

Evaluation of Strategic Research Initiatives at Roskilde University Guidelines for the evaluator's report

The strategic research initiatives grew out of an ambition to boost of RUC's research through an investment in research areas and groups with a potential for development and a possibility to evolve into future strength positions within and across departments.

The evaluation should describe the results of RUC's investment in strategic research initiatives:

- Which immediate results have the strategic research initiatives created?
- To which extent have the strategic research initiatives been able to realize their potential?
- Which future possibilities for development can be seen in the four areas?

The aim of the evaluation is partly to make a survey on the outcome for RUC in general – and each of the research areas in specific – from focusing on the four strategic research initiatives (Global Dynamics; Environmental Risk; Designing Human Technologies; Power, Media and Communication), partly to collect different experiences with organizing collective and interdisciplinary research initiatives.

Your individual report should consist of the 3 elements mentioned below.

Your evaluation report should fill 3-5 pages in all.

Evaluation of Strategic Research Initiatives at RUC

Strategic Research Initiative	Designing Human Technologies
Evaluator (name and university)	Robert Winter, University of St. Gallen

I. Comments on your specific research initiative: Outcomes and realization of potential

Objectives

The objectives of all four (selected from 13 proposed) Strategic Research Initiatives (SRIs) have been

- To bring together researchers from RUC's well-established research and education areas in **new networks**.
- To invest in research areas and **groups** (not in single researchers).
- To strengthen **interdisciplinarity**.

SRIs were expected

- To establish their respective fields as research areas of repute, nationally and internationally. This means that RUC support was meant as "seed money" for establishing a **sustained** initiative.
- To be **recognized** by external stakeholders as being specific for RUC.
- To stimulate research **publication** (measured in BFI points).

Later also the establishment of **Ph.D. activities** was added to the expectations.

"Designing Human Technologies" (DHT) is a design-oriented SRI supporting RUC's new "Humanities and Technology" bachelor programme (HumTek) and its three dimensions: Design, Humanities, and Technology. In support of HumTek, DHTs instantiated the generic SRI objectives as

- To establish a scientific identity.
- To establish a research-driven environment.
- To establish an engaged and consistent group of academic staff pursuing a shared objective.

Performance

Sustainability: By linking DHT to HumTek, important elements of momentum and sustainability were achieved by design. Even after the completion of the "seed money" phase, the continued existence of HumTek will create a need for DHT follow-up projects - and vice versa. In addition, many of the DHT showcase projects succeeded in acquiring significant third-party funding which at least in some cases can replace RUC "seed money".

Interdisciplinarity: Traditionally, research at RUC was analytical / descriptive and organized in disciplines like humanities, social sciences and natural sciences. For design-oriented teaching and research, a new, interdisciplinary "home" (subject area) was successfully created. In contrast to traditional research, research "by design, for design and into design" is normative, constructive, solution-oriented, and requires active researcher involvement. Solution orientation and human orientation create a specific challenge: Not only needs design teaching, but also design research to integrate many traditional disciplines. While HumTek provided a first, teaching-oriented integrative platform, the recent re-organization of departments at RUC was an important step to move from traditional, disciplinary structures into a more problem-oriented organization – that might also been viewed as being supported by the SRIs.

Recognition: Regarding research content, DHT identified three central "Issues/Themes":

- Development and design of socio-technical systems.
- Aesthetics, experience and learning.
- Design as a scientific method.

Instead of investing in new faculty, the DHT leadership decided to invest into (a) “beacon” projects along these issues/themes, into (b) two integrative book projects and into (c) establishing an integrative Ph.D. event.

