of things, new broadband networks, data governance, new participatory ways to strengthen democracy, AI techniques, and online security and privacy, among others.

This methodology makes it possible to provide constant feedback between the various disciplines and a global vision of the problems and challenges, as well as promoting citizen and stakeholder participation in the production of knowledge and sociotechnological innovations to address these challenges or problems.

### **3. Mission**

The IN3 is a research institute of the Universitat Oberta de Catalunya that specializes in digital society. Through close collaboration between engineering, social sciences and human sciences, the IN3 generates interdisciplinary knowledge about digital technologies, especially the internet, and their effects on different areas of human activity in order to improve our understanding of technosocial phenomena and contribute to the progress of society.

The IN3 is a core pillar in the goal of giving meaning to the UOC as an excellent, innovative and socially relevant research university.

## **4. Vision**

The IN3 aims to consolidate itself as a leading and pioneering research centre in the understanding and improvement of digital society through the generation of interdisciplinary knowledge about digital technologies and their social effects. The institute seeks to become a point of knowledge exchange between different sections of society and, by addressing emerging technosocial challenges, to contribute to a society that facilitates well-being and is more inclusive, sustainable, equitable and participatory.



## 5. Strategic analysis (SWOT)

<p><b>STRENGTHS</b></p> <ol style="list-style-type: none"> <li>1. <u>Uniqueness</u> at national level regarding the focus of the institute (digital society).</li> <li>2. <u>Interdisciplinary</u> nature of the research carried out, balance between social sciences, humanities and engineering.</li> <li>3. <u>Attractive location</u> and flexibility in ways of working (online first).</li> <li>4. <u>Horizontal</u> structure that combines experience and youth.</li> <li>5. <u>Flexibility</u>, agility and a pro-change culture.</li> <li>6. <u>Gender parity</u>.</li> </ol>	<p><b>WEAKNESSES</b></p> <ol style="list-style-type: none"> <li>1. Our <u>visibility</u> as an institute <u>could be better</u> (communication policy, identity and brand).</li> <li>2. <u>Difficulties attracting, maintaining and developing</u> teams (temporary contracts, salaries, unequal dedication, attracting students and junior researchers).</li> <li>3. <u>Insufficient support</u> for the promotion of interdisciplinarity and cooperation between research groups.</li> <li>4. <u>Excessive variety of subject areas</u> within research groups.</li> <li>5. <u>Difficulty transferring or giving value to research</u> in some disciplines.</li> <li>6. <u>Lack of tools to support</u> research.</li> <li>7. <u>Few sociability and community creation actions</u> as an institute (new researchers).</li> <li>8. We need to <u>improve attention to diversity and equity</u>.</li> </ol>
<p><b>OPPORTUNITIES</b></p> <ol style="list-style-type: none"> <li>1. <u>Strategic and institutional commitment</u> to promoting research at the UOC (funding).</li> <li>2. <u>Potential for development</u> in the IN3's areas: ubiquity of digital technology in our societies.</li> <li>3. <u>Uniqueness</u> in the Catalan and Spanish environments (interdisciplinarity).</li> <li>4. <u>Dynamism</u> and capacity for specialization and adaptation of teams.</li> <li>5. Research with <u>high potential for societal impact</u>, and interrelation and exchange with the immediate environment.</li> <li>6. Several groups work on (and with) <u>feminisms</u> and the <u>gender perspective</u>.</li> <li>7. <u>Very broad contact networks</u> thanks to interdisciplinarity.</li> <li>8. <u>European context</u> conducive to the research model (e.g. Horizon calls).</li> </ol>	<p><b>THREATS</b></p> <ol style="list-style-type: none"> <li>1. <u>High competition</u> in the Catalan/Spanish environment making it difficult to attract and retain talent.</li> <li>2. <u>The sustainability</u> of the UOC's research policy, and dependence on the priorities of the university's management.</li> <li>3. <u>Low levels of funding</u> from Spanish/Catalan calls. Little public investment.</li> <li>4. <u>Private nature</u> of the university (no eligibility for certain calls).</li> <li>5. <u>Legislative changes</u> affecting the organization of research (science law, labour reform, etc.).</li> <li>6. <u>Post-pandemic</u> changes.</li> </ol>

## **6. Strategic objectives**

In line with the institutional priorities of the UOC's new strategic plan, the IN3 aims to contribute to the process of consolidating the UOC's research to make it attractive, excellent, innovative and socially relevant.

