



Evaluation Design and Plan

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Authors	Dr Joe Cullen (TIG), Dr Kerstin Junge (TIG)
Reviewers	Frederique Thureau (TCBL); Sabrina Francon (MAKE); Marion Real (REDU)
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Executive Summary

Background and context to this Deliverable

- This document is the first Deliverable D5.1 of shemakes.eu WP5 Evaluation and Impact assessment. It **aims to develop the approach, methodology and toolkit** for the evaluation of shemakes.eu.
- **shemakes.eu.eu aims to contribute to gender equality in the T&C sector** (and manufacturing more widely) by creating an opportunity ecosystem combining two innovative networks (TCBL Foundation and Fabricademy) and implementing three types of interventions (learning paths, innovation services and reputation management) to tackle stereotypes and create new opportunities for women in T&C.

Evaluation approach for shemakes.eu

- The project is accompanied by a process, outcome and impact evaluation. These evaluation modes support project development, learning, accountability and the generation of knowledge from project implementation.
- We have chosen a **theory-based evaluation design** to underpin the shemakes.eu evaluation as it allows us to both assess the implementation theory of the project and an investigation of what was achieved, why and in what context – hence meeting the learning and knowledge objectives of the evaluation. Moreover, an experimental counterfactual evaluation at project level is methodologically extremely difficult not the least because in a project as complex and long as shemakes.eu it is not possible to control the intervening variables that could influence outcomes.
- At the centre of the shemakes.eu evaluation approach is **gender responsive evaluation**. This is an approach recommended for interventions focusing on gender as it pays particular attention to the extent to which a project or programme has addressed gender and power relationships. Requirements for implementing gender responsive evaluation have been built into the shemakes.eu evaluation design and methodological implementation, among others by: crafting evaluation questions focusing on gender equality; appropriate gender break-down of output indicators and key performance indicators (KPIs); mix of quantitative (surveys) and qualitative methods (case studies, the latter implemented in a way that pays attention to the power dimension of researcher / 'researchee'; participative moments; and a focus



on context in particular at case study level and also for the development of the project's theory of change as a whole (see below).

- In addition, the evaluation draws on four other concepts in order to shape how it is implemented – each matching different aspects of the project.
Participatory evaluation not only links up with requirements of gender responsive evaluation but mirrors the shemakes.eu design thinking orientation. It is implemented by engaging with project partners in some of the conceptual (e.g. theory of change) and practical (e.g. data collection) aspects of the evaluation, choice of research methods and involving stakeholders in sense-making on evaluation data towards the end of the project. Literature on **complex innovation ecosystems** and their evaluation highlights, among others, the dynamic nature of innovation ecosystems and the need to consider trade-offs and highlights the importance of participation, diversity (of data and stakeholders) and inclusion. Practically, it has been used to think about the types of case studies that will be implemented for the evaluation, which are all focused on dynamic interactions between different parts of the shemakes.eu ecosystem in different contexts, as well as the kinds of ecosystem mapping activities we will need to implement with the help of social network analysis. **Large scale change** is a strategy for working towards a fundamentally different future which focuses on distributed leadership and mobilising local actions to affect larger change. This is aligned with the shemakes.eu change approach, and highlights the importance of in-depth 'local' case studies for the evaluation. Finally, **theory of change** is the practical tool that underpins the shemakes.eu theory based evaluation design, articulating both iterations of the implementation theory during project implementation (supporting learning and development) and creating the basis for the impact evaluation using Contribution Analysis (see below).

Evaluation methodology

- In alignment with the approaches underpinning the shemakes.eu evaluation, process, outcome and impact evaluation are implemented with both quantitative and qualitative methods and using a participatory ethos.
- The **shemakes.eu process evaluation** collects output and key performance indicators to analyse progress against plan and towards results respectively. They support the accountability and learning purposes of the evaluation, and together with the periodic partner survey can provide a tool for collective reflection and potential improvements of implementation. Ecosystems



mapping using social network analysis and theory of change iterations provide data on how the shemakes.eu system evolves over time.

- At the core of the shemakes.eu **outcome evaluation** are two sets of methods aimed to capture immediate and intermediate outcomes achieved by shemakes.eu activities via the three learning paths implemented by WP 2 of the shemakes.eu project (Curiosity, aiming at girls 8–18, Discover, aiming at young women 18–25; and Innovation, aimed at women 25 years and over). First, it will use data collected on participants' outcomes by WP2 to analyse results achieved. Second, it will implement 12 in-depth qualitative case studies focusing on the interplay of different actors and activities in different contexts of the shemakes.eu ecosystem. It is envisaged that two of these cases will be longitudinal with two rounds of data collection (year 1 and year 2 of project implementation).
- Finally, the **shemakes.eu impact evaluation** consists of a retrospective participant survey aimed at all stakeholders involved in shemakes.eu activities and, subject to feasibility assessment in year 1 of the project with shemakes.eu partners, may include quasi experimental comparison of shemakes.eu outcomes among school aged children in year 2. A cost consequence analysis will aim to come to a judgement of the economic impact of the project. Contribution Analysis will be used to implement the counterfactual analysis by using a set of mechanisms to construct the shemakes.eu contribution story.



Table of Contents

EXECUTIVE SUMMARY	3
TABLE OF CONTENTS	6
LIST OF TABLES.....	8
LIST OF FIGURES.....	8
1. INTRODUCTION.....	9
2. SHEMAKES IN CONTEXT	11
2.1 SOME GENDER EQUALITY CHALLENGES IN SOCIETY AND T&C SECTOR	11
2.2 EU GENDER EQUALITY GOALS.....	14
3. THE SHEMAKES.EU THEORY OF CHANGE.....	16
3.1 ABOUT THEORY OF CHANGE	16
3.2 SHEMAKES.EU THEORY OF CHANGE	16
4. SHEMAKES.EU EVALUATION APPROACH	22
4.1 GENDER RESPONSIVE EVALUATION.....	22
4.2 PARTICIPATORY EVALUATION.....	26
4.3 (COMPLEX) INNOVATION ECOSYSTEMS	27
4.4 LARGE SCALE CHANGE	31
4.5 THEORY OF CHANGE.....	32
4.6 CONCLUDING SUMMARY	34
5. EVALUATION METHODOLOGY.....	36
5.1 SHEMAKES.EU EVALUATION MODES AND QUESTIONS	36
5.2 PROCESS EVALUATION	38
5.2.1 <i>shemakes.eu process dashboard</i>	38
5.2.2 <i>shemakes.eu core output indicators</i>	39
5.2.3 <i>shemakes.eu key performance indicators (KPIs)</i>	41
5.2.4 <i>Partner surveys</i>	43
5.2.5 <i>Mapping the evolving shemakes.eu ecosystem</i>	43
5.2.6 <i>Theory of change iterations</i>	45



5.3 OUTCOME EVALUATION	46
<i>5.3.1 Capturing outcomes from participants in the learning paths</i>	<i>47</i>
<i>5.3.2 Case studies.....</i>	<i>47</i>
5.4 IMPACT EVALUATION	50
<i>5.4.1 Quasi-experimental comparison.....</i>	<i>50</i>
<i>5.4.2 Retrospective participant survey.....</i>	<i>52</i>
<i>5.4.3 Cost consequence analysis.....</i>	<i>53</i>
<i>5.4.4 Counterfactual analysis using contribution analysis.....</i>	<i>55</i>
<i>5.4.5 Participatory sense-making workshop.....</i>	<i>59</i>
6. EVALUATION TIMETABLE	60
7. CONCLUDING SUMMARY	61
8. DOCUMENT INFORMATION.....	63
9. REFERENCES	65
10. ANNEX 1: THEORY OF CHANGE DIAGRAM (LONG).....	69
11. ANNEX 2: EVALUATION TOOLKIT (V1).....	70
PROCESS EVALUATION TOOLS.....	70
<i>Process dashboard.....</i>	<i>70</i>
<i>Website pop-up survey (draft questions)</i>	<i>71</i>
<i>Partner survey questionnaire.....</i>	<i>72</i>
OUTCOME EVALUATION TOOLS.....	79
<i>Outline questions for individual women participants – assuming a narrative interviewing method.....</i>	<i>79</i>
<i>Outline topic for semi-structured interviews with organisations.....</i>	<i>80</i>
IMPACT EVALUATION TOOLS.....	81
<i>Contribution analysis: mechanisms table</i>	<i>81</i>
<i>Contribution analysis: alternative mechanisms table</i>	<i>82</i>



List of Tables

Table 1: EU gender equality goals with particular relevance for shemakes.eu	15
Table 2: Requirements of gender responsive evaluation and implications for shemakes.eu evaluation design.....	26
Table 3: Participatory evaluation in shemakes.eu.....	27
Table 4: Summary of key implications of theoretical approaches underpinning the shemakes.eu evaluation design.....	35
Table 5: shemakes.eu core output indicators.....	41
Table 6: shemakes.eu KPIs	43
Table 7: Stages in CCA.....	55

List of Figures

Figure 1: T&C gender gap and the impact of shemakes.eu	19
Figure 2: shemakes.eu Theory of Change.....	20
Figure 3: shemakes.eu evaluation pillars	22
Figure 4: Illustration of the innovation ecosystem definition (amended).....	29
Figure 5: The Connection between CSFs, Outcomes, KRIs and KPIs	42
Figure 6: Social network based on the conversations held between different types of participants at #TCBL_2018.....	45
Figure 7: Types of case studies and estimated numbers	49



1. Introduction

This is the first Deliverable of WP5 (D5.1) Evaluation and Impact Assessment of the shemakes.eu project. The purpose of D5.1 is to set out the evaluation conceptual framework, evaluation design and implementation plan. It also includes an initial Evaluation Toolkit incorporating data collection/analysis tools which will be updated and expanded as the evaluation progresses.

shemakes.eu.eu aims to develop an ecosystem in which life and job opportunities are based on traditional occupations that, however, are re-thought to use technological knowledge and sustainable manufacturing in order to increase their positive impact on society and the economy. This involves building a bridge between traditional handcrafts, digital technologies and 21st Century skills that is crucial to disrupt stereotypes and create new opportunities within the textile field as a whole. Through shemakes.eu three intervention axes – Learning Paths, Innovation Services, and Reputation Management – the projects aim to bring about a change in public perception of textile work and the aspect of gender issues surrounding textiles.

Evaluation plays a central role in shemakes.eu, supporting both the Call focus and the vision and ambition of the project. The shemakes.eu evaluation encompasses:

- **Process Evaluation** to provide ongoing monitoring of project progress and feedback to the methodology's effectiveness in reaching desired outcomes;
- **Outcomes Evaluation** to assess how shemakes.eu contributed to changes in the awareness, knowledge and behaviours of participating individuals and organisations;
- **Impact Evaluation** to understand progress towards medium- and long-term impacts.

This Deliverable D5.1 sets out the high-level approach to meet these different evaluation dimensions, and specifies the detailed methodological implementation of this approach. It is structured as follows:

- **Chapter 2** sets the scene for the evaluation design by outlining some key features of the socio-economic context within which shemakes.eu is implemented.
- Against this background, **Chapter 3** presents the shemakes.eu theory of change as articulated at the beginning of the project by both project documentation and in the first theory of change workshop run by the shemakes.eu evaluation team in February 2021.



- **Chapter 4** then takes this information to develop an outline of the high-level evaluation approach adopted for shemakes.eu. It focuses on discussing the key theoretical and conceptual pillars on which the evaluation rests and discusses implications for evaluation design: gender responsive evaluation, participatory evaluation, innovation ecosystems, large scale change and theory of change.
- **Chapter 5** then presents the methodological implementation of this approach by articulating the data collection and analysis techniques that will be used to implement the shemakes.eu process, outcome and impact evaluations.
- **Chapter 6** provides a timetable for the evaluation implementation.
- **Chapter 7** concludes this deliverable with an overarching summary.

This Deliverable has been produced by drawing on a range of sources: a theory of change workshop with partners in February 2021; a review of peer reviewed and grey literature (e.g. policy documents and reports) on the issues of gender and the T&C sector as well as the conceptual constructs underpinning the evaluation; relevant deliverables due in month 3 in particular relating to WP2 and WP3; relevant reports and deliverables produced by the evaluation team for other projects (most notably the TCBL and Designscapes projects).¹

¹ TCBL (2016) D6.3 Evaluation approach (unpublished); TCBL (2019) D6.4.3 Final Evaluation Results (unpublished) ; Designscapes (2018) D2.1 Evaluation Framework (unpublished)



2. shemakes in context

Gender equality is an important value of the EU, and is enshrined in Article 8 of the Treaty on the Functioning of the European Union:

"in all its activities, the Union shall aim to eliminate inequalities, and to promote equality, between men and women."²

Yet, the field of gender equality in general, and related to the world of work and the Textiles and Clothing (T&C) sector more specifically, is full of contradictory dynamics.

2.1 Some gender equality challenges in society and T&C sector

Whilst much progress in reaching gender equality has been made over the last decades, in practice full parity has not (yet) been achieved and in some areas progress is reversing. Looking at the field of employment, for instance, since the 1970s, a number of EU directives have addressed matters such as equality in access to and treatment in employment and self-employment (Council Directive 76/207/EEC; Directive 2006/54/EC; Directive 2010/41/EU); parental leave (Council Directive 96/34/EC) and the right to request flexible working after parental leave (Directive 2010/18). Yet, women still have a lower employment rate than men across EU countries, are more likely to work part-time than men and are under-represented in certain roles and occupations.³ In the T&C sector, for instance, women represented nearly 71% of all employees⁴ and 81 per cent in Clothing where, however, women are

² European Commission (2020) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A union of Equality; Gender Equality Strategy 2020–2025, COM (2020) 152 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152>

³ <https://eige.europa.eu/gender-mainstreaming/policy-areas/employment> For instance, in 2012, only 11% working in craft and related trades workers were women, 17% of plant and machine operators or assemblers and 33% of managers were female.

