

WP2 – D2.8: Report on synergy from EU advanced textile experts training masterclasses

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# Weaving innovation among academia and industry in the Tunisian textile sector



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### 1. Introduction

WINTEX project is a European Cooperation for innovation and the exchange of good practices Partnership composed of thirteen partners. Six of them are Tunisian institutions (3 HEIs, 2 research scientific centres, and 1 cluster). The European ones are composed by universities, clusters, and expert institutions on education and innovation fields.

The WINTEX partnership main objective is to transmit knowledge, resources, and innovation capabilities to the the textile sector of Tunisia through the implementation of a Capacity Building strategy in the field of Higher Education. In other words, to facilitate an empowerment of the textile industry of the country by generating a symbiosis between the academia and the industry.

To do it so, an important part of the Project budget is destined to the purchase of modern machinery that shall be allocated within each one of the Tunisian HEIs, actuating, this way, as new three textile and innovation centres able to provide new and innovative services, products, investigation and research lines,... and, at the end, a new and valuable opportunity for the academia and industry to gather around these centres, to find common interests, mutual help and to impulse the sector competitivity from its two main essential sides.

Once the machinery arrived to unisia and it was installed, one important moment took place. The moment to learn and get inspired from some examples of good practices already caried out, in this case, by European partners.

In that sense, the WINTEX project previewed a series of masterclasses that would consist in the explanation of the experience of some partners and the content considered relevant to foment a proper environment that fosters innovation, competitivity, sustainability, digitalization in the textile sector.

The masterclasses brought cases from innovative and/or sustainable products from textile companies in Europe to illustrate with practical cases all the members of the consortium and resulted to be a key resource for the Tunisian partners.

From these masterclasses, the deliverable D2.8. – "Report on synergy from EU advanced textile experts training masterclasses" aims at compiling and resume the experience acquired from those sessions. It is determinant to keep the learnings from those events, not only to facilitate the Tunisian partners the implementation and exploitation of all the ideas, recommendations and potentialities exposed, but also to give the opportunity to new potential Tunisian stakeholders within the Tunisian textile sector and to take advantage of the content of the sessions even if they were not present or involved in the project at that time. With this tool at their disposition, Tunisian partners will always be able to implement strategies towards the transformation of the Tunisian textile sector and its competitivity.

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# 2. Methodology

How were the masterclasses designed and executed? The elaboration of the content, the organization of the events and the following outcomes were planned conscientiously to exploit the most the possibilities of this deliverable. A well-designed methodology is key to ensure good results during the implementation. Some steps were done before the masterclasses became real. Find the preparation stages, below:

# 2.1 Content organization

The first step in this deliverable was to think. The content shall be very well selected and organized to be useful for the Tunisian partners. And useful mean understandable, realistic, and coherent to the Tunisian textile sector needs and reality.

That is why the first move was on the organization of the European partners to find a moment where debate about the knowledge acquired previously during the project, about the Tunisian textile sector and propose which experiences, examples, or good practices each partner could bring to the content of the masterclasses, discuss how useful could they be for the receptors and agree which ones would be selected.

After the partners met and agreed on the content, this one should be organized. It was structured by topics (introduction to WINTEX project, basic knowledge about innovation strategy, trends and opportunities in the textile sector, relevant stakeholders and facilitators' paper on innovation, business strategies, among others), and following a logic that when the listener is receiving the information, they do it in such way that the ideas are well connected and enable the reader to connect the key concepts of one presentation with the next one, so it facilitates and promotes on one side, the imagination and, on the other side, the extrapolation of such ideas to their own reality.

# 2.2 From the theory to the reality: the speakers

Once the content structure was clear, it was the time to find the ideal experts who are in contact and/or know real case examples about the designed theory, to present it all on the masterclasses. So, the contact with the proper speakers came was the next step.

The speakers should be expert on the topics mentioned but also be diverse and represent several European countries.

