# ASSESSMENT REPORT FOR THE RESEARCH AREA TEXTILE AND FASHION

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#### 1. UNIT OF ASSESSMENT

The audit regarding the local evaluation of the doctoral education program took place at the University of Borås on April 11 and 12, 2024. The audit focused on the following domains: Textile and Fashion Design (TD), Textile Management (TM), and Textile Technology (TT).

This document ends with the section entitled DISCUSSION AND CONCLUSIVE EVALUATION containing the overall remarks, good points and points to be improved.

Moreover, the assessment report provides an analysis of the research domains and environment within the Department, focusing particularly on the alignment of research groups with the department's objectives, the strength of research-informed curriculum, and potential areas for improvement.

Regarding the material provided for the Textile and Fashion Research Area, we found it rather difficult to navigate; while 'Design', 'Management' and 'Technology' are clearly distinguishable terms, some terminology is frequently used across levels and areas. This means some of our comments may be misdirected. More importantly, this indicates that there is room for improvement in terms of communication with external stakeholders. To organize our responses, we drew up the Table 1 below – any errors are on our part.

Table 1. List of documents received

Textiles & Fashion Research Area		Documents received
		Strategy for Research and Doctoral Education (Nawar Kadi)
		Self-assessment Textiles and Fashion Research Area (Clemens Thornquist)  'Rapport' – bibliometrics (Kristofer Warnberg)  Staff list PhD thesis list T&M Publications list External funding list
Research group A	Design (Textile and Fashion Design)	
A1 topic	Fashion design	
A2 topic	Textile design	No documents
A3 topic	Textile interaction design	
Research group B	Textile Management	

B1	Marketing, fashion & sustainable consumption	Research plan for marketing, fashion and sustainable consumption (2022)
B2	Management of B2B relations	
В3	Textile value chain management	Research plan TVCM (2022)
Research group C	Textile Technology	Department Textile Technology
C1	Advanced textile structures	(no name)
C2	Polymeric e-textiles	
С3	Textile material technology	
C4	Textile & wearable sensing for P-health	

#### 2. PROFILE OF THE UNIT OF ASSESSMENT

Although textile technology and management at different scales are important areas of the Swedish School of Textiles, it is important to note that fashion design and artistic research-based activities, including PhD theses in this area, are prioritized by the school. The school holds a unique position in Sweden and the Nordic countries, and to some extent, on a global level, encompassing both textile technology and design research topics.

The relative weakness is that the school does not appear to collaborate with existing social sciences and humanities disciplines that exist in other parts of the University. Nevertheless, it has strength in its long-standing and diverse relationships with other academic institutions, and these could be activated to develop focused programmes across disciplinary specialisms. Such efforts would complement the school unique vertical 'textile fibre to final product' production chain offer, and allow the 'for design, through design' ethos of the Textiles and Fashion research area to be extended meaningfully via design anthropological approaches – into design.

In the document *Strategy for Research and Doctoral Education*, Textile and Fashion is referred to as a prioritized research area by Professor Nawar Kadi, but it is not clear if this is a prioritized research area as a whole, or for the Textile and Fashion Design research groups within it (please see profile section below). Even though, textile is a prioritized research area as at least half doctoral students receive funding from the university.

The Department administration houses staff members not directly associated with the textiles and management research groups, which raises questions regarding their alignment with the department's focus areas.

The research activities at the Swedish School of Textiles are structured into three main well-balanced domains: Design (TD), Textile Management (TM), and Textile Technology (TT) each with a substantial number of members. These domains align with the student profile and the taught curriculum, suggesting strength in research-informed teaching.

Each domain contains research groups that seem to be autonomous in their activities and the collegial structures are not well developed to promote decision-making at a higher level. The groups enjoy a lot of autonomy, but the coordination is missing amongst them. The research coordination at the school level seems weak.

The profile of the school is very broad, which is also highlighted as their distinguishing characteristic. This is an advantage, rightly highlighted, which should be cherished. That said, there is an imbalance and only one out of the eight research groups is in design.