⁴ Euratex (2020) Facts & Key Figures of the European Textile and Clothing Industry, p. 13 <https://euratex.eu/wp-content/uploads/EURATEX-Facts-Key-Figures-2020-LQ.pdf>

⁵ European Sector Skills Council Textile Clothing Leather Footwear (2014) Report 2014, p. I http://europeskillscouncil.t-c-l.eu/pdoc/22-eng/2014_report_F.pdf



working in particular as sewing machinists – a very low paid occupation⁶⁷ – whilst men tend to be found in the higher paid management roles.⁸

According to the European Institute for Gender Equality (EIGE), “(g)ender-based occupational segregation is linked to a number of factors, such as differences in knowledge, skills and abilities stemming from education and training; differences in household roles and the distribution of unpaid work; entry barriers and organisational culture and practices; gender identity, norms, attitudes and stereotypes.”⁹

Many of these factors also appear to play out in the field of education, another area of diverging trends. On the one hand, girls are more digitally literate than boys¹⁰, outperform boys at school, are less likely to leave school early and young women are more likely to have tertiary education.¹¹ On the other hand, the choice of study subjects remains gendered: 77% of graduates in education and training, 73% in health and welfare and 65% in the humanities are women as opposed to 28% in engineering, manufacturing and construction. Again, explanations are multi-faceted, and include grade expectations, not envisaging a future career using technology (pointing also to a failure of careers advice given to girls)¹² and experience of sexism and stereotyping: “Although heavily involved in STEM subjects at a younger age, I was discouraged by the sexism that surrounded me when I took part in competitions

⁶ European Sector Skills Council Textile Clothing Leather Footwear (2014) Report 2014, p. 38, http://europeskillscouncil.t-c-leu/pdoc/22-eng/2014_report_F.pdf

⁷ <https://www.unionlearn.org.uk/careers/sewing-machinists>. Interestingly, at this level the gender pay gap is reversed, with women earning more than men.

⁸ shemakes.eu theory of change workshop

⁹ <https://eige.europa.eu/gender-mainstreaming/policy-areas/employment>

¹⁰ European Commission (2020) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A union of Equality; Gender Equality Strategy 2020–2025, COM (2020) 152 final, p. 10 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152>

¹¹ <https://eige.europa.eu/gender-mainstreaming/policy-areas/education>; shemakes.eu theory of change workshop.

¹² shemakes.eu Theory of Change workshop.



and conventions".¹³ Lack of identifiable (female) role models¹⁴ and a lack of understanding how technology can help women and girls realise their objectives of making the world a better place (much more pronounced in men than in women) are further obstacles to choosing technology careers.¹⁵

The European Commission's gender equality strategy foregrounds stereotypes as the "root cause of gender inequality and affect all areas of society"¹⁶, and in this context also recognises the problem of intersectionality – where gender stereotypes combine with others around race, ethnic origin, belief, disability, class and others. Indeed, ethnographic studies exploring this issue in the field of STEM education at University level have shown the specific impacts of these intersecting disadvantages.¹⁷

All of this is relevant when thinking about women's (current and future) roles in the T&C sector in Europe where increased digitisation and focus on higher value-added products require these skills, and also require qualities often ascribed to women by an anticipated greater use of design, co-creation, innovation and creativity in the sector.^{18 19} Growing and inter-related societal and industry interest in sustainability,²⁰

¹³ PwC (2017) Women in Tech. Time to close the gender gap. Realising the potential of females to change the world, p. 6 , <https://www.pwc.co.uk/who-we-are/women-in-technology/time-to-close-the-gender-gap.html>

¹⁴ shemakes.eu Theory of Change workshop, February 2021

¹⁵ PwC (2017) Women in Tech. Time to close the gender gap. Realising the potential of females to change the world, p. 10 , <https://www.pwc.co.uk/who-we-are/women-in-technology/time-to-close-the-gender-gap.html>

¹⁶ European Commission (2020) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A union of Equality; Gender Equality Strategy 2020–2025, COM (2020) 152 final, p. 5, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152>

¹⁷ For instance: Chouinard, M (2016) Gender in STEM: An Intersectional and Interdisciplinary Feminist Ethnography, Honors College Theses, https://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1015&context=honors_theses

¹⁸ https://ec.europa.eu/growth/sectors/fashion/textiles-clothing/eu_en

¹⁹ International Labour Organisation (2019) The future of work in textiles, clothing, leather and footwear, Working Paper No.326, p. 26 https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_669355.pdf

²⁰ See, for instance: TCBL Deliverable D6.12 Final Evaluation Results (unpublished)



artisan skills²¹ and traditional textiles²² together with a sector that is dominated by micro and small sized enterprises suggest opportunities for women (also via self-employment) interested in pursuing jobs based on values and making a difference. However, once more stereotypes are one of the barriers female would-be entrepreneurs face, together with “less effective entrepreneurial networks” and other factors.²³

2.2 EU gender equality goals

Against the background of these, and other, remaining gender equality challenges, the European Commission’s 2020 gender equality strategy, covering a five-year period to 2025, sets out policy objectives and key actions for gender equality. Goals relevant to shemakes.eu are summarised in the box below. The next chapter then presents the shemakes.eu project in light of this context.

The EU gender equality strategy has six goals, with goals 1, 2, and 4 most relevant as a context for shemakes.eu.²⁴

- **Goal 1 covers violence against women and girls and challenging stereotypes.** The strategy acknowledges that “(g)ender stereotypes strongly contribute to the gender pay gap” (p. 5) and elaborates that “they are often combined with other stereotypes such as those based on race or ethnic origin, religion or belief, disability, age or sexual orientation, and this can reinforce stereotypes negative impacts.” (pp 5–6). Actions include inclusion of a gender dimension in the Commission White Paper on Artificial Intelligence and an EU wide communication campaign combatting gender stereotypes (p. 6).
- **Goal 2 covers a gender-equal economy.** Aims include: increasing women’s participation in the labour market (also those suffering multiple

²¹ <https://www.the-sustainable-fashion-collective.com/2016/07/19/designers-embracing-traditional-artisan-skills>

²² <https://www.perinoyarns.com/traditional-textiles-influence-fashion/>

²³ OECD (2015) Policy Brief on Women’s Entrepreneurship, p. 3,
<https://www.oecd.org/cfe/smes/Policy-Brief-on-Women-s-Entrepreneurship.pdf>

²⁴ Goal 3 seeks to achieve a gender balance in decision making and politics, focusing in particular on senior leadership roles in business and representation in politics. Goal 5 discusses the gender dimension of various EU funding mechanisms and instruments. Goal 6 looks at the EU’s external actions promoting gender equality globally.



disadvantages due to effects of the intersection of gender with other factors of disadvantage), improving work life balance to support this and supporting women's entrepreneurship. The strategy recognises that more women than men work in low-paid jobs and sectors, and in lower positions, a phenomenon which the strategy ascribes to contributing factors such as "discriminatory social norms and stereotypes about women's and men's skills, and the undervaluation of women's work" (p. 9). Against this background, this goal also includes measures to address the relatively low representation of women in ICT and STEM (p. 10) and those to address the gender pay gap. This includes the recent (March 2021) Commission proposal on pay transparency which sets out measures such as pay information for job seekers, a right to know the pay levels for workers doing the same work, as well as gender pay gap reporting obligations for big companies.²⁵

- **Goal 4 on gender mainstreaming** mentions, among others, the importance of women in shaping digitisation and announces that intersectionality of gender with other grounds of discrimination will be addressed across EU policy areas.

Table 1: EU gender equality goals with particular relevance for shemakes.eu

²⁵ Pay Transparency: Commission proposes measures to ensure equal pay for equal work, https://ec.europa.eu/commission/presscorner/detail/en/ip_21_881



3. The shemakes.eu theory of change

It is against this background that shemakes.eu is being implemented. This chapter sets out the project's theory of change as articulated in the DOA and by partners at the beginning of the project in early 2021. It is presented below both in narrative and diagrammatic form.

3.1 About theory of change

Theory of Change is a way of mapping the desired and expected 'change journey' of an intervention. It starts with a 'presenting problem', and a theory of what causes the problem and how it can be solved and ends with the expected change to the problem at the end of the project (the project's expected impacts). It does this by investigating the causal relationships between 'context-input-output-outcomes-impact' to understand the combination of factors that has led to the intended or unintended outcomes and impacts. Theory of change is one of the building blocks of the shemakes.eu evaluation approach, serving as the main tool guiding the practical implementation of the evaluation (this is outlined further in section 4.5). The section below therefore builds on the broad outline of some of the context challenges within which shemakes.eu is embedded and presents the first iteration of the shemakes.eu theory of change in both narrative and diagrammatic form.

3.2 shemakes.eu theory of change

The presenting problem and shemakes.eu solutions

Due to a combination of social factors there is a persistent gender gap in the labour market, one aspect of which – also in the T&C sector – is the over-representation of women in lower paying roles.

The project's overarching objective is to address this gender (pay) gap in the T&C sector (and manufacturing more widely) by increasing the value added of the low-paying activities in which women mostly work and challenging the stereotypes surrounding these roles. The central shemakes.eu' hypothesis is that re-thinking traditional occupations to include technological knowledge and sustainable manufacturing encourages new forms of open creativity, disrupts existing gender stereotypes about T&C roles and creates new opportunities for women in the T&C sector as a whole.



Inputs and activities

To this end, shemakes.eu brings together two innovation ecosystems that offer their specific ways of working to the project: Fabricademy and its transdisciplinary curriculum which focuses on the development of new technologies applied to the textiles sector; TCBL – a collaborative ecosystem, with a networked set of different labs operating under a common vision and being closely linked to their local communities , women and girls as well as businesses

Drawing on the experience and expertise of these two networks, shemakes.eu carries out three types of interlinked activities, described as strategic axes in the DOA:

- shemakes.eu develops **three Learning Paths** targeting girls and women of different ages providing them with technical knowledge, practical learning and soft skills as appropriate for the group. **Curiosity** engages 150 girls aged 8-18 in formal and informal activities designed and delivered in close collaboration with school and science museums and intended to build confidence and awareness change among those participating. **Discovery** works with both young women (target = 75 aged 18-25) and institutions (universities, fashion institutes and academies). The young women gain leading edge skills by being exposed to innovative practices; Institutions will embed Fabricademy modules into existing curricula. The **Innovation** pathway, finally, addresses 50 women aged 25 and up and focuses on job routes for women who have been through an alternative professional training and hence change the awareness among those participating about possibilities and opportunities. The curricula / modules delivered within these learning paths are developed bottom up with active participation of relevant individuals and organisations of the local community.
- The shemakes.eu **Innovation Services** raise the role of women as innovators within their local communities, open research networks and the T&C business community. **Community engagement** activities carry out a gap analysis of equal opportunities methods implemented by each shemakes.eu lab and develop replicable innovations in the form of open laboratories, workshops, seminars and co-created sessions to fill these gaps and increase gender awareness locally. Three **lab-to-lab projects** engaging 50 participants will be carried out to promote a more female oriented approach to science and technology research. Business engagement targets women with an entrepreneurial potential coming from the Fabricademy and TCBL networks and matches them with TCBL businesses or start-ups with a specific



innovation need. This activity is to lead to at least three start-up opportunities and three new business lines for existing companies.

- **Reputation management** aims to build a community of leading figures, role models and emergent ‘ambassadors’. The nine shemakes.eu **advisors** will contribute to round table interviews and the final conferences, participate in pitch sessions and be involved in testing job routes developed as part of the innovation pathway. The six shemakes.eu ‘**gurus**’ will be role models from within the project partnership leading the work on the learning paths and innovation services. Their role will be that of ‘knowledge transfer’ agents between different shemakes.eu settings. Ambassadors are women and girls who have participated in the learning pathway(s) or innovation services activities and demonstrate the capacity to emerge as leaders and ‘carry the message’ to their peers in other cultural and geographical contexts. Ambassadors are awarded a residency in one of the 12 transfer labs with the aim to develop a similar learning path or innovation service to the one they participated in, and hence supporting the spread of shemakes.eu innovations across the ecosystem.

These three sets of activities are underpinned by the development of a gender and innovation vision for shemakes.eu, which provide a unifying framework for the project, and communication activities, aimed at key audiences and drawing on the voice of women and girls involved in shemakes.eu. Finally, evaluation tracks project implementation, offers reflective opportunities and assesses results achieved.

Outcomes

As a result of the learning paths activities, participating girls have increased confidence to innovate, are more aware of gender issues and know more about female innovators. Participating women gain new leading-edge skills, are more empowered to innovate and take risks, and are more aware of the opportunities open to them. New role models have been created, permanent collaborations with more traditional educational institutions have been established, and Fabricademy modules have been embedded into their curricula. The innovation services have increased awareness of gender equality in local communities, created a more female oriented approach to science and technology research and led to start-ups or new business lines. At project level, shemakes.eu has improved awareness of the role of women in innovation processes, raised awareness of the importance of women’s (innate and acquired) skills, promoted bottom-up innovation and created learning and access to manufacturing opportunities closer to local communities.



Impacts

Ultimately, new opportunities in the T&C sector are created. Perception about textile work and stereotypes about women's roles change and a new gender culture in the T&C sector is created. Because of the value changes achieved by the project, women working in roles and (tech enabled) environments that are more valuable and valued business and start-ups created, the opportunity structures of at least 16 EU member states and Associated countries permanently re-shaped.



Figure 1: T&C gender gap and the impact of shemakes.eu

The summary theory of change diagram below illustrates the high-level causal pathways for shemakes.eu. A more detailed figure is provided in Annex 1.