Then, the WINTEX partners managed contacts with their previously listed best options to perform these masterclasses and got response from them, obtaining a highly experience list of speakers. Thew were Amine Haj Taieb, from Univeristy of Sfax (Tunisia); Sergi Artigas from Leitat (Spain); Raul Fangueiro from Fibrenamics (Portugal); Ariadna Detrell from AEI Tèxtils (Spain); Josep Casamada from AEI Tèxtils (Spain); Daniela Zavec from Titera (Slovenia); Judith Bosch from the ETP (Belgium); Joan Santamaria

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from <u>Hilaturas Arnau</u> (Spain); Francesc Solà from Hilaturas Arnau (Spain); Jamie Meehan from <u>IDEAM</u> Cluster (Ireland); Myriam Vanneste from <u>CENTEXBEL</u> (Belgium) and Omar Cherkaoui from the <u>ESITH</u> (Morocco).

# 2.3 Organisation and preparation of the event

The event itself was organized by the Tunisian partners. This is the most important part of the whole process, as the better is planned everything, the better it will work the day of implementation. The main logistics that these members of the consortium did have to take into account were the reservation of the two events halls (one in Sfax and one in Ksar-Hellal), the contact with the institutions and stakeholders within the sector and the accommodation of the attendants (partners, speakers, institutions, ...), etc.

## 2.4 Dissemination of the event

Deepen into the stakeholders and the attendance care, it is important to underline the pillar that suppose a proper dissemination of such an event.

The success of this kind of events use to depend on the number of attendees and their profile. This is the reason why a previous contact and a well transmitted message is essential to make them perceive the importance of the event.

So, in order accomplish with the objective to involve the maximum number of relevant stakeholders, a communicative campaign was designed.

Once the speakers were arranged, the agenda was closed, designed, and published. The agenda followed Wintex corporative image and was designed under an attractive interface, and with the most relevant content highlighted.

This agenda, together with the proper and personalized explanation was sent to all the relevant stakeholders Tunisian partners could reach. The contact with stakeholders was made in person (events and meetings), by call, videocall, email, social networks, etc.

Furthermore, from the Wintex consortium a wide dissemination of the events was implemented through the publication of the agenda, details of the event on a press release, and the share of this content through the consortium social networks.

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Sfax masterclass program

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Ksar-Hellal masterclass program

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### 2.5 Execution

The execution consisted in put in practice all the precious preparations. Both sessions were held normally, according to the agenda. Physically, everything was ready when the participants came in (accommodation, chairs, food, screen, and digital support, etc.). And an important aspect is that speakers were clear in their explanations. They focused on the relevant content to be transmitted without talking excessively long, but at the same time they gave key examples that accompanied their explanations. Furthermore, and also very important: they established a good connection with the audience, which enabled the attendants to make some questions and take the maximum profit of the sessions.



Wintex partners & stakeholders during the masterclass

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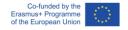














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Wintex partners & stakeholders during the masterclass



Stakeholders during their visit to the new Textile Innovation Centres' facilities and their new machines

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Wintex members & masterclasses' speakers once one of the sessions was finished

### 2.6 Determinant: the review

The review is an important part of the whole masterclass (and any other) project It is determinant to detect weaknesses that can be improved, strengths aspects that should keep being implemented or even improved and any other suggestion or adaptation that can be useful to get the best implementation of this initiative in this or in future other cases. In this case, particularly, it consisted of an evaluation by the participants of the two events with the aid of two questionnaires examining the general organization and the topics presented. Comments of the participants regarding strong and weak points were also received. The results of the review (evaluation) are presented in detail below, in the section number 4.

## 3. Contents and learnings

During the two-day sessions of the WINTEX masterclasses in Sfax and in Ksar-Hellal, several topics were touched. And many learnings, synergies and inspiration came after the content exposed. This content was diverse and focused on the enhancement of the Tunisian Textile Industry and the promotion of their modernization and capabilities of adaptation to new trends.

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# 3.1 1st session (Sfax, Tunisia)

The first session, held in the Institut Supérieur d'Arts et Métiers of Sfax, began with a general and necessary overview about the Wintex project for all the attendants to know why they were there and how the project enabled such capacities for the Tunisian textile sector and the benefits for them in the immediate future as well as in long term. It was presented by Amine Haj-Taieb.