- (a) I had a chance to talk to representatives involved into four (of the 12) DHT projects and to study their scientific outcomes as well as their tangible results (Experimental Museum Exhibition Design, Network for Design of Robust Organizational Change, Clinical Communication and Italian Drawings). These four projects nicely represent DHT’s range from humanities to information systems and organizational science. All projects were able to acquire external funding, although the range is from very small to very large amounts. The projects nicely illustrate how “insight” is transformed into “impact”, notably also impact with local institutions (Viking Ship Museum, Ribe Kunstmuseum), Danish companies and the health care system of Zealand. Researcher teams mostly had not collaborated before the SRI. Most projects were already able to serve as a case / experience base for publications.
- (b) The two books “Design Research – Synergies from interdisciplinary perspectives” (Routledge 2012) and “Situated Design Methods” (The MIT Press 2014) directly address the three central DHT issues/themes. Although during that early phase of thematic integration a “bottom-up” consolidation is clearly visible, the books also provide fundamental integration models for DHT and in particular HumTek. A very large portion of the DHT participants contributed to these two edited books, thereby helping to create shared identity and language. The books also helped to address the issue/topic “Design as a scientific method”.
- (c) For the ca. 40 Ph.D. students involved in DHT, a series of annual **Ph.D. events** has been created that now attract not only a growing number of external Ph.D. students, but also are planned to be held outside Denmark as a Nordic initiative. According to my discussion with actual Ph.D. students, they appreciate the active involvement of senior researchers, the momentum of a new interdisciplinary initiative and the “drive” that is created by being involved in one of the mentioned DHT-sponsored projects. The DHT Ph.D. events clearly helped to build an interdisciplinary junior researcher community.

In summary, the three core activities succeeded substantially to create internal and external recognition for RUC in a newly developed field. Much more than few additional faculty could have achieved it, DHT disseminated outcomes to diverse stakeholders ranging from local institutions (by projects) and Danish companies/administration agencies (by projects) to national and international peers (by books, Ph.D. education).

Publication output: Regarding publications, the outcome of a “seed money” period of few years (2013-current) cannot be solely measured in terms of highly ranked journal publications. As this type of publications often takes several years of revisions and results need some time to be created and documented, it is no surprise that the volume of highly ranked DHT publications is small. In addition, interdisciplinary work is hard to publish in traditional, highly-ranked (and usually disciplinary) journals. Nevertheless there is a number of publications in reputed journals currently under review or being prepared. A lot of results have been published online (project web sites) or been presented at conferences. Also the book publications created a good number of DHT-related publications. Compared to a large monolithic programme or a longer strategic initiative, the overall quantity and quality of publications, although meeting the shared milestones, is naturally smaller.

The qualitative assessment of the central objectives group-building, interdisciplinarity, establishing a sustained initiative, achievement of recognition, creation of high-quality publication output and creating Ph.D. activities is complemented by a short review of the shared KPIs in the following.

1. Research production: Peer-reviewed publications (BFI) and other research publications
 - Target measurable goal agreed for this milestone: “Increasing trend, min. 50 BFI points in 2016” (Appendix 3: p. 8).
 - Over-accomplished (ca. 120 points in 2014 and close to 100 points in 2015).
 2. External funding/projects co-funded by the strategic research initiative (e.g. number of applications, total funding, the role in the application e.g. coordinator/partner etc.)
 - Target measurable goal agreed for this milestone: “A minimum of DKK 1 million/year in external funding after 2013” (Appendix 3: p. 8)
 - Massively over-accomplished (over 4 million DKK).
 3. Development of PhD activities/courses
 - Target measurable goal agreed for this milestone: “PhD programmes in Designing Human Technologies will be generated at Roskilde University
 - Widely accomplished: Courses (not really a Ph.D. programme) have been created; a Nordic PhD network has been built.
 4. Institutionalization of the research groups/teams within the research initiative
 - Target measurable goal agreed for this milestone: “Institutionalizing the research initiative to ensure its sustainability also after 2016. The centre is organized and manned at year-end 2015” (Appendix 3: p. 7).
 - A center has not been established due to RUC reorganizations. Ca. 50% of DHT researchers joined “People and Technology”, a new unit dedicated to the HumTek bachelor program. To some extent, “People and Technology” can therefore be regarded as an institutionalized form of the DHT initiative.
 5. Projects across existing research groups and departments
 - Target measurable goal agreed for this milestone: “Projects across existing research groups and departments. Completion of a minimum of four projects” (Appendix 3: p. 7).
 - Over-accomplished. 12 projects staffed with researchers from different groups have been started. While most of them are completed now, four will be continued after the end of the DHT seed period.
 6. Internal/external profiling
 - Target measurable goal agreed for this milestone: “Active website containing contributions from all participants on an ongoing basis” (Appendix 3: p. 8).
 - Accomplished. Active DHT web site and DHT blog established and maintained. Books edited and distributed.
 7. Support for program development
 - Target agreed for this milestone: “Presentation on research-based potential for new subjectintegrated graduate programmes” (Appendix 3: p. 8).
 - This milestone was dropped based on strategic considerations (e.g. concentrate on research activities). Design Master programme started to be developed, but not implemented.
 8. International conferences at RUC
 - Target measurable goal agreed for this milestone: “A minimum of two conferences to be held between 2012–2015” (Appendix 3: p. 8).
 - Accomplished. Two DHT-related conferences held at RUC, two other conferences with major contributions (and visibility) of DHT researchers.
-