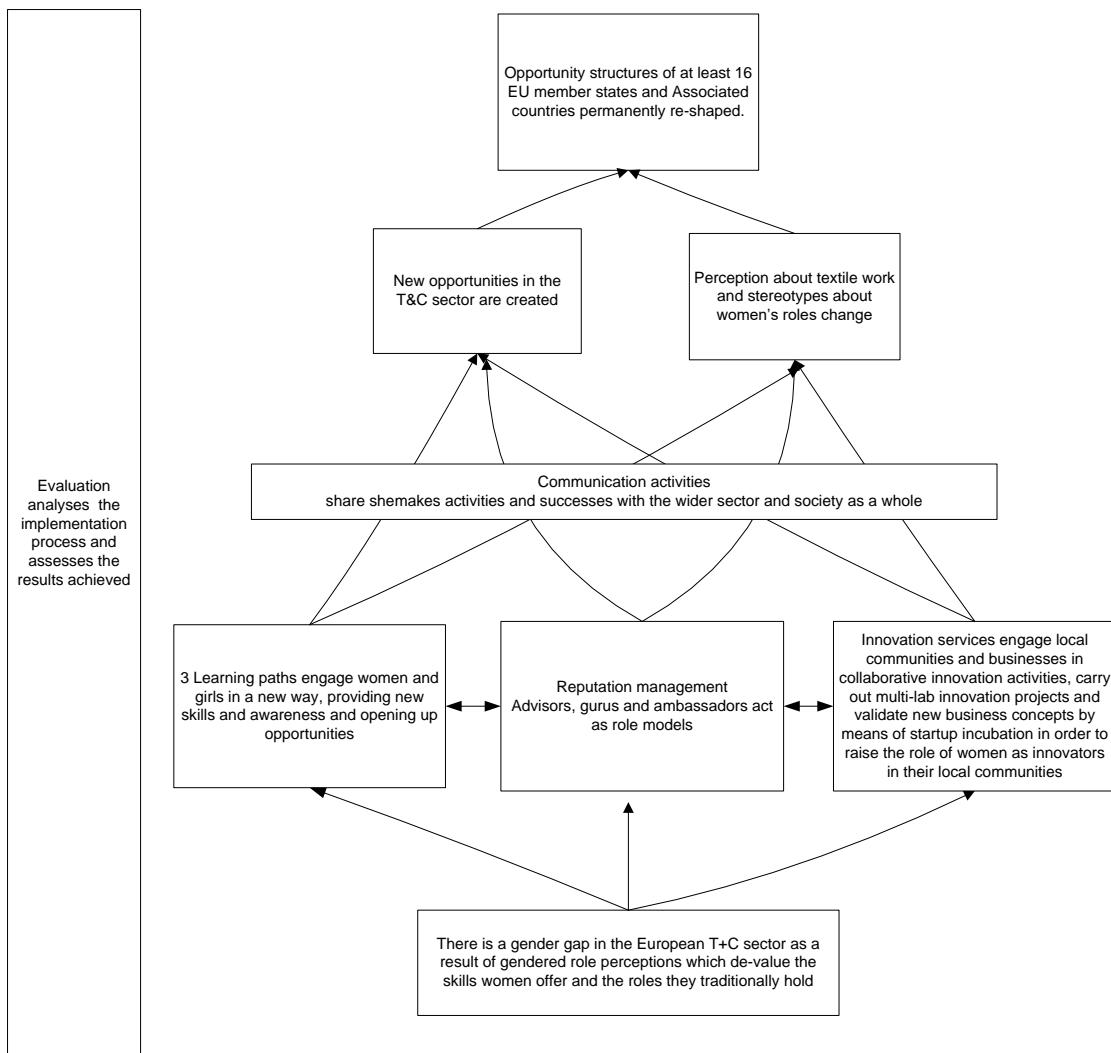


Figure 2: shemakes.eu Theory of Change

Assumptions and risks

The shemakes.eu theory of change workshop and the DOA itself articulate some assumptions that must hold true for the project to succeed. The following **assumptions** underpin shemakes.eu:

- Developing women's skills is a key precondition for achieving gender parity in the T&C sector.
- The project is able to manage the uncertainty created by the ongoing COVID-19 pandemic.
- Even though the COVID 19 pandemic has hit the T&C sector hard (with several global brands having entered bankruptcy and the sector as a whole expecting EUR 50 billion in losses/30% less turnover), small and independent women-owned

ateliers are more resilient to the economic fallout from the pandemic and can be seen as part of the sustainable economic recovery solution after the pandemic.

- The project might face the following risks:
- COVID-19 might negatively affect the project's ability to implement aspects of the project with a similar degree of effectiveness leading to reduced impact.

The next chapter will draw on this information and outline the high-level approach that will be taken to evaluate the shemakes.eu project.



4. shemakes.eu evaluation approach

As the DOA articulates, the shemakes.eu evaluation covers process, outcome and impact evaluation. These evaluations are implemented using a conceptual framework which combines four pillars clustered around the central core of 'gender-responsive evaluation': participatory evaluation, complex ecosystems, large scale change and theory of change. As the chapter below shows, this conceptual framework is closely aligned to the key features of shemakes.eu and sets some key parameters for the evaluation methodology.

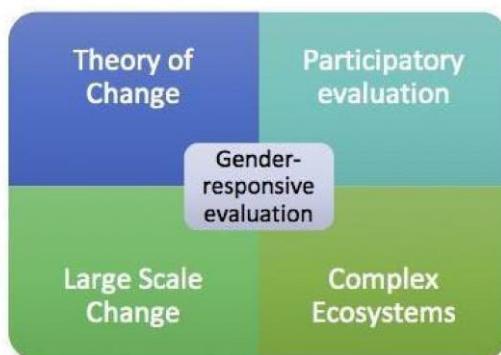


Figure 3: shemakes.eu evaluation pillars

4.1 Gender responsive evaluation

As the project narrative in the previous chapter showed, at the core of shemakes.eu is contributing to a greater equality between women and men.²⁶ This explicit focus on gender equality requires of the evaluation to do the same, and indeed the DOA puts gender responsive evaluation at the centre of the shemakes.eu evaluation approach (see Figure 2 above). As INTRAC (the International NGO Training and Research Centre) argue, "a gender responsive evaluation should be applied when evaluating any project or programme with an explicit focus on women's rights or women's empowerment, or which particularly targets women."²⁷

Gender responsive evaluation has two elements:

²⁶ shemakes.eu DOA, p. 9

²⁷ Intrac (2017) Gender-responsive evaluation, p. 1, <https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Gender-responsive-evaluation.pdf>

- **What it examines:** gender responsive evaluation “assesses the degree to which gender and power relationships – including structural and other causes that give rise to inequities, discrimination and unfair power relations – change as a result of an intervention.”²⁸
- **How it is undertaken:** gender responsive evaluation uses a “process that is inclusive, participatory and respectful of all stakeholders (...).”²⁹
- As an evaluation approach it is based on three principles:³⁰:
- **Inclusion**, that is: “ensuring that different groups contribute to, and benefit from, a gender based evaluation.”³¹ This means looking beyond simply one variable of inclusion, gender, and in addition also considering other factors of disadvantage to make sure that those included in the evaluation do not only reflect the views of those that are most prominent or powerful.
- **Participation** applies to both the evaluation and the intervention being evaluated. Stakeholders should be included in the evaluation design (focus and methods). In addition, stakeholder participation is also an object of evaluation – investigating how far women and girls have been able to participate in the design and implementation of a project and how they benefit from results.
- **Fair power relations.** Gender responsive evaluation needs to consider power relations at all levels of the system within which the intervention operates and be sensitive to “women’s empowerment where women are the disadvantaged gender within a given context.”³² In shemakes.eu, this means considering how the power relationship between those offering learning paths, for instance, and those

²⁸ UN Women (2015) How to manage gender-responsive evaluation. Evaluation Handbook, p. 4, <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2015/un-women-evaluation-handbook-en.pdf?la=en&vs=1401>

²⁹ UN Women (2015) How to manage gender-responsive evaluation. Evaluation Handbook, p. 4, <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2015/un-women-evaluation-handbook-en.pdf?la=en&vs=1401>

³⁰ United Nations Evaluation Group (2014) Integrating Human Rights and Gender Equality in Evaluations, p. 32, <http://www.unevaluation.org/document/detail/1616>

³¹ Intrac (2017) Gender-responsive evaluation, p. 1, <https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Gender-responsive-evaluation.pdf>

³² United Nations Evaluation Group (2014) Integrating Human Rights and Gender Equality in Evaluations, p. 32, <http://www.unevaluation.org/document/detail/1616>



participating might influence assessments of values / benefits gained or how power and gender structures within participating organisations (education institutions or businesses) might support or impede shemakes.eu goals as well as how the wider policy context is reflected in the intervention. Thinking through how the shemakes.eu empowerment ethos can also be reflected in the evaluation implementation is another implication.

No specific methods are attached to gender responsive evaluation, though the principles above together with the inherently political nature of interventions to promote gender equality do have implications for methodological choices. UN Women, for instance, call, among others, for a combination of qualitative and quantitative methods; choosing methods that are rigorous and appropriate and give credible results; using methods that facilitate participation and inclusion; designing tools that probe into broader gender issues; and paying attention to context (Group dynamics, subject matter, gender, class, caste, age, race, language, culture, rural and urban issues, etc.).³³

The table below presents some minimum requirements for gender responsive evaluation and the implications for the shemakes.eu evaluation design. The key message from this table is that the gender aspect needs to weave through data collection (i.e. research tool design) through to analysis and reporting, and put findings in relation to the broader legislative, policy and other relevant context.

Minimum requirements for gender responsive evaluation³⁴	Implications for shemakes.eu evaluation
Include at least one explicit evaluation question in relation to gender equality	High level process, outcome and impact questions need to speak to the project's gender dimension.
Report against gender disaggregated indicators	The output and key performance indicators developed by the evaluation to track project process need to consider gender

³³ UN Women (2015) How to manage gender-responsive evaluation. Evaluation Handbook, p. 140, <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2015/un-women-evaluation-handbook-en.pdf?la=en&vs=1401>

³⁴ Intrac (2017) Gender-responsive evaluation, p. 2, <https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Gender-responsive-evaluation.pdf>



Be based on gender responsive stakeholder analysis, including human rights roles	This suggests that any fieldwork involving individuals in the context of their organisations (businesses or educational institutions) needs to also collect information about organisational attitudes and practices on gender equality.
Include consultations with rights holders (i.e. women and girls)	Interviews (not just survey questionnaires) with women (and possibly girls) involved in shemakes.eu. Participatory dimension to the evaluation.
Include gender analysis in any description of context	Acknowledging the importance of context, in particular in relation to gender differences, for generating outcomes. Supports the idea articulated in the DOA of working with mechanisms and analysing whether / how they fire differently in the different contexts the project operates in.
Include an analysis of the extent to which internationally and nationally agreed norms on gender equality are met by an intervention	The EU gender equality strategy is relevant here, with its focus on intersectionality. In addition, a range of EU Directives and Regulations cover the areas of shemakes.eu, e.g. Directive 2010/41/EU on equality of men and women in self-employment; Directive 2006/54/EC of equal treatment in employment; EU work-life balance legislation (e.g. Directive 2010/18 on parental leave). Member states have a degree of flexibility in the transposition of these Directives into national law, so both an examination of relevant directives and their transposition needs to be part of a context analysis for case study work of the evaluation.



Include discussion of gender equality throughout any section dealing with findings	Structure and content of Deliverable D5.2 Evaluation Final Report needs to discuss gender equality in country and sector context.
Have at least one conclusion and recommendation that explicitly addresses gender equality	

Table 2: Requirements of gender responsive evaluation and implications for shemakes.eu evaluation design

4.2 Participatory evaluation

As the text on gender responsive evaluation above articulates, the approach has a strong focus on participation and empowerment. This is also true for shemakes.eu with its ‘design thinking’ orientation and its objective of embedding science within the open participatory involvement of local communities. Indeed, participation permeates key shemakes.eu activities, such as the design of the learning paths, the creation of ambassadors from within the group of learning path ‘graduates’ to support the widening / extension of the shemakes.eu ecosystem and its activities or the collaborative lab pilots to name but three. It is therefore necessary to also include a participatory dimension into the shemakes.eu evaluation.

Participatory Evaluation is a ‘constructivist’ approach ensuring that all stakeholders – particularly those who have less power – have a voice in the evaluation and are actively involved in its design and implementation. There is no one way to implement a participatory evaluation approach, but it needs to be suitable for the intervention and purpose of using it. The table below outlines how the participatory evaluation in shemakes.eu will be implemented.

Stage of evaluation	Which stakeholders involved	Method of involvement	Purpose of involvement
Evaluation design	Project partners	Theory of change development Discussion of high level vision for the evaluation	Sense-check and buy in into the approach and methodology



Stage of evaluation	Which stakeholders involved	Method of involvement	Purpose of involvement
		approach and methodology Peer review of deliverable	
Evaluation implementation: data collection	Project partners	Workshops, ad hoc consultations and project Steering Group consultations	To ensure that data collection tools are suitable for different contexts and appropriate in scope, length and format
	Project 'beneficiaries': women, girls, organisations	Choice of data collection methods and tools	To ensure beneficiaries are given voice
Data analysis and reporting	Project partners and selected beneficiaries	Data analysis and sense-making workshop	To ensure conclusions drawn from the data accurately reflect the 'lived experience' of shemakes.eu beneficiaries

Table 3: Participatory evaluation in shemakes.eu

4.3 (Complex) innovation ecosystems

The project's key objective of developing and supporting a sustainable open gender innovation system requires that evaluation reflects understandings about how



complex innovation systems work and particularly how they influence change in environments that are characterised by inter-dependency and inter-connectivity.³⁵

The ecosystem metaphor to describe business, knowledge or innovation systems has been borrowed from the field of ecology where it describes “the complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space.”³⁶ However, while the concept has gained traction, there is no universally accepted definition of what an innovation ecosystem is, and in fact Grandstrand and Holgerson (2020, p. 2) have found 21 “more or less unique” definitions. Drawing on an analysis of these definitions in terms of common elements and omissions, they propose the following definition of innovation ecosystems:

“An innovation ecosystem is the evolving set of actors, activities, and artefacts, and the institutions and relations, including complementary and substitute relations, that are important for the innovative performance of an actor or a population of actors.”³⁷

Whereby:

- **Actors** are individuals and / or organisations operating in the ecosystem;
- **Artefacts** include products and services, tangible and intangible resources, technological and non-technological resources and other types of system inputs and outputs including innovations (Grandstrand and Holgerson, 2020, p. 3);
- **Complementary relations** are collaborative; **substitute relations** are competitive;
- **Institutions** “refer to the ‘rules of the game’ [(Grandstrand and Holgerson, 2020, p. 7), in the case of shemakes.eu, for instance, this includes the gender, employment and industrial policies that create the framework conditions within which shemakes.eu is being implemented in different contexts, but also the organisational settings, and their cultures and ways of working, within which shemakes.eu activities are implemented.

