SUMMARY

Design thinking, creative thinking, critical thinking, art thinking: Applying a Design Led Innovation approach to the advanced textiles sector

Developed by:

Co-funded by the
Erasmus+ Programme
of the European Union

Introduction

- The term design has broaden its meaning and can be used to describe a multi-disciplinary problem-solving approach

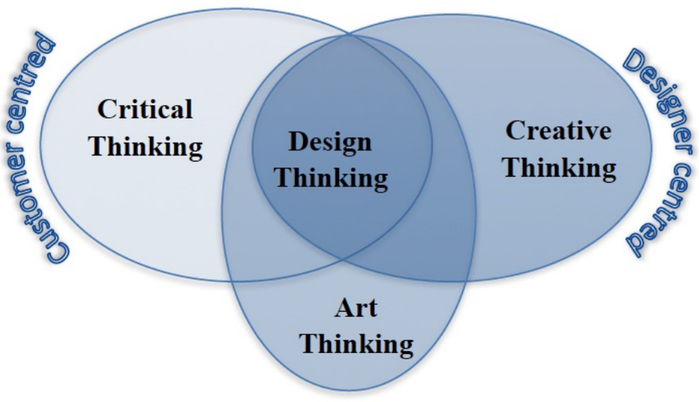
- Design is an important strategic business resource, helping companies to:
  - Increase quality
  - Improve production flexibility
  - Reduce material cost
  - Innovate, differentiate and compete in the global marketplace

- In the technical textile sector design need mainly to accomplish product functional aspects

Background

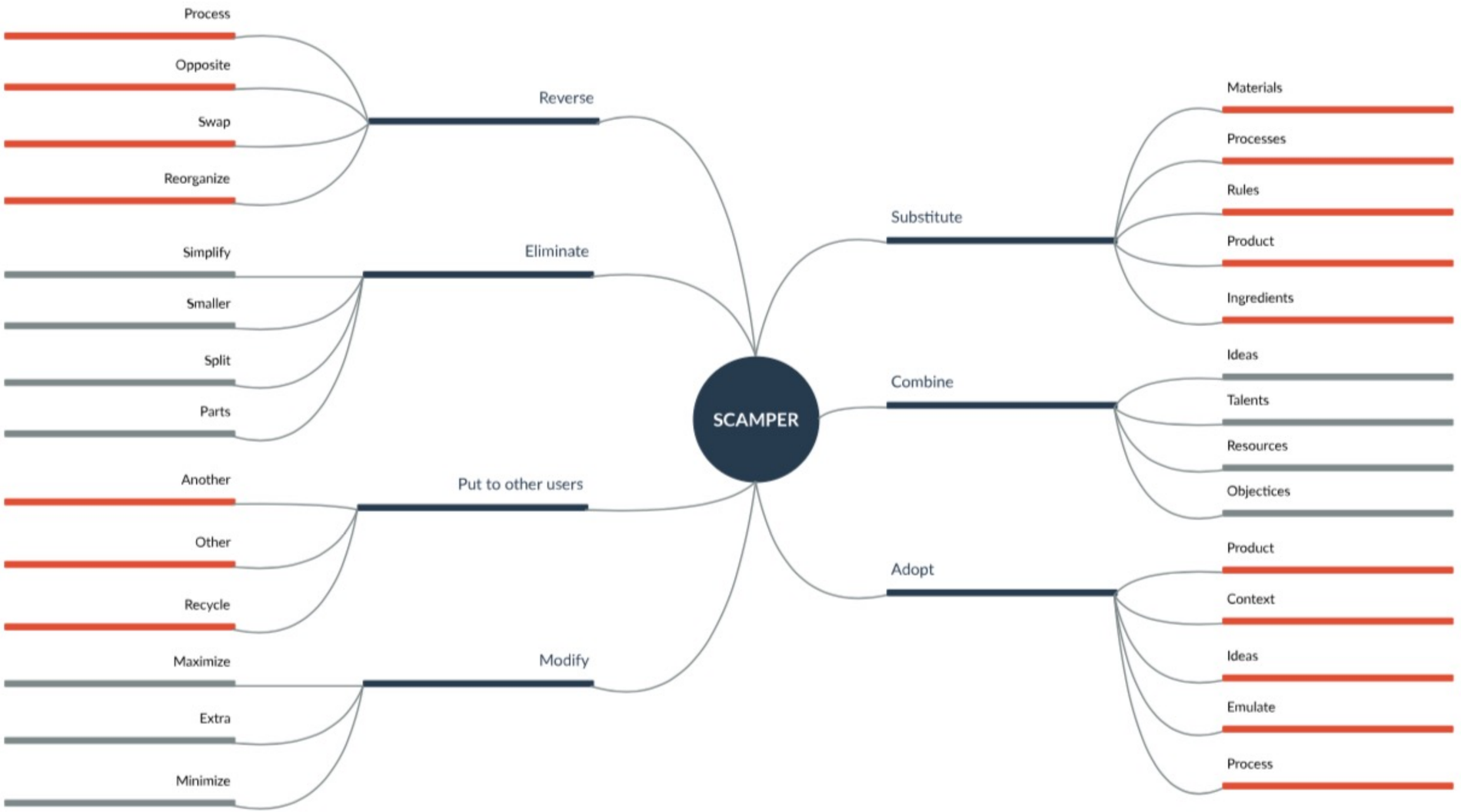
Design thinking, with his intersections between critical, creative and art thinking, can be seen as an holistic approach contributing to a company design led-innovation.