This general aim materializes in the following specific strategic objectives:

1. To consolidate the IN3 as a centre of excellence and international prestige in the field of research into digital society.
2. To contribute to the deployment of an interdisciplinary R&I ecosystem, especially between social sciences, humanities and engineering (or technology designer/developers).
3. To consolidate the IN3's role as a hub for open knowledge and knowledge exchange with society.
4. To develop a responsible research assessment model for the IN3.
5. To contribute to equity, respect for diversity and gender equality.
6. To continue with the development, implementation and improvement of research support processes, ways of working, and the attraction, retention and development of internal and external talent.

## 7. Operational objectives and action plan

This section sets out the specific strategic objectives in the form of operational objectives and, from there, as a set of proposed actions to be executed in the period 2023-2026.

It should be noted that the actions and associated indicators are set out **as a proposal**. Each operational objective will be coordinated by a deployment team that will ensure that the actions and indicators, as well as their timing, are specifically defined. Each semester, this team will provide information on the status of implementation of the various actions and will review their schedule if necessary.

### 7.1 Consolidate the IN3 as a centre of excellence and international prestige in the field of research into digital society

This strategic objective materializes in the following operational objectives:

- OP1.1. Consolidate the publication of excellent research in the field of digital society.
- OP1.2. Participate regularly in prestigious fundraising calls, especially those that allow the IN3 to position itself as a leading figure in international consortia.
- OP1.3. Increase the number of excellent researchers by attracting and retaining talent.
- OP1.4. Contribute by means of internationally prestigious events or actions in topics related to digital society.

Proposed actions and indicators:

Proposed actions	Proposed indicators
Prioritizing a set of publication objectives that maximize the quality and impact of research (in accordance with DORA/COARA criteria).	Articles, books and chapters published in/by quality journals/publishers.
Participating in competitive proposals for Catalan, Spanish and international funding.	Catalan, Spanish and international funding proposals (applied for, awarded).
Regularly participating in prestigious talent attraction calls (ICREA, ERC, Marie Skłodowska-Curie, RyC, etc.).	Researchers hired through prestigious competitive calls (applied for, awarded).
Regularly participating in competitive doctoral calls (FI, ITN, international doctorates, Marie Skłodowska-Curie, etc.).	Predocctoral researchers hired through competitive calls (applied for, awarded).
Participating in calls for the recognition of centres of excellence (María de Maeztu).	Presentation of the proposal.
Actively participating in the Global Network of Internet and Society Research Centers (NoC).	Number and type of actions and participations.

## 7.2 Contribute to the deployment of an interdisciplinary R&I ecosystem, especially between social sciences, humanities and engineering (or technology designer-developers)

This strategic objective materializes in the following operational objectives:

- OP2.1. Put in place mechanisms to promote interdisciplinary and transdisciplinary research among IN3 researchers, especially between social sciences, humanities and engineering.

Proposed actions and indicators:

Proposed actions	Proposed indicators
Drawing up a diagnosis of the institute's intradisciplinary, interdisciplinary and transdisciplinary research dynamics and the current policy for promoting (incentives) interdisciplinarity.	Diagnosis.
Carrying out interdisciplinary research projects around four challenges of digital society (equity, sustainability, well-being, participation).	Shared scientific programme.
Consolidating a programme of seminars on intradisciplinary, interdisciplinary and transdisciplinary forms of collaboration and research.	Number and programme of seminars and sessions for the joint exploration of interdisciplinarity practices.

**Goal-based interdisciplinary indicators:** interdisciplinary projects between social sciences, humanities or engineering, and publications resulting from interdisciplinary initiatives.

## 7.3 Consolidate the IN3's role as a hub for open knowledge and knowledge exchange with society

This strategic objective materializes in the following operational objectives:

- OP3.1. Consolidate the IN3 as a research centre with a strong societal impact and return.
- OP3.2. Strengthen links with the UOC's research ecosystem (faculties, research centres, research laboratories, HacTe, etc.).

Proposed actions and indicators:

Proposed actions	Proposed indicators
Contributing to the development of the current open knowledge action plan.	Open academic publications (number of publications), number of open data sets, number of open publications of doctoral theses, others (publication of open-source code, feedback activities / return of projects, etc.), number of open knowledge-specific training activities for IN3 staff.
Regular knowledge exchange sessions / industry days / open days.	Number and type of sessions.
Proposing a specific plan for patronage/philanthropy/agreements with government	Specific patronage and philanthropy plan.

bodies tailored to the needs of the various research groups.	
Drawing up a map of collaborations and transfer actions with the research ecosystem (UOC+).	Collaboration map (UOC+).
Carrying out communication actions that highlight the IN3 as a centre committed to open knowledge.	Number of actions carried out in the field of communication to publicize the IN3's commitment to open knowledge.
Creating a catalogue of services accessible via the website with the tangible results obtained in recent years.	Catalogue.