We propose that this is a useful definition of innovation ecosystem to guide thinking on evaluation for shemakes.eu because: a) it offers clarity about the different

³⁵ Rogers, P (2008) “Using Programme Theory to Evaluate Complicated and Complex Aspects of Interventions” Evaluation, [Volume: 14 issue: 1](#), pp 29-48

³⁶ <https://www.britannica.com/science/ecosystem>

³⁷ Granstrand, O and Holgersson, M (2020) “Innovation ecosystems: A conceptual review and a new definition”, Technovation 90-91 (2020), p. 3



components of an innovation ecosystem which can then be applied to shemakes.eu and investigated with the help of the evaluation; b) it explicitly includes a dynamic component due to the use of the word 'evolving' and the inclusion of both collaborative and competitive dynamics which are an integral part of both natural and business ecosystems. The inclusion of the word 'institution' is important in the gender context as it is a reminder of the structural / organisational / societal aspects of gender equality.³⁸

The figure below re-presents Granstrand's and Holgersson's diagrammatic presentation of their innovation ecosystem definition and adds some information specific to shemakes.eu as a starting point for some reflections about implications for the evaluation. The arrows represent relations which are relevant within and between the different components of the ecosystem.

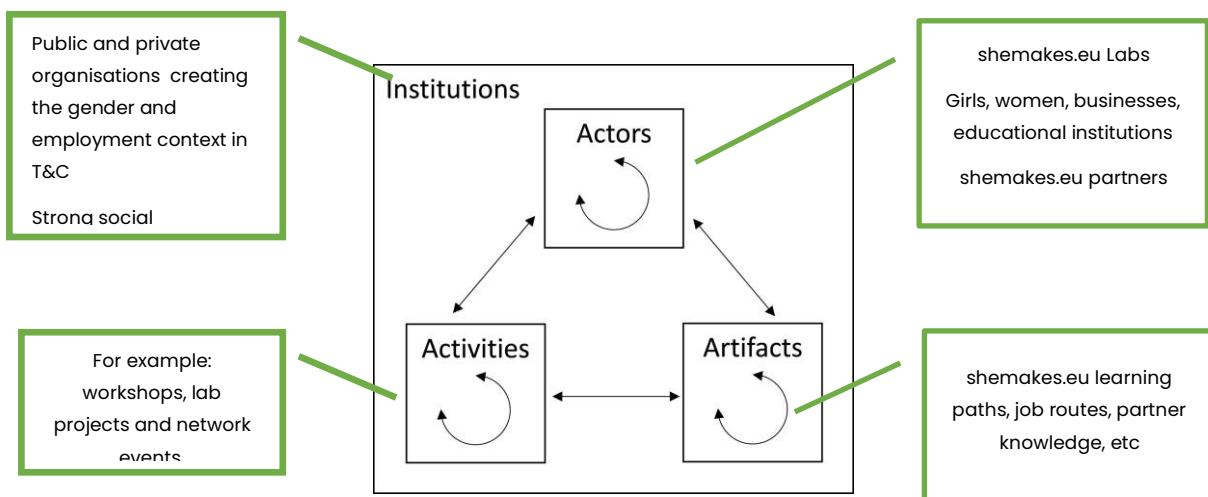


Figure 4: Illustration of the innovation ecosystem definition (amended)³⁹

It is clear from this diagram that the way different components of an ecosystem interact amongst themselves and with each other in the institutional context within which they sit is key for how this ecosystem functions. Ecosystem evaluation therefore tends to focus on capturing the dynamic interactions between and within the different components of an ecosystem, for instance using modelling approaches

³⁸ This definition is high level enough to also work in conjunction with the sections on innovation ecosystems in D4.1

³⁹ Source: Granstrand, O and Holgersson, M (2020) "Innovation ecosystems: A conceptual review and a new definition", Technovation 90-91 (2020), p. 7

or social network analysis combined with ethnographic research.⁴⁰ Indeed, a methods paper produced by FSG on evaluating ecosystems investments argues in favour of using non-linear methods such as theory of change or systems mapping to understand ecosystem relationships and components and how they change.⁴¹ They also argue in favour of listening to multiple perspectives and tracking interim outcomes from the start, by providing stakeholders with tools to track early outcomes and developing quantitative and qualitative indicators for outcomes. The James Hutton Institute's approach to ecosystem evaluation⁴² highlights the need to understand how 'trade-offs' work in ecosystems. Because ecosystems are complex systems, in which a wide range of actors work in a continually changing environment, the key to evaluation lies in capturing how these different actors negotiate and manage transactions. Our own assessment of evaluating business ecosystems developed for the TCBL project concluded that it requires, among others:⁴³

- A **participatory evaluation methodology** based on engaging with key stakeholders to allow for co-creation of knowledge;
- The combination of a **broad range of data and information** that reflects the spectrum of involved stakeholders – using 'scientific' data as well as 'local knowledge'. This in turn requires the construction of multiple sets of evaluation indicators in line with the evaluation questions.
- Representation of **stakeholder voices** – particular those who are less powerful.
- **Summative evaluation** needs to consider the long-term impacts as well as the immediate and intermediate outcomes as results might take some time to materialise.

⁴⁰ Tian, CH, Ray, B K, Lee, J, Cao, C and Ding, W (2008). BEAM – a framework for business ecosystem analysis and modelling. IBM SYSTEMS JOURNAL, VOL 47, NO 1; Russo, M and Rossi, F (2009) "Cooperation networks and Innovation. A complex systems perspective to the analysis and evaluation of a regional innovation policy programme" Evaluation, Vol 15 (1), pp 75–100

⁴¹ Mack, K et al (2016) Evaluating Ecosystem Investments, pp 12–13,
<https://www.fsg.org/publications/evaluating-ecosystem-investments>

⁴² Waylen, K.A.; Blackstock, K.L.; Irvine, R.J. (2014) Starting points for evaluating implementation of the "Ecosystem Approach", James Hutton Institute,
<http://www.hutton.ac.uk/sites/default/files/files/ecosystemservices/Suggestions%20for%20evaluating%20EcA.pdf>

⁴³ Cullen, J, Junge, K and Iacopini, G (2016) TCBL D6.1 Evaluation approach, (unpublished), p. 29



4.4 Large scale change

shemakes.eu.eu is, at its core, a systems change project: by means of its activities it seeks to make a difference at individual, organisational and local levels to (some of) the social factors deemed responsible for the inequality between women and men at work, in particular in the textiles and clothing sector as a focal lens for manufacturing more widely. Whilst not explicitly articulated in the DOA, the change strategy adopted by the project closely resembles that of a large scale change process.

Large scale change (LSC) can be defined as “the emergent process of mobilising a large collection of individuals, groups and organisations towards a vision of a fundamentally new future state, by means of: high leverage key themes; a shift in power and a more distributed leadership; massive and active engagement of stakeholders; mutually reinforcing changes in multiple systems and processes. Done properly, this leads to such deep changes in attitudes, beliefs and behaviours that sustainability becomes largely inherent.”⁴⁴ Unless implemented within the boundaries of one organisation, large scale change normally involves a combination of technological and social systems challenges and is approached from an open systems perspective, especially when pursued through an ecology or social movement lens.

This short summary points towards some key elements of shemakes.eu which align with large-scale change: the development of innovation and gender visions at the beginning of the project to underpin activities (envisaging a fundamentally new state); the decentralised way of working through a growing network of labs as focal points for engaging both women and girls, local communities and businesses (distributed leadership and open systems thinking); the transfer of activities within participating labs in up to 16 countries (mutually reinforcing changes in multiple systems and processes) and the combination of using technology (as part of the learning pathways) and social (role models etc) levers for change (socio-technical change and challenges).

Thinking of shemakes.eu as a large scale change process is useful for the evaluation because it points towards the practical importance of two factors the evaluation

⁴⁴ NHS Institute for Innovation and Improvement (2013) *Leading Large scale change: a practical guide*, p. 30 www.nhsiq.nhs.uk/download.ashx?mid=8526&nid=8530



needs to consider: the role of leadership in the shemakes.eu ecosystem and how emergence is being worked with and the role of leadership in the system.

In her article on how large-scale change happens, Margaret Wheatley places much emphasis on the power of local actions that evolve into something bigger and potentially systemic (ie emergence):

"In all living systems (which includes us humans), change always happens through emergence. Large-scale changes that have great impact do not originate in plans or strategies from on high. Instead, they begin as small, local actions. While they remain separate and apart, they have no influence beyond their locale. However, if they become connected, exchanging information and learning, their separate efforts can suddenly emerge as very powerful changes, able to influence a large system. This sudden appearance, known as an emergent phenomenon, always brings new levels of capacity. Three things are guaranteed with emergent phenomena. Their power and influence will far exceed any sum of the separate efforts. They will exhibit skills and capacities that were not present in the local efforts. And their appearance always surprises us."

The dynamic outlined in the quote above is, of course, very much in line with the shemakes.eu change strategy, and as such highlights the need for the evaluation to include methods that are able to shed light on the innovation dynamics that happen both locally and then how these get spilled out into the shemakes.eu and T&C system more widely and how they are supported by the notion of distributed leadership.

4.5 Theory of change

The final concept that underpins the shemakes.eu evaluation is Theory of Change. As noted in Section 3, Theory of Change is a way of mapping the desired and expected 'change journey' of an intervention. It starts with a 'presenting problem', a theory of what causes the problem and how it can be solved and ends with the expected change to the problem at the end of the project (the project's expected impacts). It does this by investigating the causal relationships between 'context-input-output-outcomes-impact' in order to understand the combination of factors that has led to the intended or unintended outcomes and impacts. An initial theory of change for shemakes.eu has been presented in Chapter 3 and a comprehensive diagram illustrating potential causal pathways is presented in Annex 1.

Theory of Change is relevant for shemakes.eu as it is a technique that is used in evaluations that assess the impacts of an intervention via theory based approaches



rather than with the help of an experimental impact evaluation using randomised controlled trials. As we explain more in section 5.4, at shemakes.eu project level, key conditions for an experimental impact evaluation design cannot be met because of the very nature of the shemakes.eu project. Moreover, as an innovative intervention, there is significant value of using evaluation in shemakes.eu to explore questions around why change has been achieved (not simply that change has or has not happened). These two factors require an overarching theory-based evaluation design which starts from the change theories underpinning shemakes.eu and then investigates why and under what conditions change has been observed.⁴⁵ As section 5.4 on impact evaluation discusses, we have chosen contribution analysis as the specific theory-based evaluation method, with the aim to construct a contribution story from the evaluation data collected outlining how shemakes.eu has achieved outcomes and impacts in different contexts.

A Theory of Change is the backbone of any theory-based evaluation design, and specifically required by Contribution Analysis as the starting point for the process of systematically assessing a project's contribution to observed change (see section 5.4). Thus, the shemakes.eu Theory of Change model presented in Chapter 3 specifies the underlying assumptions of shemakes.eu and so incorporates a number of hypotheses about how the activities carried out by the project will promote changes at each stage of the project. These are also presented as 'mechanisms' in section 5.4. The evaluation data collected along the way enables a testing of both the project's implementation journey and these embedded change hypotheses. If the evaluation data do not support a particular hypothesis, then this hypothesis needs to be discarded or modified as part of an iterative and collaborative process involving project partners. Ultimately, by thus building an involving and constantly improving evidence-based model of the changes (in terms of immediate and intermediate outcomes, and distance travelled to impacts) shemakes.eu has achieved via its activities, and, crucially, will provide a framework for the analysis of why and how they were achieved as part of an overarching theory-based evaluation design (see also section 5.4 on impact evaluation).

⁴⁵ It should be noted, however, that a theory based evaluation design is not incompatible with using experimental or quasi-experimental approaches to assess the impact of individual activities implemented by a project.



4.6 Concluding summary

The discussion above has highlighted the main ideas behind each of the approaches underpinning the shemakes.eu evaluation design, how they are reflected in the design of the project (i.e. how there is conceptual congruence between the theories used to inform the evaluation design and the project) and the factors that the methodological implementation of the evaluation needs to consider. The main points are summarised in the table below. They offer a quasi checklist for the methodological choices made to implement the shemakes.eu evaluation. These are outlined in the next chapter.

Conceptual approaches underpinning shemakes.eu evaluation	Practical implications for the evaluation design
Gender responsive evaluation	Gender needs to be explicitly included in all aspects of the evaluation, from questions through to indicators, methods and data analysis. The policy and societal context in terms of gender and power relations are an integral part of reporting.
Participatory evaluation	Appropriate inclusion of shemakes.eu stakeholders in evaluation design, implementation and data analysis / reporting.
Innovation ecosystems	Non-linear methods, participation and multiple perspectives, interactions between ecosystem components and multiple indicators measuring short term and long term outcomes and impacts.
Large scale change	Choice of methods and implementation processes that are able to shed light on the emergent properties of the local activities implemented by shemakes.eu Analysing the types of leadership at play in the shemakes.eu ecosystem and their effect on project results.



Conceptual approaches underpinning shemakes.eu evaluation	Practical implications for the evaluation design
Theory of change	Needs to be periodically updated to reflect developments and growing understanding about shemakes.eu causal pathways to be able to inform the assessment of outcomes and impacts.

Table 4: Summary of key implications of theoretical approaches underpinning the shemakes.eu evaluation design



5. Evaluation methodology

5.1 shemakes.eu evaluation modes and questions

The shemakes.eu evaluation operates in four modes and for different purposes: developmental (contributing to project design); accountability (monitoring progress and assessing outcomes and impacts); learning (feeding evaluation results into ongoing project review and supporting sustainability / exploitation at project end); and knowledge (generating insights into gender opportunity ecosystems). These purposes are addressed via three ‘types’ of evaluation:

- **Process evaluation** which has a developmental and learning purpose and focuses on analysing project implementation and partner satisfaction and supports learning and continuous improvement via ‘reflective moments’ within project meetings drawing on data as they emerge from evaluation activities;
- **Outcome evaluation** which focuses on assessing the immediate and intermediate results achieved by shemakes.eu and seeks to generate learning about ‘what works where’ and hence has both an accountability and knowledge purpose;
- **Impact evaluation**, which analyses distance travelled to the high level / societal objectives the project seeks to achieve.

Drawing on the discussions of the preceding chapter, the following evaluation questions have been identified to guide evaluation activities:

Process evaluation questions

- Was shemakes.eu implemented as planned?
 - What major (strategic and operational) changes did the project undergo, and why? What effect did these changes have?
 - What are we learning from project implementation, and how can this be improved?
- What key activities and outputs did the shemakes.eu ecosystem produce via its three intervention strands?
 - To what extent did they meet the needs of girls and women with an interest in STEM and the T&C sector?