It seems that the Textile and Fashion research group differs from the other two domains in its naming structure and may not require the additional layer under 'Design'. Rather 'Textile & Fashion Design' could be the research group title, with three distinct sub-groups below it.

However, the Design department (with Professor Clemens Thornquist as a Head) maintains a tight connection between research and education at the department by keeping the research in one united group (although the research has three branches: fashion textile design and interaction design). It's a matter of keeping a critical mass and cooperation between the researchers.

There are some discrepancies on the publicly available website Prof Thornquist is named in the review documents as a leader of Textile and Fashion design with Prof Dumitrescu, he is missing from the website profile. Statements made on the website regarding the different research areas are very helpful, and we particularly like the articulation of the approach by Textiles and Fashion Design: "Research in Textiles and Fashion Design is focused on deepening the understanding of the interaction between analysis and synthesis in the design process, theoretically as well as practically. It forms a basis for developing design methodology, design technology, and design programmes, which requires a practice-based approach; for design, through design".

A further comment here concerns the visibility of practice research outputs. Both in the reports provided and on the DiVA research portal, images tend to take a back seat to text. This is entirely comparable with other organisations. Given its strengths in artistic research, there is an **opportunity here for The Swedish School of Textiles to lead the field in practice research through a redesign of the portal to forefront practice outputs.** This may be a matter of navigation architecture rather than additional media files.

It looks like the school has reached its vision to become a top ranked international textile university in textile and fashion education. Both international ranking lists (for cited researchers), branch organizations international top-ranking lists for education, and other universities willingness to collaborate show a comprehensive education environment that also attracts students, researchers and educators.

There are some dominant voices at the leadership level, aligned with normative innovation values; the school offers far more than this and it would be good to see a culture of listening so that others are also heard and supported. While individual stellar researchers are a good thing to have, unification of the area seems to be compromised by this (this may also be a function of a lack of actual power at the research leadership level or at the level of faculty and collegial structures).

The 2018 creation of Research Groups (RG) plans was referred to in passing as a 'paper exercise'. This sentiment appears to have subsided, but more work is needed to support struggling groups. Some leadership is necessary as well as ground-up leadership by RG leads (i.e. invite a meaningful dialogue – collegial governance structures).

#### 3. RESEARCH ENVIRONMENT

The environment for PhD students, postdoctoral researchers, and other academic staff is excellent in terms of working conditions, equipment, and remuneration policy. The Swedish School of Textiles offers pleasant and comfortable conditions for work and studies. The research is well developed with a well-balanced organization of groups, even

though there is only one design group compared to three in management and four in technology.

The investments made are significant, both in improving existing labs and in creating new labs, including the new Fiber Centre.

The deliberate support of newly hired academics with extra research time is excellent. However, the rolling together of 'competence development time with research time in the standard 20% available to researchers means research is unsustainable.

Research Group (RG) leads appear to be responsible for researcher development, but no formal framework was articulated within the interviews. There may be others, but this might be of interest: https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-development-framework. This responsibility on the shoulders of the RG leads is too important, especially given the lack of control over budgets and decision-making powers (e.g. on hiring, time management,) that RG leaders have and could be effectively centralized at a higher level.

The research environment has signs of both a high-quality segment at the forefront, but also many researchers (senior lecturers) who are not actively involved in research activities, but whose time is entirely taken up by teaching (and administration). This is not unusual in Sweden (and elsewhere), and it is of course beyond the influence of research group leaders, but it is still something that should be noted.

The Textile Technology Group has secured significant funding for equipment and research, primarily from TEKO (funding is received from the foundation for Swedish textile research which is governed by TEKO). While this funding has facilitated the acquisition of necessary laboratory equipment, there may be concerns regarding over-reliance on a single funding source. Diversification of funding streams should be considered to ensure sustainability and reduce dependency on external sources. Moreover, there is a need to assess how teaching income can contribute to funding research activities within the group.