Based on the qualitative and quantitative discussion, it can be stated that the DHT SRI was a good success in terms of (a) achieving or over-achieving the strategic objectives of the institution, (b) providing value to the participating RUC researchers (an interesting ground for activities outside their disciplinary home), and (c) creating impact for local and external stakeholders and (d) really integrating research and teaching in an innovative, attractive and emerging field – especially in the light of the moderate investment by RUC.

II. Further observations concerning the strategic research initiatives more generally

The DHT strategy to invest in projects, in building a shared identity and language (by writing books) and in building a Ph.D. student (and supervisor) community appears to successfully address the challenge of adding a new, interdisciplinary platform to the existing disciplinary platforms, i.e. motivating researchers to balance individual and small group goals/rewards/interests (e.g. disciplinary reputation) with institution-wide goals/rewards/interests – and this was achieved with very limited funds.

Compared to other SRIs at RUC (but without having made an in-depth assessment of these other SRIs), the DHT approach seems to better have been able to create a sustained, productive and visible platform.

However, even more might have been achieved if

- An even tighter integration of DHT research and DHT teaching had been possible (HumTek bachelor, HumTek PhD programme – and a HumTek Master!) and respective DHT-centred institutions would have been created, thereby evolving into transdisciplinary structures and allowing to create even more synergies between innovative teaching and unique research position.
- An integrated research project portfolio would have been supported “beyond seed money”, e.g. by large-scale interdisciplinary research funding on a National scale (like the “Sonderforschungsbereiche” that are funded by Deutsche Forschungsgemeinschaft in Germany, or the interdisciplinary funding programme of the Swiss National Fund).
- Problem-oriented, normative research would be treated on the institutional level to be at eye level with traditional, analytic descriptive research. Although accreditation organizations like AACSB have recently put much more emphasis on the impact of research and teaching, many institutions are still regarding only descriptive research as scientific activity, and all problem-oriented activities as inferior.

III. Recommendations for future practice: Possibilities/potential for development

The four SRIs have been created in the context of a traditional disciplinary organizational structure that has changed in the meantime. Teaching-based integration – and maybe the community-building efforts of some SRIs – paved the way for an amended organizational context that comes closer to the interdisciplinarity objective behind the SRI initiative.

As a consequence, DHT needs to re-assess its positioning and may need to re-adjust to the new organizational setup. Since 50% of the DHT researchers joined the new “People and Technology” department, it may be a good start to analyze

- How DHT should adapt its positioning in order to even better match the “People and Technology” positioning.
-

- How an evolution of HumTek teaching and in particular an evolution of teaching at the Master level could lead to a better fit of teaching and research structures.

A dialogue between the leadership of the “best matching” department and the SRI will certainly help both sides to clarify synergy potentials and identifying mutual adjustment needs. While it is natural to differentiate between resource management (departments) and delivery management (teaching and research programmes) in a University, more alignment will certainly increase synergies and overall performance.

While the ongoing DHT projects will secure a decentral “survival” of some DHT ideas, such external project funds cannot be used (formally and in terms of volume) to support internal integration objectives like continuing with the Ph.D. community, continued methodological integration (further books) and funding new DHT projects that complement the portfolio. There are even threads that basic decentral activities like journal publications on DHT core topics cannot be continued if, e.g., travel funds for conference participation are drastically reduced as planned. As a consequence, as a means to secure the impact of the SRI seed financing, at least a fundamental sustained financial support should be provided.

As the analysis of the 2013-2016 period shows that much can be created with limited amounts, it can be concluded that much can be maintained with even smaller amounts – but much will be lost if things are completely discontinued.