- To what extent did they meet the needs of other stakeholders in STEM and the T&C sector, including education and training providers, employers and community representatives?
- How did the shemakes.eu opportunity ecosystem change over the course of the project's funded period, in particular in terms of the nature and strength of the relationships between and within the different components of the system?
- What can be learned about how shemakes.eu was implemented to improve the project or projects like it in the future?

Outcome evaluation questions

- What does the shemakes.eu innovation / opportunity ecosystem look like at the end of the funded period?
- What main immediate – changes in awareness, knowledge, attitudes and skills – and intermediate – changes in behaviour and in organisational systems, structures and culture – outcomes did shemakes.eu produce for the girls, women, businesses, and educational institutions involved, and how?
- To what extent do these outcomes address key barriers to gender equality in the T&C sector?
- What unintended outcomes did shemakes.eu achieve?
- To what extent do these support or obstruct the project's objective of contributing to greater gender equality in the T&C sector?
- What worked, for whom and in which circumstances in shemakes.eu?

Impact evaluation questions

- Has shemakes.eu succeeded in raising awareness of the gender gap in innovation, and specifically the T&C sector?
- Has shemakes.eu succeeded in leveraging a deep collaboration between the Fabricademy network and the TCBL Foundation?
- In addition to the young women participating directly in the shemakes.eu Learning Paths, were young people involved in the shemakes.eu ecosystem and in what ways?



- Is there any evidence that shemakes.eu has contributed to better matching of hidden and under-recognised skills of women innovators with employment opportunities in manufacturing and the T&C sector specifically through its Innovation Services activities?
- To what extent is shemakes.eu likely to succeed in permanently changing the conditions for a permanent increase in the number, role and recognition of female innovators in the EU and beyond?

In the next section we proceed to discussing in more detail how the process, outcome and impact evaluations of shemakes.eu will be implemented methodologically.

5.2 Process evaluation

Process evaluation focuses on tracking the implementation of a project or programme, learning from implementation and potentially improving an intervention. In shemakes.eu, the process evaluation achieves this by capturing how the project evolves over time, assessing the extent to which project targets and milestones are being met and supporting consortium reflections on these trajectories. Key methods used for this purpose are: process dashboard, social network analysis, partner surveys, reflective partner workshops, and theory of change iterations. These are discussed in more detail below.

5.2.1 shemakes.eu process dashboard

A key tool in the shemakes.eu process evaluation is the ‘process evaluation dashboard’. The Dashboard is composed of:

- **Key Progress Monitoring Indicators** – a list of baseline core outputs defined as ‘evidence of success’; and
- **Key Performance Indicators (KPIs)** that measure progress towards project objectives, set against a ‘baseline’.

These indicators together build up a snapshot at a point in time of the extent to which the project is meeting its planned operational objectives. By the end of the project, the dashboard will offer a quantitative overview of the project’s trajectory which will then be interpreted jointly with partners in order to understand the meaning of any deviations from the original plan. During project implementation, the tool can support joint reflection and learning from implementation.



Below we provide the indicators that form part of the shemakes.eu process dashboard. Data collection for these indicators will happen in two waves:

- a first set of data will be collected following the completion of Phase 1;
- a second set of data will be collected after completion of Phase 2 of the innovation actions.

The dashboard will primarily draw on information provided by the project's internal technical and financial monitoring activities as well as relevant work package deliverables. Conversations with relevant partners will take place to fill in any data gaps. A periodic pop-up survey for visitors of the shemakes.eu website and analysis of social media data will be implemented to understand the context behind the communication and dissemination KPIs.

The Process Dashboard, together with the regular partner and stakeholder surveys (see below), is an important tool to support the 'participatory evaluation' approach underpinning the shemakes.eu evaluation. We will ask for dedicated time, for instance at partner meetings or during steering committee meetings, to share this and other data with partners and enable a reflection on how the project is progressing and to collaborate in developing strategies if needed to adjust the project trajectory.

5.2.2 shemakes.eu core output indicators

The shemakes.eu core output indicators focus primarily on a set of expected project outputs as listed in the DOA. Tracking them will successively build up a picture of project progress and how far it matches the envisaged trajectory. These core output indicators are listed in the table below. Though not specified in the DOA, several of these categories will ideally require a break-down by gender (e.g. the participants in local events and final conference as per table below), with implications for how respective work packages collect this information.

Objective	Output	Target
Develop Opportunity Ecosystem to bridge gender gaps	Gender specific methodology produced	NA
	Active Labs in 16 countries	18
	Integration of Labs into TCBL Foundation	NA



Objective	Output	Target
Develop Learning Paths for girls & women innovators	Learning model & toolkit produced	NA
	Girls 8-18 involved in Curiosity path	150
	Women 18-25 in Discovery path	75
	Women 25+ in Innovation Path	50
Develop/Adapt TCBL services to bridge gender gap	Model & Toolkit produced	NA
	Community workshops/seminars involving 200 participants (ideally disaggregated by gender)	12 (200)
	Networked Lab projects and participants	3 (50)
	12 T&C businesses validate new business/service concepts	12
Carry out reputation management to highlight value of role models	Advisors engaged	9
	Gurus engaged	6
	Ambassadors engaged	30
Carry out evaluation & impact assessment	Evaluation Design produced	NA
	Process evaluation delivered	NA
	Outcomes evaluation delivered	NA
	Impacts evaluation delivered	NA
Effective communication & dissemination	Website visitors	10000
	Social media followers (cross-platform)	1000
	Local seminars and workshops (participants – ideally disaggregated by gender)	500
	Final project event (participants, including information on gender break-down)	80
	Videos (interviews and testimonials) produced (at least)	At least 18



Objective	Output	Target
Effective project management	Stories / blog posts disseminated (at least)	At least 36
	Newsletters produced	4
	Press releases produced (at least)	At least 6
	Scientific publications produced (at least)	At least 3
Compliance with ethics requirements	Consortium meetings held	3
	Progress reports produced	4
	Data management plan	1
	Policy briefs	2
Compliance with ethics requirements	Ethics advisor appointed	Francesco Molinari
	GDPR compliance	NS
	Informed consent obtained	NS

Table 5: shemakes.eu core output indicators

5.2.3 shemakes.eu key performance indicators (KPIs)

KPIs provide an ongoing measure of the extent to which the project is progressing towards its outcomes and impacts. They track the actions between the combination of factors that are critical for the project to achieve its goals (the critical success factors – CSFs) and the expected changes at the end of the project (measured by key results indicators).⁴⁶ This connection is shown in the diagram below.



⁴⁶ O'Sullivan R (2004) Practicing evaluation: a collaborative approach. London: SAGE



Figure 5: The Connection between CSFs, Outcomes, KRs and KPIs

As a result, KPIs have to have the following properties:

- They have to measure a **process**.
- They have to be **key** – i.e. they need to be the only measures that are **essential** to demonstrate progress towards ‘results’.
- They have to measure **progress** on that process.
- They need to capture **‘live’ data** – i.e. the information source used to measure process and progress is continually generating updated information.
- They need to reflect **‘context’**. For example, it’s no use having a KPI for shemakes.eu that measures changes in the number of visits to the project website over time without measuring who is visiting and for what purpose.
- Finally, they have to be **‘metrics’** – i.e. a KPI needs to be a quantifiable measure that can demonstrate progress either from a baseline or in context – not just a measure which is ‘absolute’ or ‘unit-specific’.

The table below shows the KPIs that have been developed for shemakes.eu.

Objective	KPI
Develop Opportunity Ecosystem to bridge gender gaps	Change in no. actors involved in ecosystem
Develop Learning Paths for girls & women innovators	% participant target reached
	% participant target reached
	% participant target reached
Develop/Adapt TCBL services to bridge gender gap	Progress towards target local community actors engaged

	Progress towards target business actors engaged
Carry out reputation management to highlight value of role models	% target advisors, gurus and ambassadors actively involved in reputation management activities
Carry out evaluation & impact assessment	Not applicable
Effective communication & dissemination	% target visitors reached
	% social media followers reached
Effective project management	Change in partner satisfaction
	Progress to milestone targets
Compliance with ethics requirements	% participant informed consent acquired

Table 6: shemakes.eu KPIs

5.2.4 Partner surveys

The process dashboard is complemented by the periodic implementation of a partner survey. This will seek to capture partner perceptions of project progress to stimulate reflection and continuous improvement of project delivery and might also be used as an opportunity to collect other data relevant for the evaluation (e.g. on envisaged outcomes and impacts or to collect data to support the ecosystem analysis – see below).

As a primarily diagnostic tool, the partner survey will be implemented at pertinent moments in project delivery (currently considered to be the end of each innovation action phase) with results discussed in partner meetings or meetings of the steering committee as part of the evaluation's developmental mode.

The partner survey will be implemented twice during the shemakes.eu project: A sample questionnaire for this survey is provided in Annex 1: evaluation toolkit.

5.2.5 Mapping the evolving shemakes.eu ecosystem

A core part of the shemakes.eu process evaluation is a mapping of the ecosystem. The main purpose of the ecosystem mapping work is to paint an evolving picture of

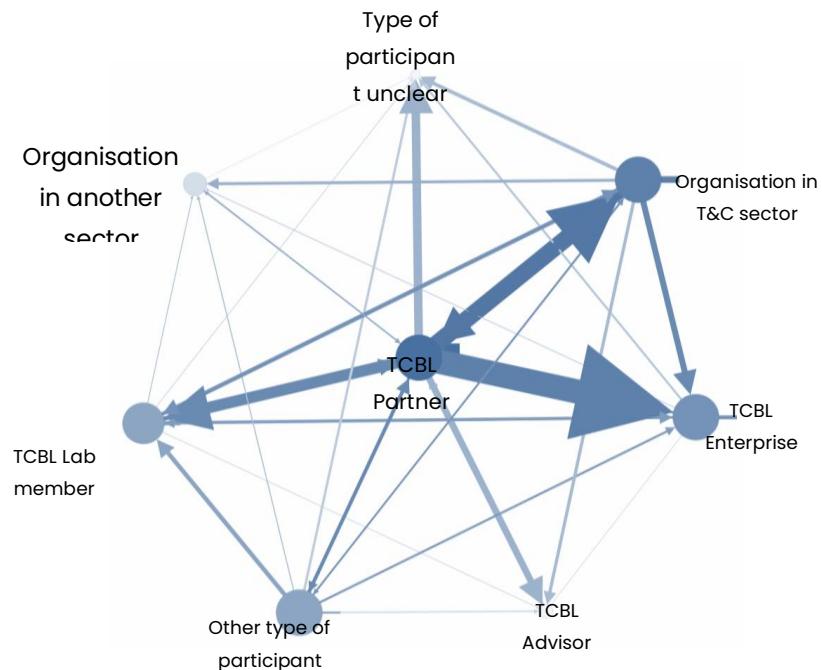


the shemakes.eu ecosystem as it develops, focusing in particular on mapping inter-relationships and networks between and within ecosystem actors, artefacts and activities in order to assess the value these interactions add to participating entities and to the ecosystem.

These mapping activities will explore⁴⁷:

- Ecosystem connectivity (membership and roles of the ecosystem, also looking at number, proximity, strength or direction of connection)
- Ecosystem health, exploring questions of resources available in the ecosystem (i.e. the artefacts but also funding), activities and ways of working, and the value that is being created from them;
- Ecosystem outcomes – the focus of the outcome evaluation, looking at key results that have been achieved (see section 5.3 below).

This is likely to lead to a number of different ‘maps’ showing different aspects of the shemakes.eu ecosystem. The image below shows one example of a network analysis we did for the TCBL project, showing the proximity, strength and direction of relationships between ecosystem members as ‘enacted’ during the final project conference.



⁴⁷ See also: Taylor, M, P Plastrik, J Coffman and A Whatley (2014) *Evaluating Networks for Social Change: A Casebook*, Center for Evaluation Innovation, <http://www.evaluationinnovation.org/publications/evaluating-networks-social-change-casebook>

Figure 6: Social network based on the conversations held between different types of participants at #TCBL_2018

The data collection methods used in network analysis will include:

- Monitoring and statistical analysis of ecosystem size, membership and member profiles based on results from any survey work carried out by the evaluation (e.g. as part of the partner survey and the final retrospective participant survey).
- Qualitative data, e.g. case study work, information from deliverables produced by other WPs, interviews with partners and shemakes.eu stakeholders on the nature of the ecosystem, e.g. types of roles held by members and nature of interactions between them.
- Social/organisational network analysis – mathematical and visual representations of the ecosystem focusing on ‘hubs’ and ‘nodes’, ‘reach’, ‘boundary spanners’ (e.g. using Gephi – open graph visualisation platform).
- As part of the ecosystem analysis we might also explore whether we can use social media analysis to assess question of reach etc. of the shemakes.eu communication activities and whether techniques such as participatory systems mapping could usefully be integrated.

Two rounds of data collection activities will be carried out, at the end of each innovation action cycle, to allow for the depiction of how the shemakes.eu ecosystem has evolved over time. In this way, the ecosystem mapping will contribute to an evolving understanding in both quantitative (number and type of actors involved; reach) and qualitative terms (e.g. nature and strength of links between them, level of engagement) of the nature of the shemakes.eu ecosystem. An integral part of this analysis will be an analysis of the evolving gender and T&C sector context within which the shemakes.eu ecosystem sits. This will draw on available quantitative data (e.g. from Eurostat or other sources), policy and sector analyses, including also the policy briefs produced by WP7.

5.2.6 Theory of change iterations

As shemakes.eu develops, the ‘baseline’ theory of change presented in Chapter 2 will be reviewed in line with emerging evaluation data. We envisage three iterations of the shemakes.eu theory of change model, each co-created with shemakes.eu partners:



- In April / May 2021 to focus on strengthening causal pathways, outcomes and develop the shemakes.eu mechanisms presented in the next section as well as produce alternative mechanisms for the contribution analysis.
- In January 2022, after one year of project and also drawing on the data collected by the evaluation.
- Another at the end of the project incorporating all the data that have been collected and showing the final change journey.

5.3 Outcome evaluation

The shemakes.eu outcome evaluation focuses on capturing the immediate and intermediate results achieved by project activities, such as:

- ‘immediate’ outcomes – changes in individual awareness, attitudes and skills – for example the acquisition of entrepreneurial and innovation competences by participants involved in Learning Paths and Innovation Services, and
- ‘intermediate’ outcomes – changes in individual behaviour – for example applying new innovation skills in practice – as well as changes in systems and structures, for example changes in the gender practices of stakeholders participating in the project.