It would be good to understand how cross-fertilisation and provocation are enabled between the different focused communities of practice. There may be an opportunity here for high-level discussion on the different value systems at play, and critically reflexive development of approaches to "sustainable societal and environmental impacts". Cross-cutting discourse will strengthen narratives of situated technical benefits, and there is an opportunity to consider diverse theories of change as relevant to each group, and to the research area as a whole.

At the PhD level this appeared to be quite mixed and to some extent depend on individual personalities. However, the 80% / 20% model of research and work, and the employment environment, seems to be working against rather than with a stated desire for this. Some individuals felt that exploring other areas would be extra work, and were concerned about relevance, while some actively sought out seminars and defences to attend and learn more about other methodologies. In all cases, enhanced transparency and communication was cited as an opportunity so that research students do not have work hard to find interesting opportunities. At the same time, many examples were given of School level activity that actively supports the PhD community and academic curiosity, including international conferences and symposia (with presentation opportunities), industry led events, public sector conferences, and an annual career day. There was some confusion (not only with PhD students) about the relationships with centres and hubs such as Teko, DoTank and the Centre of Smart Textiles, and this could be made more transparent for relevant audiences. For some PhD students, anything other than 'pure' research time seems to be cast as something to be resented, whereas it is part of the reality of doing research anywhere perhaps some work on re-framing this type of activity could be undertaken (e.g. managing budgets). The 100 hours of supervision team time is recognizable but seems to be conflated

by many as contact meeting time only. It sounds like some staff are working over hours in meeting students weekly, while others reported long periods without supervision (up to 6 months) – this is problematic for the individuals concerned, and not equitable. The make-up of supervision teams sounds very healthy, with different research groups and departments and other in the same teams. Line management appears to be confused across human resources and research.

Student researchers can take credit bearing courses at other higher education institutions, although processes for identifying them seems to be haphazard. Funding is available for students accepted to present at conferences – there is a question about whether a maximum amount to be applied for per year might be an alternative model ("doktorandpott"), but this did not seem to be well received. The funding mechanisms could be made more transparent through, for example, the PhD handbook. The flexibility of the 80% / 20% model of employment is welcomed by PhD students, but there is inconsistency across teams with regards its application and transparency – Individual Study Plans (ISPs) do not appear to be effectively used. There appears to be a lack of awareness of the flexibility regarding the planning of their institutional duties and more predictability was called for, but also opportunities for changing from e.g. 80% / 20% to 90% / 10% or other combinations. The question was raised whether international PhD students should be able to use institutional time for attending Swedish classes.

## PhD students in Textile Management would welcome more opportunities for working with industry.

One of the strengths of the Design research at The Swedish School of Textiles has been its contribution to methodological development in the field. Such innovations in interdisciplinary enquiry, practice research methodologies, tools development and the development and definition of vocabularies, provides a rich ground from which to explore systems of value of research outcomes.

With regards lab support, the role of experienced technicians cannot be overstated. There has been investment at the Swedish School of Textiles in the knitting and weaving and research labs, but critical needs have been identified to sustain the high quality of work being supported. Different ad-hoc funding structures across the equipment and labs looks like a weakness in that strategy for the future is necessary, but the situation seems to have emerged from flexibility and the ability generate external investments, and to see and act on unexpected opportunities. Where possible, strategic action should now be taken to secure the future of labs, equipment and technical expertise where there is precarity, alongside the investment plans for a new co-lab and VR (virtual reality) lab.

**It is not clear from documents provided what the timescales are for future investment – ambitious plans and activities** such as the creation of the fibre lab, and the development of a custom warp knitting machine, are at once ambitious and feasible given the symbiotic links with industry. There is no investment plan for prioritized equipment (infrastructure plan). It seems how this is decided "ad hoc". A plan could provide better transparency and include research members more effectively in the decision-making process.

Diverse approaches to research and knowledge are well understood as a matter of course at the Swedish School of Textiles and are actively supported. The structures in place to involve all stakeholders in the development of new technical areas and updates in technology and technician expertise is exemplary and exciting. The support for exploratory and speculative materially-driven enquiry is to be envied – and perhaps claimed more explicitly as a strategic approach to the research culture. It was heartening to hear that industry demand is not prioritized over academic artistic research. Deliberate action has been taken to make technical spaces less intimidating for students and researchers to be engaged with and this seems to be working well. Workshop inductions can be transferred.