Figure 1: The Design –Led Innovation Framework
(Bucolo and Matthews, 2011)



Design Led Innovation:
Critical, creative and art thinking can work together to create innovation in the Design thinking process, acting from different perspectives.

Visual Creative Thinking Techniques

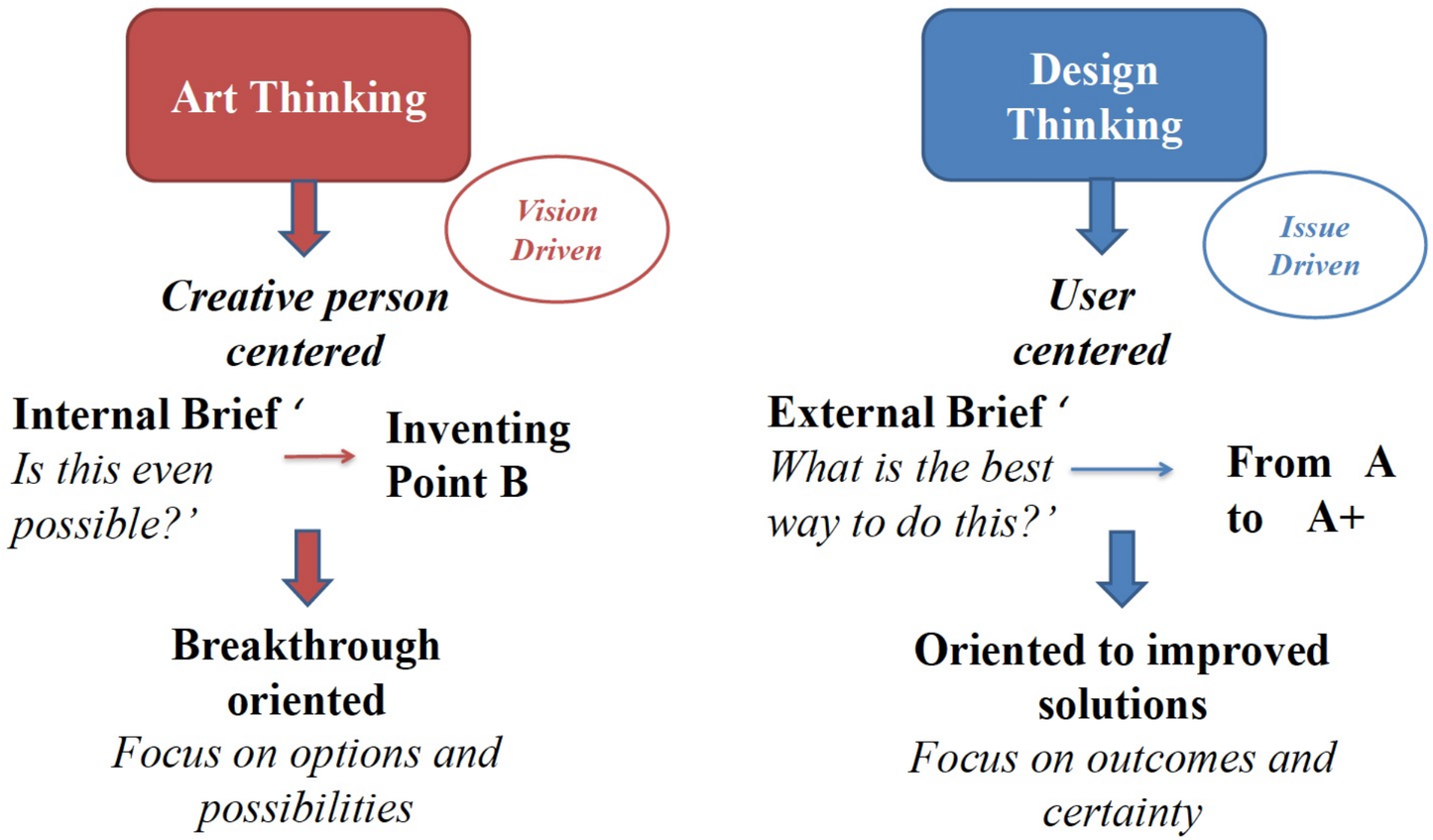