Outcomes can thus be expected to occur at different levels of the shemakes.eu ecosystem, e.g.:

- Individuals: e.g. women and girls participating in the Curiosity, Discover and Innovation learning paths (including the Ambassadors selected from this group of people);
- Organisations: such as businesses involved in the Innovation Services or educational institutions involved in the Discover learning path; the shemakes.eu labs running activities;
- Wider society and the T&C sector, e.g. those involved in the community engagement activities run as part of the innovation services; communication audiences.

The key tool for capturing outcomes at these levels is a set of in-depth case studies (see section 5.3.2) which will explore outcomes achieved in context and the



mechanisms through which they were achieved. Data from these case studies will be supplemented with outcomes captured from participants by WP2. In line with the methods guidance on gender responsive evaluation, the outcome evaluation applies a ‘mixed methods’ approach to data collection, which will also support ‘triangulation’ (comparing different sources of data reflecting different positions and perspectives).

5.3.1 Capturing outcomes from participants in the learning paths

WP 2 will capture information on outcomes at path, activity and participant level via the participating labs.⁴⁸ The shemakes.eu evaluation will provide inputs into the design of relevant outcome indicators and, where useful, data capture tools. We will use this data to feed into the analysis of outcomes and possibly also the selection of case studies.

5.3.2 Case studies

The case studies are the key evaluation methodology to investigate in-depth how different elements of the shemakes.eu ecosystem come together to produce outcomes of interest, and most importantly how these outcomes are produced in different (geographical, organisational, gender and innovation) contexts.⁴⁹ They will be an opportunity to explore processes of large-scale change via the lens of specific bottom-up activities implemented in the framework of the shemakes.eu project and hence also contribute to the impact evaluation of the project. The implication of this is that shemakes.eu will need fewer but deeper cases to explore the complex relationships in sufficient depth by involving all relevant actors in the case study work. Another implication is that the shemakes.eu evaluation will benefit from: a combination of longitudinal cases (following up as set of actors over the duration of the project) and one-off case studies; and follow a multiple case study design where a second wave of cases builds on a previous wave allowing for the investigation of

⁴⁸ Shemakes Deliverable D2.1 Learning Paths: Launch Toolkit (draft version prior to submission)

⁴⁹ This is not only a requirement of gender responsive evaluation but has been identified as an area for shemakes.eu project activities in D4.1 which talks about the need to “monitor the influence of geographical and cultural differences on innovation dynamics.”



an emergent set of questions not sufficiently covered in the first set of cases, or the exploration of new questions, to build up a fuller picture of the issue at hand.

We envisage implementing four types of case studies as part of the shemakes.eu evaluation, each of which would be accompanied by a gender focused context analysis:

- **Case studies around the Discovery learning path** which focuses on young women aged 18–25 but also includes educational institutions. This set of case studies would seek to capture changes at individual young woman level from the participation in the innovative learning modules, and analyse this against the backdrop of the educational setting and its approach to and understanding of gender equality. Changes at the educational institution would also be captured, both in terms of 'hard outcomes' (the intended inclusion of Fabricademy modules in curricula) and other behavioural or attitudinal changes. A first set of two of these case studies would be carried out in autumn 2021, with one of these being followed up a year later.
- **Case studies exploring the link between female innovators in T&C business contexts⁵⁰**, pulling together work in Task 3.4 (Business engagement) which in turn builds on work carried out in Task 2.4 (Innovation / job routes). These case studies would focus on exploring issues around women innovators, leadership and business model (and other) change in T&C businesses. A first set of these case studies would be implemented during autumn 2021, followed by a second set a year later capturing different geographic and organisational settings. We would envisage that at least one of these cases is longitudinal, so following up the set of actors involved in 2021 in 2022 to capture longer term changes.
- **Community engagement case studies** explore the inter-relationship between shemakes.eu labs and their local communities in relation to the labs' work on supporting gender equality (Task 3.2). These case studies will take place in both core labs and transfer labs.
- **Ambassador case studies**, covering different learning paths. These case studies would be an opportunity for a multi-dimensional investigation of the outcomes and impacts of the shemakes.eu ecosystem by looking at the issue of gender dynamics, innovation and leadership in the T&C sector and in

⁵⁰ This has been identified as an area for shemakes.eu project activities in D4.1 which talks about the need for shemakes.eu to demonstrate that social and environmental impact can be blended with business needs.



different contexts through the focal point of (young) women who have participated in shemakes.eu learning paths and were then selected to participate in transferring these activities into new contexts of wave 2 labs. Ambassadors are due to be selected in October / November 2021 and will start their work at the beginning of 2022, so this case study work would take place in one round during the second half of 2022.

Case studies will be selected in consultation with shemakes.eu partners, and implemented mainly using qualitative methods to understand issues in depth. During the case study selection the feasibility of using some more ethnographic methods (e.g. digital photo, video or written diaries) will be explored. Each case study would be analysed and written up separately, and ethical as well as GDPR questions will determine whether and how these individual reports will be included in the final Deliverable or serve as a basis for a cross-case study analysis.

Type of case study	Number and when implemented		Total
	2021	2022	
Discovery learning path case studies	2	2 (1 follow up on one of the 2021 cases)	4
Innovation learning path: Female innovators in T&C business contexts	2	2 (one of which a follow up from the first round)	4
Community engagement case studies	1	1	2
Ambassadors case studies	0	2	2
Total	5	7	12

Figure 7: Types of case studies and estimated numbers

For participating women, a narrative interviewing style might be more appropriate than using semi-structured interviews. Narrative interviews “provide an opportunity



for the participant to narrate his or her experience for the researcher⁵¹ and hence shift the researcher – researched power balance towards the person telling their story. As a method, it might also provide the depth of experience we are looking for in the case studies. In any event, we will seek to audio record the interviews (if permission is granted) and analyse the data using NVivo software to ensure a systematic and traceable coding of the data.

5.4 Impact evaluation

Impact evaluation further develops the results of the outcomes evaluation to explore the likely effects of the project at the broader societal level and in the longer term. The evaluation uses ‘Theory of Change’ to predict likely developmental trajectories post-project drawing on data from both the outcome evaluation and additional impact data. Additional evaluation data is drawn from: a retrospective participant survey; a potential quasi-experimental comparison; individual case studies; cost consequence analysis (CCA); a mapping and analysis of the final shape of the ecosystem at project end using social network analysis (SNA).

5.4.1 Quasi-experimental comparison

In evaluation, the ‘gold standard’ is experimental methods using randomised controlled trials (RCTs). These are designed specifically to test causal relationships and answer questions about whether the intervention has had the anticipated results. The aim of the approach is to compare the impact of the intervention with what would have happened anyway without the intervention (the counterfactual). It analyses two ‘populations’, one in receipt of the intervention and one without the intervention to observe what happens in the absence of the intervention. This evaluation approach provides evidence that the intervention has been successful if the group receiving the intervention (known as the treatment, programme or experimental group) shows significant changes in the impact measure compared with the group not receiving the intervention (referred to as the control or comparison group)⁵².

⁵¹ <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-communication-research-methods/i9396.xml>

⁵² Campbell D and Stanley J (1973) Experimental and Quasi-experimental Designs for Research, Skokie: McNally



A consistent problem identified in the literature on these experimental approaches is the difficulty in maintaining the 'temporal priority' required in RCTs – the assumption that a suspected cause precedes an event (for example, in clinical trials that the application of a particular drug will 'cause' the relief of particular symptoms). There are a number of factors that conspire to undermine temporal priority: history effects (the effects of 'external' variables that may have an influence on the outcome of the intervention); selection effects (statistical bias in the treatment and control groups); instrumentation effects (for example using measurement tools in different settings); attrition (uneven loss of participating subjects in treatment and control groups). In short, the range and complexity of 'intervening (confounding) variables' that may influence the effects of a social intervention are potentially unmanageable. As Stromsdorfer (1987) has argued, experiments involving social interventions "simply cannot bear the expense of a sample size large enough to measure all of the possible combinations of treatment mix and client characteristics that characterise the operational environment of a program at a given point in time and as it changes over time".⁵³

In complex interventions like shemakes.eu, logistical, ethical and methodological considerations make it extremely difficult to carry out experimental evaluation using RCTs. However, shemakes.eu might offer an opportunity to implement a quasi-experimental approach where activities are sufficiently well designed and implemented in school settings.

The quasi experimental evaluation methodology proposed for shemakes.eu uses a non-equivalent groups design in which two groups of students from schools participating in shemakes.eu are compared. The 'treatment' group is composed of students who are actively involved in shemakes.eu activities. The 'control' group are students who are not involved in shemakes.eu activities. Because students are not randomly assigned to these two groups the evaluation design is not strictly experimental, which means that the effects of 'intervening' (confounding) variables on results cannot be fully controlled. However, it is possible to reduce these confounding effects by for example, selecting students for the control group from the same school and same year group as the treatment group, and by selecting students with similar characteristics, such as age, or grades on standardised learning tests. To add additional rigour to the evaluation, the methodology would also include a 'pre-test/post-test' element which compares both treatment and control groups before the school's involvement in shemakes.eu and after

⁵³ Stromsdorfer, E.W. (1987) Evaluating CETA: advances in assessing Net Program Impact. Evaluation Review, 11:4.



involvement. The quasi-experimental design would compare treatment and control group on a range of measures including perceptions of gender, self-efficacy, education and employment aspirations. Standardised measures will be used where available and relevant, for example the New General Self-Efficacy Scale⁵⁴, the Implicit Association Test⁵⁵ and the Social Roles Questionnaire⁵⁶. The quasi-experimental design would also explore whether and in what ways students participating in shemakes.eu influence the gender attitudes and behaviours of their peers – in particular their male peers – through processes like ‘cognitive social learning’ (Bandura, 1988)⁵⁷.

A range of practical and ‘social’ issues would need to be discussed with WP2 partners to assess feasibility and desirability of carrying out this quasi-experimental work (e.g. dosage of interventions, how well defined they are and how much is known about the outcomes they will produce, how those implementing them relate to the ‘risk’ of seeing no change; whether schools could be won over to participating; translation of standardised scales from English to other languages). These discussions will be helped by the experience of implementing the first set of activities during 2021, and hence indicative planning of the evaluation has moved this work into 2022, subject to consent by the partners involved.

5.4.2 Retrospective participant survey

The retrospective participant survey is a tool that aims to capture the effects of shemakes.eu from the perspective of participating actors. These actors cover the range of individuals and groups involved in the project – including girls and women involved in the three learning paths; advisors, gurus and ambassadors, Labs and other stakeholders embedded in the shemakes.eu ecosystem. The survey takes a retrospective position, looking back at the end of the project to assess its implementation and impacts.

⁵⁴ Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62–83.

⁵⁵ Greenwald, A. G., and Banaji, M. R. (1995). Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychol. Rev.* 102, 4–27.

⁵⁶ Baber KM, Tucker CJ. The social roles questionnaire: a new approach to measuring attitudes toward gender. *Sex Roles*. 2006;54:459–467

⁵⁷ Bandura, A. (1986). Social foundations of thought and action: A *social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.Google Scholar.



The survey will be delivered online through a questionnaire that incorporates a core set of questions common to all participants⁵⁸ – including questions on expectations of involvement, whether these expectations were met, self-reported benefits associated with participation, experience of involvement, including challenges encountered and how they were addressed, levels of satisfaction with the project and recommendations for improvement.

The core set of questions will be supplemented by question blocks aimed specifically at shemakes.eu stakeholder sub-groups to capture the different contexts and experiences of these sub-groups. In order to reduce the burden on respondents, the majority of questions will take the form of categorical and multiple-choice questions, supplemented by a limited number of open-ended questions.

5.4.3 Cost consequence analysis

An additional important tool used in the impact analysis is cost consequence analysis (CCA), which carries out an assessment of the likely economic impact of the project.

Cost Consequence Analysis is defined as: "A form of cost-effectiveness analysis comparing alternative interventions or programs in which the components of incremental costs are computed and listed, without aggregating these results (e.g. into a cost-effectiveness ratio)." ⁵⁹

CCA considers a broad range of outcomes and measurements beyond financial ones, including 'humanistic' measures. In the health field, for example, these CCA models cover direct medical costs – for example prevention, detection, treatment, and rehabilitation, amounts spent to treat an illness, including hospitalization, professional services, pharmaceuticals, and medical supplies – and indirect medical costs – for example changes in productivity, such as earnings lost because of illness. Humanistic outcomes deal with functional status, quality of life, and satisfaction, and may include pain, anxiety, self-esteem, ability to carry out normal activities, and overall impressions. But unlike cost-benefit analysis or cost-effectiveness analysis, CCA "does not attempt to summarise outcomes in a single measure (such as the quality-adjusted life year) or in financial terms. Instead, outcomes are shown in their

⁵⁸ Questions for the children and young people participating would be phrased in an age appropriate way.

⁵⁹ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation



natural units (some of which may be monetary) and it is left to decision-makers to determine whether, overall, the treatment is worth carrying out".⁶⁰

Applications of CCA beyond the health field are rare. They include evaluation of social services interventions⁶¹, evaluations of youth offending programmes⁶² and international development programmes⁶³. We have also used CCA in the evaluation of TCBL to estimate both the measurable financial consequences and the non-financial consequences relating to a core set of outcome measures.

CCA provides a methodology to compare two scenarios: a scenario where the costs and benefits of the status quo – in which the T&C sector continues to work within an unsustainable profit-driven paradigm – are estimated – and a scenario in which the T&C sector works within a sustainable values and customer-driven paradigm.

The CCA analysis involves five stages, summarised in Table 7.