This conceptualization was strongly complemented by Sergi Artigas from Leitat Technological Centre in Barcelona, Catalonia, who provided a deep and detailed vision about the opportunities, last trends, examples and good practices about the technology application, how it is related with the textile industry and how it can contribute to become more competitive.

In the same line, Raul Fangueiro from Fibrenamics, focused on the last trends, opportunities and limitations around the field of fibers and composites, giving to the attendants a complete overview of about the importance this aspect plays in the innovative process.

The first part of the session was completed by AEI Textils' Cluster Manager Ariadna Detrell and Josep Casamada, AEI Tèxtils' Project Coordinator. The members of the Catalan Advances Textile Materials' Cluster explained the importance of a cluster to gather companies under a trustable and symbiotic environment to increase the competitiveness. They provided to the Tunisian textile stakeholders some key point to consider to get this objective. Among others, the projects strategy followed by the bluster the recent years, they basic items they are working on to create competitiveness, the tools they implement, resources to facilitate inspiration, and some KPIs to proof its progress.

After a break, the first masterclass continued with the second part's content.

And connecting with the previous presentation, Daniela Zavec, from Titera, Slovenia, exposed her experience as a company leader and provided the attendees with an interesting point of view in this regarding. She gave examples how she and her company performed strategically a business model and presented some results as well as good practices experiences.

Later on, Judith Bosch, from the ETP, presented accurately the current status of the Smart Textiles' performance in Europe through the SmartX initiative, and gave a preview which will be its role in the becoming years. Furthermore, Judith introduced the last trends of Smart Textile products (in several fields such as Personal Protection, Medicine, Sports, Automotive sector, Smart interiors, and Industry) as well as two Smart Textiles Communities that aim at take the maximum benefits its potentialities and act as a hub where all stakeholders can contribute and join.

And finally, to conclude and complete the first Masterclass session, a sustainability presentation was exposed by Joan Santamaria from Hilaturas Arnau. He pointed several examples of his company's green transition during last years. The company, that holds the Global Recycled Standard certificate, produces several yarns obtained from several natural sources. The interesting fact that might inspired the Tunisian attendees are the bast variety of possible yarns and the fact that they are used afterwards for technical

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applications such as aeronautics, automotive, metallurgical industry, agro-food industry, etc. and so it completes the added value chain on by developing sustainable and ethical products for these fields.

# 3.2 2nd session (Ksar-Hellal, Tunisia)

The second masterclass followed the same structure as the first one for its first part. It counted with a contextualization about the Wintex project provided by Amine Hadj Taieb from the Institut Supérieur d'Arts et Métiers of Sax, and a consolidation part more focused on innovation and competitiveness, and innovation. The content of this second part, as mentioned, conditions and trends for and about the innovation, and the paper of the clusters towards competitiveness.

For the second part of this session, the content changed with respect to the first Masterclass.

After the break, the event Jamie Meehan, from the IDEAM cluster, in Ireland, gave to the attendees valuable information about the industrial digital transition, focusing on examples within the manufacturing process, strategic partnerships to get the targeted objectives on digitalization, talent and skills required, how to invest in it properly... And afterwards, Jaime illustrated everyone with a brilliant example how to build a Green and Sustainable Business model, giving tips from the micro to the macro cases and variables to take into account during any green transition process. In this regard, some events about this key point were presented to encourage the presents to attend them in the future and deepen their knowledge about it.

Later, Myriam Vanneste from CENTEXBEL, a Research Centre from Belgium, presented functionalization of finishing processes.

Finally, to conclude the second and final Masterclass, an exposition about the good practices caried out in Morocco and Jordan through another previous Capacity Building project, was presented by Omar Cherkaoui, from the ESITH, Morocco.

Mr. Cherkaoui gave a Moroccan textile industry overview and then presented the Fostex project, its parallelisms with the Wintex project as a Capacity Building initiative, how the whole project experience was, a brief explanation and how the innovation centres were installed and are performing currently in Morocco, once the project finished.