Some senior researchers find it hard to book in time in workshops as they are very busy, but there also seems to be a culture of less formalized approaches that can sometimes complement the main labs.

The number of technicians is high, with clear job descriptions and structures for supporting all kinds of research as well as teaching. Technicians seem to work very well across their skillsets as well as in their specialisms, and technician costs are included in new equipment procurement processes. There is support for them to attend international trade events and inform and even lead planning.

Online learning and booking systems are in place for the labs through the VLE, Canvas.

Management (and staff) experience of models of funding with industry and other stakeholders is a strength and may be of consultancy value to other centres internationally.

Extensive and continued collaboration across European and international platforms provides a dynamic and relevant environment for researchers.

There seemed to be tension between a narrative of collaboration and an actual culture of individual research trajectories.

#### 4. PRODUCTIVITY AND IMPACT

Productivity is a strange term, but if we talk reported publications, then it appears that there is a good number. However, it's hard to know because very different traditions are united under the same research roof. There is relevant media presence and reports of other forms of impact that appear in line with the respective conditions and interests of each group and the school in general.

The number of 41 doctoral students who have successfully defended their dissertations in textiles and fashion is significant considering the size of the school, although it may seem low for the period concerned. The current number of 26 doctoral students is very promising. It is noteworthy that there are ten PhD students currently in the Design group, which is impressive considering there are seven other groups with a total of 16 PhD students. The school's effort is also evident in terms of the number of internally funded PhD students in this group. A relative risk can be identified in the ratio between externally and internally funded PhD students. The situation differs significantly in other similar research organizations in Europe and worldwide, where the number of externally funded PhD students is much larger compared to internally funded ones. This may be attributed to the strong support from the city of Boras, which unfortunately ceased in 2022.

The scientific output is rather good, with a total number of publications when compared with the number of PhD students. It is important to note that the scientific outputs of design students are not typically found in "Web of Science" journals but rather in the form of exhibitions, etc.

Analysis of citations and outputs highlights areas with minimal activity, indicating the need for a more targeted approach to research allocation and resource utilization. The department's self-reflection indicates aspirations to become a top textiles and fashion school. However, there is a lack of clarity on how to achieve this status, particularly regarding the integration of design and fashion elements into the research agenda. The cessation of funding streams for design further exacerbates this challenge.

The track record here is excellent, and it is to be hoped that will support future applications as well. The future of artistic design PhDs is noted as being an area of concern, and we agree that a strategy of joint funding and supervision will be helpful here. Including alumni on the research profile pages, and tracking the societal impact of such artistic training will be helpful in the longer term. On the other hand, the management and technical areas could also build PhD numbers to support the financial outlook for the area.

Metrics for creative outputs are also a recognized issue. The Swedish School of Textiles generates a large amount of high-quality work of this type, and already supports dissemination through attractively produced PhD theses. Ongoing international discourse on this could be proactively engaged with and alternative forms of visibility (see comment above in profile) and indicators of esteem can be gathered and tested (for example, how are other national research audits assessing such work?). At the same time, practice research does not preclude standard publication activity and it would be helpful to see a comparative table for Design alongside Management and Technology citations. When we search for Design scholars' h-index online, it appears that some have not set up profiles that would generate this metric. This could be encouraged alongside open discussions on how to value practice outputs on their own terms. In the UK, the periodic national Research Excellence Framework invites portfolio submissions for review to deal with this. Some institutions use an internal graphic designer to collate ongoing academic practitioner work in a way that validates it and communicates internally as well as externally. The list of twenty funded projects in the Management area is very impressive; a slight weakness occurs in the imbalance of publications across the sub-groups - management of B2B is not available to us, and Marketing seems to be struggling, while Textile Value Chain Management plans are detailed and show a strong trajectory of funding, supervision and publication. The plan for Technology is similarly strong.