SCAMPER technique:
SCAMPER stands for seven thinking approach aimed to test different kind of possibilities for a data product

Visual Creative Thinking Techniques

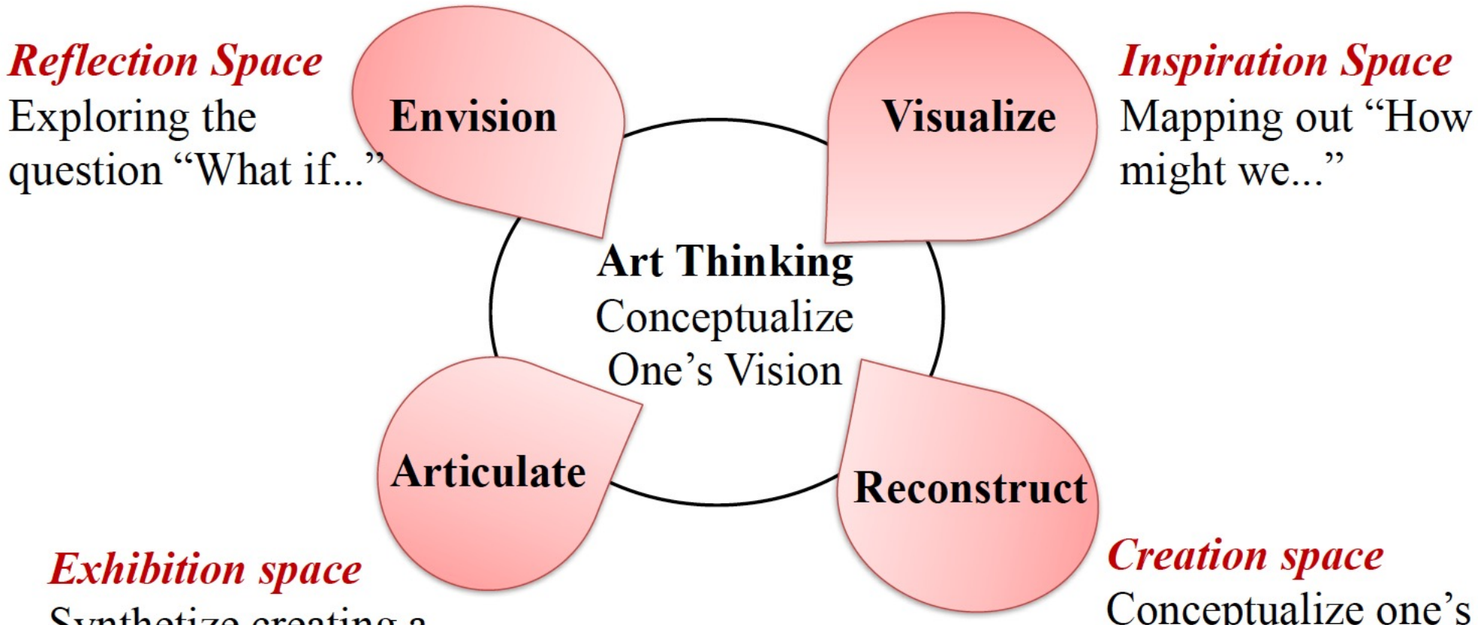
SIX Thinking hats technique:
In this method each hat represents a different perspective from which to evaluate an idea/ solution