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## 4. Evaluation

After the end of the two sessions, two questionnaires were distributed to the participants in order for them to evaluate the events. The questionnaires were circulated with the aid of google forms.

# 4.1 1st session (Sfax, Tunisia)

From the 48 people participating in the event 34 answered the questionnaire.

## **Origin of participants**

The people who answered the questionnaire came from the following organizations:

ISAMS (USF) 24
Hedi mallouli 2
ISMM 4
CRNS 1
AEI Textils 1
ISET 1
Mb 1

## Identity of participants

•	Member of an association	1
•	Member of an SME or SME cluster	1
•	Member of Local or Regional Authorities	1
•	Member of University Faculty	21
•	Researcher	8
•	Student	2

# Results

The questionnaire consisted of 8 closed type questions and two open ended questions. The results are as follows:

Questions		Satisfaction (%)
1	Are WINTEX project's objectives, activities, benefits and results clear to you?	86
	to you:	
2	Please rate the date and time of this event	84
3	Are you satisfied with the speakers?	87

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4	Are you satisfied with the online tool/platform used?	81
5	How satisfied are you with the presentations about the different aspects of innovation?	86
6	How satisfied are you with the presentations about the smart, advanced and circular textiles?	90
7	How satisfied are you with the presentations about the importance of clusters for the increase of competitiveness?	84
8	How would you rate this event?	89
	Average	86

### What did you like most about the event?

- The event itself, I liked it.
- The way of presenting new information about innovation in domain of textile with a clear and motivated method
- Discovering new research areas.
- The event provided different aspects of textile world, which I find very interesting for me as a designer.
- The innovation of textile field
- The speakers with their presentations: the smart, advanced and circular textiles
- Good experience to know about the innovations.
- To know about the smart, advanced, and circular textiles
- The smart, advanced textiles
- The different aspects of innovation
- The event was amazing everything was great. The speakers were very good and I'm happy for being part of it.
- The presentations.
- The way of speaking with fun and like this the receiver can be more interested in the project objectives and information
- Meeting professionals that provide us useful information
- Organization
- The very pleasant atmosphere and the speakers

## What did you like least about the event?

- Timings...
- There are some people who don't know English very well, so I hoped that there is some translation in French
- Lack of interaction between speakers and audience.
- The online part was also interesting but maybe cause of the poor connection sometimes it's not clear, but overall, it was fascinating.
- Everything went well

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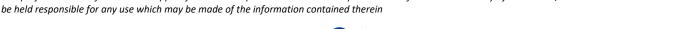
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- Maybe the organization of the event
- In my point of view the speeches were a bit long and you kind of lose focus during them so maybe
  we should work on this more but other than that everything was so good thank you.
- The absence of industrialists.
- If they speak in French that be better because there are some difficult words
- The online part, just some random problem we could all face (poor connection)

### **Newsletter**

32 of the people who answered the questionnaire expressed their interest in receiving the newsletter of the project.

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### Comments by the hosts

"During the masterclass, some participants asked questions related to the different topics presented during this event. Speakers were also asking audience to stimulate their knowledge.

After the end of the presentations, discussions were initiated between audience and speaker.

During the coffee break, audience and speakers discovered the equipment of the innovation textile centre at the university of Sfax by visiting the two locations of the Innovation textile centre at the higher Institute of Arts and Crafts of Sfax

During the coffee break also the vice rectors of the University of Sfax, audience and speakers inaugurated the Innovation textile centre at the higher Institute of Arts and Crafts of Sfax and the local organizers presented the different equipment and the services of the centre".

Concluding, the event is considered successful (percentage of satisfaction more than 70%). Three issues should be taken into consideration for the improvement of next events: the online connection, the lack of attendants from the market and the poor interaction between the audience and the speakers.

# 4.2 2nd session (Ksar-Hellal, Tunisia)

From the 103 people who attended the event, 29 answered the questionnaire.