To pick up the CTF journal sounds like an interesting idea and could be a way forward to share new knowledge. Also to test ways of building a stronger community, test ways of sharing and developing the artistic research field (within textile and fashion) on an international level. A digital platform could cater for a merge of scientific articles and with a "digital gallery" showing the more visual/tactile works and projects. This would also be a first attempt for art and science to find its way back to each other. Many projects do have both aspects already today, still it is much about what angle and context we chose to give, share and present. Exiting!

Some researchers in the Design RG do not seem to have an ORCID identifier, which would in turn flow through to other internationally recognized metric systems, including the h-index. Some spoke about ResearchGate as if this is where a reliable system for dissemination, but neither this nor Acdemia.edu should be relied upon as a replacement for ORCID. Google Scholar profiles would also be helpful. Visuals could be included in audit exercises like this one, as well as placed front and centre on the website as knowledge outputs; practice is well understood within the Design RG but is not effectively disseminated with the outside world. I suggest two helpful sources to inform future approaches:

an Erasmus+ project, Docs4Design (https://research.tudelft.nl/en/publications/phd-in-design-a-map-and-glossary), and a meta review of practice research undertaken in the UK in 2021 (Bulley, J. and Şahin, Ö. (2021). Practice Research - Report 1: What is practice research? and Report 2: How can practice research be shared? Practice Research Advisory Group UK (PRAG-UK), London. https://doi.org/10.23636/1347.

Downloads available from: https://www.jamesbulley.com/practice-research-in-england-reports-2021/).

Some identifiable publication venues for Design have ended in the past few years, including NORDES research journal and Ambience. It is noticeable that design RG members are publishing more widely now however, which should be positive for index scores.

#### 5. COLLABORATION

A strong and sustained culture of collaboration among different groups could be better developed and encouraged. For instance, multidisciplinary projects involving researchers with complementary, yet different expertise and know-how should be

**developed.** One of the great achievements consists of obtaining permission to deliver doctoral degrees on an artistic basis and in general. Another strength of the TM and TT research groups is their capacity to obtain external funding, which is much more difficult for the TD research group. It should be better supported in terms of scholarships for PhD students.

Collaborations at the national Swedish, European, and international levels are good considering the number of staff and the size of the school. Extensive and continued collaboration across European and international platforms provides a dynamic and relevant environment for researchers.

However, there is room for improvement in collaborations with Asian and North American universities and associations (such as the Fiber Society, Japan Fiber Society, and Chinese universities).

As the industry is an important source for funding, collaborations should be established even if they do not yield publications. Sometimes, it is not optimal for researchers' carriers to prioritize industry collaboration/cooperation.

The different management, research and student groups own opinion is that there is good cooperation with industry today, and very good relations with local actors.

Several meeting points are already today created for students and staff to meet and connect with industry. Both, during research projects and funding, and in education through different event days, by established internships, support and engagement for competitions and inviting industry to be a part of the educational boards etc.

The forms of cooperation obviously look different for the different specializations, Design, Management and Technology. From technology is shared that the industrial developments preformed in the workshops is seen more as product development rather than research (Nawar Kadi). Engineering PhD students see their PhD diploma and education as something that makes it more difficult for them to work in industry (in Sweden), because that they think the industry see them as over educated. In other EU countries (France...), the industry wants and need higher educated students and PhD's get employed in industry. PhD students lift a wish to work more together over design, management and technology and become "a part of a research environment", they also share curiosity and interest for methodology in design (from technology and management). To be clear about wished peaks of excellence, and prioritized areas, a solid foundation and guidance could help both students, teachers and researchers to gain collective strength.

Technicians at the school have a high demand from industry, that are willing to come and work in the workshops. It is a bit unclear what is Borås science park/smart textile and how the collaboration takes place. They (technicians and research leaders?) are strict with what project to pick, they do not "produce" for industry/commercial needs, rather they pick development and prototyping projects. The time for industrial projects (20% - 30%) is adjusted to educational levels. The PhD students can work on the advanced machines on their own (depending on project and skills to run machines on their own, but during office hours).