## 7.4 Develop a responsible research assessment model for the IN3

This strategic objective materializes in the following operational objectives:

- OP4.1. Move towards the reform of the research assessment system to increase the quality, production and impact of research.

Proposed actions and indicators:

<b>Proposed actions</b>	<b>Proposed indicators</b>
Collaboration by the IN3 in the development of the UOC's 2024-2027 action plan within the framework of the university's membership of the Coalition for Advancing Research Assessment (COARA).	Action plan.
Incorporating the gender perspective into the IN3's research assessment process.	Model of indicators with a gender perspective.
Assessing (using SPACE) the IN3's conditions to improve research assessment in accordance with DORA principles.	Diagnosis.
Drawing up a list of international good practices for implementing DORA recommendations that are useful to the IN3 (benchmarking from other research centres).	Catalogue.
Promoting (or participating in) a programme of debates on responsible assessment, with an IN3 perspective, with international experts (in line with the UOC's strategic plan).	Number of seminars, main agreements in the IN3's capacity as a result of the seminars.
Developing and testing an IN3-specific indicators model for responsible assessment of excellence, interdisciplinarity and societal relevance/impact of IN3 research, in accordance with DORA principles.	Indicators model.

## 7.5 Contribute to equity, respect for diversity and gender equality

This strategic objective materializes in the following operational objectives:

- OP5.1. Develop policies that provide for equity, respect for diversity, and gender equality.
- OP5.2. Expand and diversify participation in the governance of the IN3.

Proposed actions and indicators:

<b>Proposed actions</b>	<b>Proposed indicators</b>
Contributing to the deployment of the Centre of Excellence on Inclusive Gender Equality in R&I (INSPIRE).	Deployment of the Centre, diagnosis and action plan for the IN3
Training the IN3's research staff in leadership with a gender perspective.	Number of researchers who have received training / type of training received.
Identifying new training needs for researchers that are not currently met to advance in the deployment of attention to diversity, equity and gender equality in the IN3.	Training plan.
Holding working sessions to identify how the knowledge generated about gender at the IN3 can be turned into measures to improve the IN3's/UOC's internal policies or into good practices to share with other universities and research centres.	Summary/conclusions of the working sessions.
Identifying the improvements in attention to diversity, equity and gender equality required at the IN3, and drawing up an action plan to implement them.	Identified improvements and action plan.
Reviewing, adapting and disseminating the work-life balance policy for researchers.	Document with the revised and adapted version of the work-life balance policy for the IN3.
Disseminating agendas and minutes of meetings in Catalan, Spanish and English.	Minutes and agendas in all three languages.
Including different profiles, ages and stages in IN3 governance research careers.	Number and type of changes made.

## **7.6 Continue with the development, implementation and improvement of research support processes, ways of working, and the attraction, retention and development of internal and external talent**

This strategic objective materializes in the following operational objectives:

- OP6.1. Make improvements to research support processes.
- OP6.2. Make improvements to the ways of working.
- OP6.3. Make improvements to the attraction, retention and development of internal and external talent.

Proposed actions and indicators:

<b>Proposed actions</b>	<b>Proposed indicators</b>
Identifying improvements in the interaction between the IN3 and other research support services.	Improvement plan.
Enhancing communication in the IN3 (interdisciplinary pillars).	Number and type of improvements to the website and communication of research to the various groups.
Preparing a study/assessment of the use of IN3 spaces to tailor it to the needs of the centre's groups and strategic objectives.	Study/assessment of spaces.
Drawing up a plan to improve the conditions of staff hired for research (induction, regulation, development,	Improvement plan.

stabilization, talent attraction, gender equality, research and teaching, etc.).	
Identifying actions and drawing up an improvement plan to promote socialization and community creation at IN3 level.	Improvement plan.

## 8. Schedule

Below is a proposed high-level schedule for the implementation of the actions in the strategic plan.

### Priorities for 2023:

- Shared scientific programme (interdisciplinarity)
- Excellence actions (María de Maeztu)
- Promoting an IN3-specific responsible assessment model (action/pilot plan, IN3-specific indicators)
- INSPIRE Centre of Excellence

### Priorities for 2024:

- Assessment of spaces
- Improvement plan for the conditions of research staff
- Training in matters of gender equality and equity
- Changes to / diversification of the institute's participatory governance
- Contributions to the open knowledge plan
- Research support process improvement plan

### Priorities for 2025:

- Pilot for the responsible assessment model
- Strengthening the research ecosystem
- Actions that highlight the IN3 as a centre committed to open knowledge