Stage	What this involves
1. Mapping	Produce an Impacts Map (ie shemakes.eu theory of change map) showing the expected impacts of the changes realised by the intervention
2. Measurable financial consequences	Select and quantify the impacts and outcomes that have measurable financial consequences attached, and develop relevant indicators
3. Non-financial consequences	Select and evaluate the impacts and outcomes that have measurable non-financial consequences attached, and develop relevant indicators.
4. Non-recurrent costs	Identify and quantify non-recurrent costs

⁶⁰ <https://www.nice.org.uk/Glossary?letter=C>

⁶¹ See Weatherly, H and Neves de Faria, I (2017). Scoping review on social care economic evaluation methods. Centre for Health Economics , York UK

⁶² Cary M, Butler S, Baruch G, Hickey N, Byford S (2013) Economic Evaluation of Multisystemic Therapy for Young People at Risk for Continuing Criminal Activity in the UK. PLoS ONE 8(4): e61070. <https://doi.org/10.1371/journal.pone.0061070>

⁶³ Edoardo Masset, Giulia Mascagni, Arnab Acharya, Eva-Maria Egger, Amrita Saha (2018). The Cost-Effectiveness of Complex Projects: A Systematic Review of Methodologies. IDS Bulletin. Volume 49 Issue 4



Stage	What this involves
5. Analysis	Compare cost consequences of alternatives and review results

Table 7: Stages in CCA

CCA relevant questions will be included into the retrospective participant survey as a block into the questionnaire for particular relevant stakeholders (e.g. Labs and businesses).

5.4.4 Counterfactual analysis using contribution analysis

Above we have already discussed the challenges of assessing shemakes.eu impact using 'classic' counterfactual methods. For these reasons, a key part of impact analysis is Contribution Analysis, which essentially involves constructing a plausible 'contribution story' that explains the contribution of a project, intervention or programme to its expected and/or identified outcomes and impacts. It has been described as 'a pragmatic approach to applying the principles of theory-based evaluation. It assesses causal chains from beginning to end, reports on whether the intended changes occurred or not, and identifies the main contributions to such changes, including the intervention under evaluation'.

Implementing contribution analysis: six steps and alternative explanations

Following standard practice⁶⁴, the methodology applied to develop this contribution analysis for shemakes.eu will involve six steps:

1. Set out the attribution problem to be addressed –specifying the outcome or target that is hoped to improve or change, as well as the key evaluation questions to be addressed.
2. Develop a theory of change about how the intervention is supposed to work, together with: i) the assumptions underpinning the theory ii) the risks to realisation of the intended outcomes and impacts

⁶⁴ Mayne, J. (2012): Contribution analysis: Coming of age? Evaluation,18(3), 270–280; Befani, B. and Mayne, J. (2014) Process Tracing and Contribution Analysis: A Combined Approach to Generative Causal Inference for Impact Evaluation. IDS Bulletin,45(6),17–36



3. Gather evidence to assess whether the Theory of Change works, and explore and discuss plausible alternative explanations –identifying the most likely alternative explanations and the evidence associated with them
4. Assemble the Contribution Story –explain how and why a result is caused by a particular sequence of events and actions, and why it is reasonable to assume that the actions of the intervention have contributed to the observed outcomes. Specify the weaknesses in the story
5. Gather new evidence on the implementation of the intervention
6. Revise and strengthen the contribution story –using the new evidence gathered and assessed.

Ultimately, Contribution Analysis aims to infer ‘plausible association’ between a project and a set of relevant outcomes and impacts by means of systematic inquiry. To demonstrate this ‘plausible association’, the shemakes.eu Theory of Change needs to meet the following five criteria:⁶⁵

- Plausibility: Is the theory of change plausible?
- Implementation according to plan: Has the program been implemented with high fidelity?
- Evidentiary confirmation of key elements: To what extent are the key elements of the theory of change confirmed by new or existing evidence?
- Identification and examination of other influencing factors: To what extent have other influencing factors been identified and accounted for?
- Disproof of alternative explanations: To what extent have the most relevant alternative explanations been disproved?

We will examine the importance of influencing factors with the help of the Relevant Explanation Finder (REF)⁶⁶ which provides a guiding framework for the identification and examination of influencing factors and alternative explanations. Annex 1 Evaluation Tools includes the tables we will use for both the analysis of contribution and the examination of alternative explanations.

⁶⁵ Mayne, J. (2011): Addressing Cause and Effect in Simple and Complex Settings through Contribution Analysis. In Evaluating the Complex, R. Schwartz, K. Forss, and M. Marra (Eds.), Transaction Publishers.

⁶⁶ Lemire, S., Bohni Nielsen, S., and Dybdal, L.(2012): Making contribution analysis work: A practical framework for handling influencing factors and alternative explanations. Evaluation, 18(3),294–309



Using mechanisms to construct the shemakes.eu contribution story

We will construct the shemakes.eu contribution story with the help of a set of mechanisms hypothesised to be responsible for affecting change.

Mechanisms' can be defined as 'underlying entities, processes, or structures which operate in particular contexts to generate outcomes of interest'.⁶⁷ A mechanism describes a complex combination of causes, and what their role is in contributing to the project's results. Mechanisms work because of the interaction between two key elements – the two 'R's' – 'Resources' and 'Reasoning'. Resources are the 'contextual assets' provided by a project. These resources interact with, and subsequently change, the 'reasoning' of the actors involved in the project, i.e. their behaviours.

The following **mechanisms** for change can be identified from the shemakes.eu DOA:

- **Learning paths mechanism.** The learning paths encourage young girls and women to become innovators by supporting them along development trajectories that map on to three key life transitions: school; higher education and work. Each transition pathway equates to three learning modes that support behaviour change: curiosity; scientific discovery and experimentation.
- **Reputation (management) mechanism:** shemakes.eu provides advisors, gurus and ambassadors from within its network based on their practice, experience and ability to carry the shemakes.eu message (resources). By promoting the reputation of these specific community members, these leaders become role models within the shemakes.eu ecosystem, promoting the shared identity and values among members (reasoning). This then helps to convey the reputation at the collective level (the shemakes.eu network) and more broadly the reputation of women in the T&C innovation context, the ultimate goal of the project (outcomes).
- **Innovation services mechanism.** This mechanism bundles together a range of resources – including outreach activities, learning events and Lab-based innovation experiments – at the community level, engaging a wide range of stakeholders, including grass roots organisations, schools, museum and start-up incubators – in collaborative work. The assumption is that this multi-

⁶⁷ Befani, B (2012): 'Models of Causality and Causal Inference', in E. Stern, N. Stame, J. Mayne, K. Forss, R. Davies and B. Befani (eds), Broadening the Range of Designs and Methods for Impact Evaluations, DFID Working Paper 38, London: Department for International Development



disciplinary and multi-sector cross-fertilisation will bring about change in public perception of textile work and the aspect of gender issues surrounding textiles, as well as increasing the penetration of shemakes.eu participants into the labour market through stimulating T&C sector companies to identify and adopt new business models made possible through experimentation in the Labs.

- **Communication mechanism.** In the context of the European scenario, with its specific challenges in terms of social and cultural perceptions in the face of gender equality, as well as the hard reality of employment and the pay gap, awareness raising actions are key to fighting prejudice and closing policy gaps. This requires campaigns that involve the host community – researchers, scientists, educators and innovators – and beyond, into established business communities. In all forms of communication, the direct voice of women can be effective to help contextualise the stereotyped images present at the European level. (DOA p. 32)
- **Overarching mechanism.** Cross-cutting all shemakes.eu activities is an over-arching mechanism based on the development and implementation of a gender-responsive ecosystem that supports a virtuous circle of community-based experimentation; social, technical and organisational innovation; value re-framing and increased social and economic equity for women. The cycle starts with the activities of the shemakes.eu Labs, in which new skills learned are applied in new forms of production, in the context of community-building and business integration. This leads to experiments with new approaches to design and production, which are shared across the ecosystem, leading to the generation of new start-ups. This leads to an increase in the value of previously low-paid skills and new role models for local and business communities as well as society at large. Increased value leads to increased social and economic equity for women, which is expanded in scale and scope as the network of Labs and the shemakes.eu ecosystem grows.

These mechanisms will be fine-tuned and, where necessary, expanded in the second theory of change workshop in April / May 2021, where alternative mechanisms will also be developed. Evaluation data collection will then collect evidence to support, develop or reject these mechanisms and also seek to understand how they affect outcomes in different contexts.



5.4.5 Participatory sense-making workshop

Towards the end of the project, and once all evaluation data has been collected and an initial analysis carried out, we will run an online participatory sense-making workshop open to both shemakes.eu partners and stakeholders ((businesses, advisors, young women). The purpose of the event would be to jointly interpret the meaning behind some of the data that have been collected to ensure this is as accurate as possible in terms of the causal pathways the data speaks to.



6. Evaluation timetable

	2021						2022																	
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec			
Process evaluation																								
Process dashboard data collection																								
Partner surveys																								
Ecosystem analysis																								
Theory of change iterations																								
Outcome evaluation																								
Analysis of learning path outcomes																								
Case studies																								
Impact evaluation																								
Potential quasi-experimental evaluation in school settings																								
Retrospective participant survey																								
Cost consequence analysis																								
Contribution analysis																								
Participatory sense-making workshop																								



7. Concluding summary

In this first Deliverable D5.1 of WP 5 Evaluation and Impact Assessment, we have set out the conceptual approach to evaluating shemakes.eu , details about the methodological implementation and provided a number of core evaluation tools in Annex 2 which will develop and grow as the evaluation progresses.

shemakes.eu seeks to make a contribution to gender equality in the textiles and clothing sector and manufacturing more widely by developing an ecosystem in which life and job opportunities are based on traditional occupations that, however, are re-thought to use technological knowledge and sustainable manufacturing in order to increase their positive impact on society and the economy. The project is implemented against the background of a complex context where, on the one hand, international political drive and grassroots social activism are pushing forward gender issues, but economic (and often social) life in terms of the nature of women's participation in the labour market, educational choices and time comments are remain somewhat gendered – something now conventionally ascribed to gender stereotypes. By bringing together two innovative networks (TCBL Foundation and Fabricademy), and implementing a set of activities aiming at skills development, awareness raising, role modelling and business incubation, shemakes.eu seeks to address stereotypes and create new opportunities for women in the T&C sector.

Accompanying the implementation of shemakes.eu is a process, outcome and impact evaluation that has developmental, accountability, learning and knowledge purposes. The conceptual approaches within which the evaluation activities are embedded, align with key features of the sheamkes.eu project and are:

- **Gender responsive evaluation** as the overarching approach for assessing the changes in gender equality achieved by shemakes.eu;
- **Participatory evaluation** which pays attention to involving stakeholders at key points of the evaluation;
- **Complex ecosystems thinking**, which requires us to investigate the components of the shemakes.eu ecosystem, and how they interact with each other and how trade-offs happen;
- **Large scale change** which offers a framework for thinking about social and organisational change processes as distributed and bottom up leadership and hence provides a useful lens for the evaluation to explore the impact of local actions on the system as a whole;



- **Theory of change** as a core component of theory based evaluation which helps us map the shemakes.eu change journey over time from inputs through to activities, outputs, outcomes and impacts.

The evaluation is implemented using both quantitative and qualitative methods which balance breadth and depth of data and hence allow for a rigorous yet nuanced assessment of shemakes.eu achievements at the end of the project. The evaluation toolkit includes some of the core data collection tools that will be used throughout the shemakes.eu evaluation. The toolkit will be expanded and developed in collaboration with shemakes.eu partners as the project and its evaluation progress. A participatory sense-making workshop will be organised towards the end of the project where both shemakes.eu beneficiaries and partners will be invited to make sense of the data coming out of the evaluation which sees through the attention we have paid to gender and power dynamics with design and implementation choices to the very end of the evaluation.



8. Document information

8.1.1.1 Revision History

Revision	Date	Author	partner	Description
V 1.0	24.02.2021	Kerstin Junge	TIG	First draft and table of contents
V 1.2	9.3.2021	Joe Cullen	TIG	Inclusion of process dashboard
V 1.3	10.3.2021	Kerstin Junge	TIG	Policy context and evaluation approach
V 1.4	16.3.2021	Joe Cullen Kerstin Junge	TIG	Impact evaluation section Process evaluation section
V 1.5	19.3.2021	Kerstin Junge	TIG	Addressing internal QA comments and sent for partner peer review
V 1.6	31.03.2021	Kerstin Junge and Joe Cullen	TIG	Final version

8.1.1.2 Statement of Originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both.

8.1.1.3 Copyright



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8.1.1.4 Disclaimer

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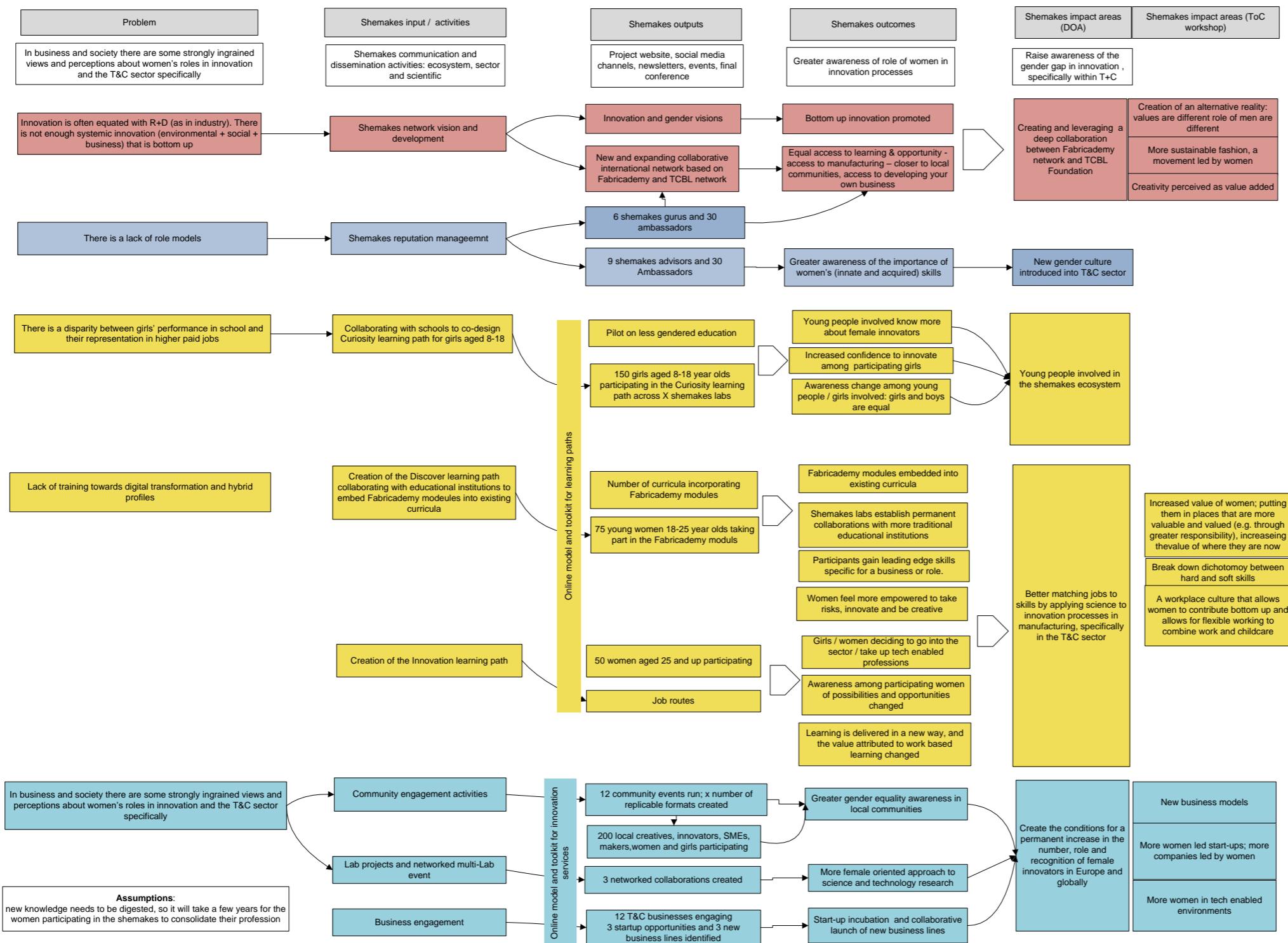
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10. Annex 1: Theory of Change diagram (long)



11. Annex 2: Evaluation toolkit (v1)

Below we present a first version of the Evaluation Toolkit. It contains drafts of the main tools we will use to implement WP5 activities and will be updated as work progresses.