### Origin of participants

The people who answered the questionnaire came from the following organizations:

ISMM 14
 ENIM 2
 ISET KH 12
 LGTex Laboratory 1

### Identity of participants

Student 4Researcer 7Member of University Faculty 18

#### Results

The questionnaire consisted of 8 closed type questions and two open ended ones.

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		Satisfaction (%)
1	Are WINTEX project's objectives, activities, benefits and results clear to you?	74
2	Please rate the date and time of this event	75
3	Are you satisfied with the speakers?	76
4	Are you satisfied with the online tool/platform used?	70
5	How satisfied are you with the presentations about the different aspects of innovation?	79
6	How satisfied are you with the presentation about the digitalization and green transition?	72
7	How satisfied are you with the presentations about the importance of clusters for the increase of competitiveness?	71
8	How would you rate this event?	82
	Average	75

# What did you like most about the event?

- The content of documents presented
- The new information and the trainers
- The presentations
- The project
- Diversity
- The speakers
- Presentation from Minho University
- The different aspects of innovation
- I like the presentations and the organization
- The event was well organized
- Most of the presentations
- Almost all Presentations
- The presentations about the different aspects of innovation

# What did you like least about the event?

- Video projection
- The projections video
- Online sessions
- Online speakers

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- Presentation of Prof Charkaoui: It is different from the title indication
- Organization
- Lack to represent the project Wintex and the objective of the event was not clear for me
- The assistance of afternoon class was practically not satisfied
- Online conference
- The date and time of this event

#### Newsletter

25 of the people who answered the questionnaire declared their interest in receiving the newsletter of the project.

# Comments by the hosts

"As part of the organization of the advanced Textile's Masterclass session at ISET KH, the attendance was satisfactory. Indeed, more than 100 people reached the conference. In addition to speakers, researchers, teachers and students from ISET, ISMM and ENIM were present at this event. The audience showed a lot of interest in the topics discussed by the speakers, whether face-to-face or online.

We note the absence of industrialists despite the strong dissemination of the event on the ISET website and on social networks. A good interaction between those present and the speakers was observed.

We believe that this session succeeded in attracting the interest of the audience to the tracks of innovation in the textile sector. This Masterclass was a good opportunity to discover the developments in the textile field in Europe and to disseminate the activities of the Wintex project".

Concluding, the event is regarded as successful as the satisfaction for all questions was more than 70%, although less than the event in Sfax. An issue that was brought into attention was in this case also the online connection and online presentations.

## 5. Conclusion

The ability to hold this kind of event has been proved to be a successful initiative regarding the Capacity Building and knowledge transferring aims of the Wintex project.

The materialization of these physical, well prepared, and interactive expositions does not give the Tunisian textile industry any secret that wouldn't have discovered or implemented through its own resilience. But it

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has provided with critical tools, inspiration, examples, paths and ways to improve some of their potentialities and dodge some potential risks.

This masterclasses format, of course, has given Tunisian stakeholders a wider overview of the textile industry but also European partners have learnt so much from the Tunisian partners. Especially now that some of their potentialities have been exploited through the Wintex project.

This initiative has been also helpful in the sense of the synergies and innovative atmosphere creation in multiple directions. From new connections between the Tunisian textile field, to interactions with foreign actors, to the potential collaborations discover through the good practices' examples provided during the events and the informal debates.

Furthermore, these actions targeted on developing innovation are strictly connected with the improvement of the immediate and long-term future in terms of sustainability and viability of the economy.

And finally, as it was targeted on the beginning of the project, it is easily inferable that through the Wintex masterclasses, some of the following topics have been tackled and addressed and some other have been presented as resourced to get these goals:

- Critical mass is key as a cluster to drive innovation and animate the ecosystem.
- Green transition topics: natural fibers and functional finishes need to be more circular and environmentally friendly. Many opportunities for new business
- Digital transition: need to uptake skills and vision to drive and lead the digital transformation processes.
- New textile innovation centers can learn from Jordan an Morocco, establishing some synergies and potentially new collaboration with them.

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