A lack of clarity on Intellectual Properties and patent (for technicians, researchers, and students) as technicians often develop the researchers' projects together with researchers, the technician holds the insights to technical solutions, is the ownership/way of working clear for technician and researcher/student?

Overall, technicians feel well supported with latest technology (by going to ITMA etc.) and by working closely with industry. Most technicians have been working in industry before joining THS, and a long-term plan for how to secure competence in the labs/different techniques is lifted. Technician experience is that it is a long process in industry, the rhythm

in academy and industry is different how/when to meet in good vibes? Good examples could be shared and developed.

There are numerous collaborations with civil society organizations, non-profits, or the public sector currently happening at the school. However, these are less visible than industry collaborations. Their value is on part with industry collaboration and needs to be emphasized on the same level.

#### 6. CONNECTION BETWEEN RESEARCH AND EDUCATION

In the summary on page 3 of the Textile University, University of Borås, Strategy for Research and Doctoral Education in Fashion and Textiles (ref. 375-23), it is stated that... The Swedish School of Textiles holds national responsibility for both advancing the artistic perspective and fostering cross-disciplinary collaboration between art and science. While a significant amount of quantitative data is presented to support this, there is an opportunity to achieve greater balance by incorporating qualitative insights. Sharing unique qualitative and practical design examples can convey new expressions, knowledge, and demonstrate how artistic research can be effectively communicated, understood, and advanced within research, education, and community contexts. This is important for positioning the discipline as both relatively new and interconnected with other emerging and traditional fields, thereby paving the way for future developments.

Furthermore, it is important to explore ways to enhance the dissemination, communication, motivation, and validation of "high artistic productivity in design." This effort holds potential to engage the international design research community and foster connections that inspire professionals in the textile and fashion industry. Additionally, there should be continued efforts to forge collaborations with various disciplines, such as art curation, textile and fashion history, archaeology, gaming, costume and interior design, industrial design, product development, scenography, and material science. These collaborations are essential for pushing boundaries and generating innovative ideas.

The need for increased funding for artistic research is emphasized. A strategic approach to securing additional funding could involve evaluating the current research funding infrastructure and identifying key external stakeholders to address larger research questions that merit greater financial support. Establishing thematic multidisciplinary communities through basic research, akin to past successes like the fusion of IT and textiles, can be instrumental. Presently, such communities might revolve around themes such as AI and textiles (encompassing fashion, textile, management, and technology) to foster connections and align efforts with broader societal and industrial goals.

Embracing novel collaboration models and constantly seeking to push boundaries will help maintain a sense of freshness and innovation in the field, thereby mitigating the risk of stagnation. It is essential to adopt a global outlook while retaining a grounded understanding of local contexts and needs.

#### 7. DEVELOPMENT AND STRATEGY

This chapter is less developed than the previous ones. The development strategy is outlined in the form of "to do" lists covering areas such as the environment, doctoral education, communication, collaborations, external funding, and briefly presenting the risks and challenges. However, during the audit on April 11 and 12 2024, following goals have been announced by Professor Kadi.

- Increase the number of PhD students from 30 to 45 (15 for each research domain: Design, management and Textile technology).
- Increase the research activities « turnover » from 2 millions euro to 3 millions euro.
- Recruit the additional research and teaching staff.

The strategies suggested appears as reasonable and adequate. Some points are too unspecific to be meaningful, e.g. Under Communication (5.3): "continue the discussion and collaboration" or "Encourage the researcher to use social media to communicate their research work". Our suggestion would be to first establish if there even is a need to do something different or more in this domain and if this is the case to develop a coherent strategy together with the university's dedicated communications and PR department.

Under collaborations (5.4): all seems good and obvious, but what is lacking is establishing collaborations (or at least attempting to) with other research groups and areas at the university.