Process evaluation tools

Process dashboard

The tables below show the shemakes.eu output and key performance indicators. Section 5.2.1 in this Deliverable outlines how they will be used.

OUTPUTS					
Objective	Output	Target	Status	Date	Observations
Develop Opportunity Ecosystem to bridge gender gaps	Gender specific methodology produced	NA			
	Active Labs in 16 countries	18			
	Integration of Labs into TCBL Foundation	NA			
Develop Learning Paths for girls & women innovators	Learning model & toolkit produced	NA			
	Girls 8-18 involved in Curiosity path	150			
	Women 18-25 in Discovery path	75			
	Women 25+ in Innovation Path	50			
Develop/Adapt TCBL services to bridge gender gap	Model & Toolkit produced	NA			
	Community workshops/seminars involving 200 participants (f/m)	12 (200)			
	Networked Lab projects and participants	3 (50)			
Carry out reputation management to highlight value of role models	12 T&C businesses validate new business/service concepts	12			
	Advisors engaged	9			
	Gurus engaged	6			
Carry out evaluation & impact assessment	Ambassadors engaged	30			
	Evaluation Design produced	NA			
	Process evaluation delivered	NA			
	Outcomes evaluation delivered	NA			
Effective communication & dissemination	Impacts evaluation delivered	NA			
	Website visitors	10000			
	Social media followers (cross-platform)	1000			
	Local seminars and workshops (participants f/m)	500			
	Final project event (participants f/m)	80			
	Videos (interviews and testimonials) produced	18			
	Stories / blog posts disseminated	36			
	Newsletters produced	4			
Effective project management	Press releases produced	6			
	Scientific publications produced	3			
	Consortium meetings held	3			
Compliance with ethics requirements	Progress reports produced	4			
	Data management plan	1			
	Policy briefs	2			
Ethics advisor appointed	Ethics advisor appointed	NA			
	GDPR compliance	NS			
	Informed consent obtained	NS			

KPIs				
Objective	KPI	Status	Date	
Develop Opportunity Ecosystem to bridge gender gaps	change in no. actors involved in ecosystem			
	% participant target reached			
Develop Learning Paths for girls & women innovators	% participant target reached			
	% participant target reached			
Develop/Adapt TCBL services to bridge gender gap	progress towards target local community actors engaged			
	progress towards target business actors engaged			
Carry out reputation management to highlight value of role models	% target advisors, gurus and ambassadors actively involved in reputation management activities			
Carry out evaluation & impact assessment	Not applicable			
	% target visitors reached			
Effective communication & dissemination	% social media followers reached			
	change in partner satisfaction			
Effective project management	progress to milestone targets			
Compliance with ethics requirements	% participant informed consent acquired			

Website pop-up survey (draft questions)

1. Why have you come to visit the shemakes.eu website today? (tick all that apply)

- To learn more about the shemakes.eu project
- To sign up to a shemakes.eu event
- Other (please specify)

2. Where did you hear about shemakes.eu (tick all that apply)

- I'm a project partner
- I'm one of the shemakes.eu advisors
- I was told about it by one of the shemakes.eu partners
- I was told about it by people from my professional network
- I attended a shemakes.eu event
- Internet search
- Other (please specify)

3. Do you work in the textiles and clothing sector? Yes / no [checkbox]

4. Do you study a subject in the field of textiles and clothing? Yes / no [checkbox]

5. How would you describe your gender identity? You don't need to answer this question but we would like to collect this information to understand who we are reaching with our activities.

- I define my gender as: [open text box]
- Prefer not to say: [checkbox]



Partner survey questionnaire

Below is a set of core questions for the partner survey. Where useful and beneficial, these might be supplemented with questions relating to project outcomes and impacts and ecosystem analysis.

Q1 Your satisfaction with this particular aspect of the project:

	Very dissatisfied (1)	Dissatisfied (2)	Neither satisfied, nor dissatisfied (3)	Satisfied (4)	Very satisfied (5)
Governance (decision making and consultation) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientific co- ordination of activities (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Progress control and monitoring (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality control (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial matters (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 Any challenges you have experienced and how these could be addressed going forward:



Governance (decision making and consultation) (1)

Scientific co-ordination of activities (2)

Progress control and monitoring (3)

Quality control (4)

Financial matters (5)

Q3 Anything that has gone particularly well:

Governance (decision making and consultation) (1)

Scientific co-ordination of activities (2)

Progress control and monitoring (3)

Quality control (4)

Financial matters (5)

Q4 How satisfied are you so far with the WP leadership in relation to:

Very dissatisfied (1)	Dissatisfied (2)	Neither satisfied, nor dissatisfied (3)	Satisfied (4)	Very satisfied (5)
-----------------------------	---------------------	---	------------------	--------------------------



WP1 Opportunity ecosystem (1)	<input type="radio"/>				
WP2 Learning paths (2)	<input type="radio"/>				
WP3 Innovation services (3)	<input type="radio"/>				
WP4 Reputation management (4)	<input type="radio"/>				
WP5 Evaluation and impact assessment (5)	<input type="radio"/>				
WP6 Communicatio n and Dissemination(6)	<input type="radio"/>				
WP7 Project management (7)	<input type="radio"/>				
WP8 Ethics (8)	<input type="radio"/>				

Q5 Your satisfaction with this particular aspect of the project, including:

Very dissatisfied (1)	Dissatisfied (2)	Neither satisfied, nor dissatisfied (3)	Satisfied (4)	Very satisfied (5)
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Communicati on and cooperation	<input type="radio"/>				
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between
partners (2)

Communication and responses from scientific coordinator (3)

Communication and responses from project management (5)

Q6 Any challenges you have experienced and how these could be addressed going forward:

Q7 Anything that has gone particularly well

Q8 Overall, how satisfied are you with the results that shemakes.eu has achieved so far?

- Very dissatisfied (1)
- Dissatisfied (2)
- Neither satisfied, nor dissatisfied (3)
- Satisfied (4)
- Very satisfied (5)

Q9 How satisfied are you so far with the progress made on:



	Very dissatisfied (1)	Dissatisfied (2)	Neither satisfied, nor dissatisfied (3)	Satisfied (4)	Very satisfied (5)
WP1: Opportunity ecosystem (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP2 Learning paths (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP3 Innovation Services (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP4 Reputation Management (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP5 Evaluation and impact assessment (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP6 Communicatio n and Dissemination(6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP7 Project management (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WP8 Ethics (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 What have been the biggest achievements so far?



Possible supplementary questions on shemakes.eu impact:

Q11 How would you see each of the shemakes.eu high level impacts being achieved in concrete and practical terms? Please specify the concrete outcomes you feel are needed in order to lead to these impacts.

Q12 And how likely do you think the project will achieve each of these impacts?

Very unlikely (1)	Quite unlikely (2)	Neutral (3)	Quite likely (4)	Very likely (5)
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Q13 What other impacts do you think the project will be able to achieve?

Possible supplementary questions on the shemakes.eu ecosystem

Q14 Connections with other ecosystem actors: which actors,



Q15 nature of connection,

Q16 strength / frequency of connection

Closing question

Q17 Do you have any further comments you would like to make on the shemakes.eu project?



Outcome evaluation tools

Below we present the outline questions for the case study work to be carried out as part of the shemakes.eu outcome evaluation. This will be reviewed and amended before use.

Outline questions for individual women participants – assuming a narrative interviewing method

(to be finalised before the first set of case studies)

Context questions	<ul style="list-style-type: none">• About themselves, their identities, learning and career stories,• Relationship with questions of gender in general, and gender issues in education and at work.• Positive and challenges experiences made as women in the field(s) in which they move
Activities questions	<ul style="list-style-type: none">• The shemakes.eu activity / activities joined• Motivations for joining them• Exploration experiences of these activities: how did they feel, how were they different / the same to prior experiences
Outcomes questions	<ul style="list-style-type: none">• What has the interviewee gained from the shemakes.eu activities?• How are they relating to their competencies, career options, further training etc now? Have they done anything different?• What are their thoughts on why they are (or are not) experiencing any changes?
Impact questions	<ul style="list-style-type: none">• What are their (career, education, personal) plans now? How are they different now compared to their thinking before joining the shemakes.eu activity

Outline topic for semi-structured interviews with organisations

(to be finalised before the first set of case studies)

Context topics	<ul style="list-style-type: none">• Interviewees role in the organisation and in participating in shemakes.eu• Focus of the organisation's activities• Gender break-down of workforce, also by seniority• Policies and practices on gender equality• Their interest in gender issues, personally and in role.• Their perception of gender challenges relating to education and work in the T&C sector
Activities topics	<ul style="list-style-type: none">• Which shemakes.eu activities did they participate in, and why?• Why did they participate in shemakes.eu?• What did participation involve? What did they do, and who in the organisation was involved in what role?• How important was the shemakes.eu engagement measured in the time committed to being involved?• What was their experience of participating? What was challenging, what was easy? How were challenges addressed?
Outcomes topics	<ul style="list-style-type: none">• What attitudinal, knowledge, awareness behaviour changes have they observed as a result of participating in shemakes.eu?• Their position in the shemakes.eu ecosystem (connectivity, value added of the ecosystem for them etc)• How have these affected the organisation, positively or negatively, in relation to business performance and gender relations?• How do they see their relationship with shemakes.eu evolve over the coming years?



Impact topics	<ul style="list-style-type: none"> • What longer term changes do they envisage taking place in their organisation as a result of being involved in shemakes.eu • What factors might negatively or positively influence these changes?
Reflective and learning questions	<ul style="list-style-type: none"> • What were the (three) key things learned as a result of participation in shemakes.eu? • Any other comments

Impact evaluation tools

The tables below present the frameworks for the construction of the contribution analysis and a description of how the relevant explanation finder tables will be used.

Contribution analysis: mechanisms table

shemakes.eu activities / outputs	
Mechanism	
Supporting evidence	Strength
Refuting evidence	Strength



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Contribution analysis: alternative mechanisms table

We will use the Relevant Explanation Finder (REF)⁶⁸ to analyse a number of alternative mechanisms as possible explanations for shemakes.eu impacts. This will be done using a table with the following six dimensions:

- **Description of the mechanism**
- **Type of explanation or factor identified.** This covers four types: ***Primary explanation*** (mechanism) – a mechanism identified and purported to be the target intervention mechanism that accounts for and explains the observed outcomes (i.e. the primary explanatory mechanism in the contribution story); ***Direct rival (mechanism)*** – a mechanism, different from the target intervention mechanism, that accounts for and explains the observed outcomes (i.e. undermines the contribution story); ***Co-mingled rival (mechanism)*** – other mechanisms, along with the target mechanism, that both contribute to and explain the observed outcomes (i.e. revise the contribution story); ***implementation rival (factors)*** – influencing factors in the implementation process, not substantive intervention mechanisms, that modify the outcomes (i.e. revise the contribution story).
- **Explanation level.** This also covers four types: ***the individual level*** – the capacities of the key actors and stakeholders such as interests, attitudes, capabilities and the credibility of (for instance) professionals or beneficiaries; the ***interpersonal level*** – the relationships required to support the intervention, such as lines of communication, management and administrative support, union agreements and professional contracts; ***the institutional level*** – the setting in which the intervention is implemented, such as the culture, leadership etc. of the implementing body; the ***wider (infra-) structural level*** – political support, the availability of funding resources etc.

⁶⁸ Lemire, S., Bohni Nielsen, S., and Dybdal, L.(2012): Making contribution analysis work: A practical framework for handling influencing factors and alternative explanations. Evaluation, 18(3),294–309



- **Identifiers** –provides descriptions of the possible identifiers that offer proof or disproof of the existence of the various influencing factors and alternative explanations.
- **Degree of influence** –this summarises the degree of influence of both the factors identified and the underlying mechanisms for the observed outcomes. It covers five attributes to be considered in assessing the degree of influence: **certainty** – the degree to which the observed outcome pattern matches the one predicted by the factor or mechanism; **robustness** – the degree to which the factor or mechanism is identified as a significant contributor across a broad range of data sources and data collection methods; **range**: the degree to which the factor or mechanism contributes to a broad range of the outcomes of interest; **prevalence** – the degree to which the factor or mechanism contributes to the outcomes of interest across a wide range of implementation environments and target groups (e.g. different implementation sites and / or types of intervention); **theoretical grounding** – the factor or mechanism is informed by theory (identifies existing theories of which it is an example) and is cast in specific terms (i.e. it is not vague)
- **Implications** –this provides conclusions regarding the implications of the factors and mechanisms for the contribution story.

These criteria are listed in the table below.

Alternative Explanation	
Mechanism	
Type	
Level	
Identifiers	
Degree of Influence	
Certainty	
Robustness	
Range	
Prevalence	
Grounding	



Implication	
-------------	--