Art Thinking



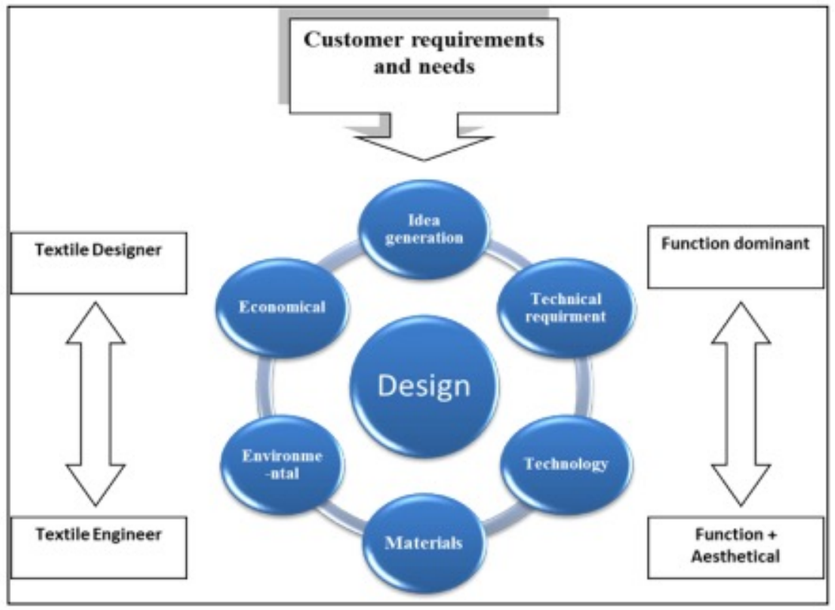
Art Thinking v/s Design Thinking:
By placing the "artist" at the heart of design process, art thinking stakes out more space for the unknown, the untested, and the not yet commercialized.

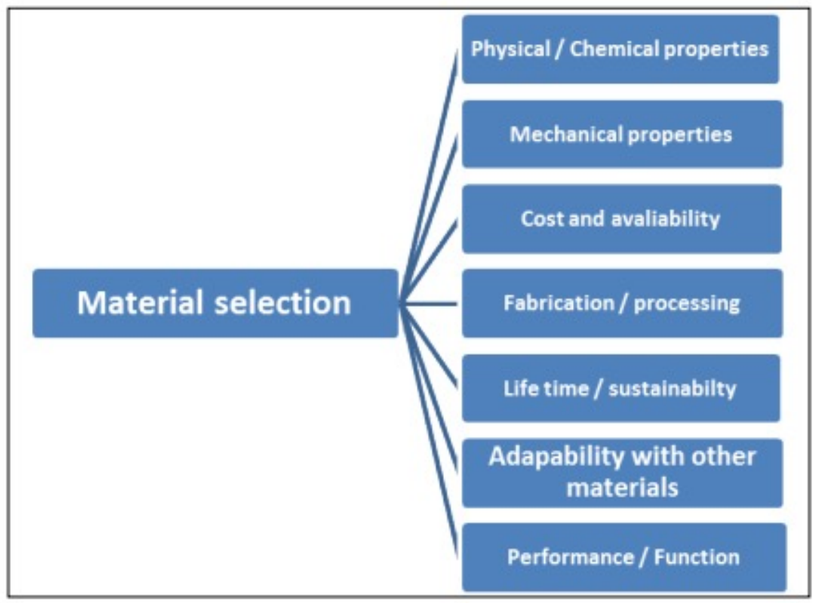
Art Thinking process



Art Thinking approach:
A possible approach to explore art thinking method

Design Requirement for technical textiles





First Figure:
Technical textile design spectrum

Second Figure:
Factors affecting material selection for design process

Third Figure:
Design model analysis

This was a summary of an open educational resource. Please visit http://destexproject.eu/ to see the full amount of intellectual outputs of the project.

Acknowledgement:

DESTEX project (INDUSTRIAL AND CREATIVE DESIGN IN ADVANCED TEXTILE MANUFACTURING; project reference number 2019-1SE01-KA203-060379) is co-funded by the Erasmus+ programme of the European Union.

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