It may be concluded that the strategy aims to improve the quality of the research environment, develop projects among groups (co-supervisions), establish joint doctoral degrees with partner universities, and secure artistic and design research. These objectives are particularly well defined and sound. A positive initiative is focused on increasing external funding for new PhD students, indicating the current weakness of the School of Textiles.

Expanding EU funding through an increased number of applications and creating a unit dedicated to assisting researchers with their EU applications could also be very beneficial.

The department's strategy emphasizes covering the entire pipeline from fibre to finished product, positioning it uniquely nationally and regionally.

Nevertheless, inconsistencies in terminology and the presence of multiple research groups may lead to confusion. The overarching narrative of growth might not be the best model for all parts of the school's research. There is a need for consolidation and clearer communication of the department's strategic vision, including a focus on sustainability and digitization. Additionally, the strategy document should articulate specific goals and pathways for achieving them, rather than generic statements. In some cases, improving quality cannot be achieved by increasing quantity, but it requires consolidation and stability at a slower pace. The strategy needs to clarify an aim that goes beyond quantifiable criteria. From the interviews, it seems that only a minority of academic staff have 50% research and 50% teaching time. Either way, such models require significant financial modelling to make informed strategic decisions. If academics are then not producing research activity when they do have research time, then there is human resources or development issue.

The list of activities and objectives in this section is extensive and appears to mix "low hanging fruit" with far more substantial aims within each of the headings. How are decisions to be made about the resource needed to tackle each of these (academic time, internal funding etc.)? Have timescales been scoped for each of them, and are there critical dependencies amongst them?

Within Management, the TVCM (Textile Value Chain Management) group presents a well-considered strategic plan with a clear track record of generating external funding, outputs and impact and seems to make a good business case for additional academic staff to support courses and supervision, and support for a digital infrastructure to support future work. We also agree that the Marketing group would benefit from some strategic leadership and an injection of PhD students. Research outputs are being generated by one or two very active members who seem to have additional responsibilities, and this could be evened up. Directed support for academics to develop their networks with the aim of attracting EU Doctoral Training Partnership funding would be beneficial.

The Technology area would be well supported to grow through in increase in lab space and dedicated technical support. Technical support across the groups is also encouraged.

Design does not seem to be split out in the same way, so it is hard to say what the strategy should be. However, we suggest adding to 5.1 an objective regarding processes for evaluation and championing of practice research (as per our earlier comments).

#### 8. DISCUSSION AND CONCLUSIVE EVALUATION

Several key areas require attention within the department:

- Strengthening the connection between teaching and research to ensure a cohesive academic environment.
- Mitigating over-reliance on a small number of researchers and funding sources by diversifying both.
- Addressing the fit and interplay between different research groups, particularly in integrating design elements.
- Streamlining communication and strategic vision to foster clarity and alignment.
- Exploring alternative solutions beyond the pipeline of PhD students to enhance research output and impact, for instance include more Postdoc researchers.
- Given its strengths in artistic research, The Swedish School of Textiles should lead the field in practice research through a redesign of the portal to forefront practice outputs.
- Some researchers in the Design research group do not seem to have an ORCID identifier, which would in turn flow through to other internationally recognized metric systems, including the h-index.

In conclusion, while the department exhibits strengths in research groups and a clear focus on applied research, there are areas for improvement in resource allocation, strategic communication, and integration of design elements. By addressing these areas, the department can enhance its position as a leading institution in textiles and fashion research and education.

#### **Strong points:**

- Excellent research infrastructure in terms of equipment, staff, and remuneration policy.
- Very good scientific outputs, with a particular emphasis on incorporating design and artistic results.
- Very good cohesion among researchers and other school staff.
- Good collaborations with the textile industry at local and international levels and with academic partners internationally.
- Excellent work conditions.

#### Points to be improved:

- Establish collegial structures that shift some of the decision-making powers from line-management to faculty and research leadership.
- Improve collaboration among research groups.
- Increase the number of EU research collaborative projects.
- Investigate opportunities for collaboration with other researchers and research groups at the university beyond the school of textiles.
- Improve website and online presence (Enable researchers to maintain their own and their projects research profiles, particularly for design research).