

STRATEGIC ANALYSIS

AIM: To obtain the information necessary to facilitate the generation of sustainable ideas.

PROCESSES								
Analyse project proposers and outline the intervention context.		Analyse the context of reference.			Analyse the carrying structure of the system.	Analyse cases of excellence.	Determine priorities for the design intervention in view of sustainability.	
SUB-PROCESSES								
Defining ambit of design intervention	Project promoter analysis	Production & consumption system analysis for the ambit of design intervention.	Competitor analysis.	Client and/or end user analysis.	General macro-trend analysis.	Identification & analysis of cases of excellence.	Existing context analysis from an environmental, socio-ethical & economic point of view.	Defining the design priorities.
RESULTS								
Document specifying ambit of intervention and design brief	Summary of project promoter analysis: 1. mission 2. main expertise 3. SWOT 4. value chain	Summary of production & consumption system analsis for the ambit of intervention: 1. identification of actors & their interactions. 2. identification of technological, cultural & regulatory dynamics.	Summary of competitor analysis: 1. who are the competitors & what are the most innovative offers. 2. how is the market segmented. 3. competitive position analysis.	Summary of client/end user needs: 1. analsis of expressed & laten needs.	Report on (social, economic & technological) macro-trends & their influence on the reference context.	Summary of cases of excellence analsis, describing: 1. offer composition and interaction with the user. 2. actors who produce & deliver the offer. 3. sustainability characteristics.	Summary of existing system analysis.	Definition of the design priorities for each sustainability dimension.
TOOLS								
	1. 2. Preparatory company questionnaire 3. SWOT analysis 4. System Map	1. 2. System map	1. 2. 3. Model 5 Porter Forces.	1. Exploring customer needs.		1. interaction table 2. system map 3. SDO toolkit- checklist best practice.	SDO toolkit - check list existing system	SDO toolkit - check list existing system.

EXPLORING OPPORTUNITIES

AIM: To make a ‘catalogue’ of promising strategic possibilities available - a sustainable design-orienting scenario.

PROCESSES					
Generate ideas oriented towards sustainability.		Outline a sustainability oriented design scenario (visions, clusters & individual ideas orientated towards sustainability)			
SUB-PROCESSES					
Defining satisfaction unit	Workshop for generating sustainable system ideas	Identify promising polarity diagrams	Polarising ideas	Defining vision	Defining clusters & single ideas
RESULTS					
Document specifying satisfaction unit & sub-satisfactions.	Sets of system ideas with environmental, socio-ethical & economic sustainability characteristics.	Polarities diagram	Polarities diagram with polarised ideas	Polarities diagram with visions	Polarities diagram with cluster of ideas Description of single clusters and single ideas
TOOLS					
	1. SDO toolkit - sustainability idea tables. 2. Satisfaction sstem map 3. PSS innovation matrix.	Polarities diagram	Polarities diagram	Polarities diagram	Polarities diagram Offering diagram

DESIGNING SYSTEM CONCEPTS

AIM: To determine one or more system concepts oriented towards sustainability.

PROCESSES						
Selecting clusters & single ideas.	Developing system concepts				Environmental, socio-ethical and economic appraisal.	
SUB-PROCESSES						
Selecting the most promising ideas and/or clusters (from the point of view of economics, technological feasibility and user-acceptability.	Defining the interactions between actors & the new system.	Defining the product & service concepts that make up the offer.	Narration of user interactions with the system & the interactions of the other actors in delivering the offer.	Narration focussing on interactions with sustainability characteristics.	Environmental, socio-ethical, economic improvement potential assessment for the system concept.	Visualising the environmental, socio-ethical and economic improvements.
RESULTS						
1. Polarity diagram with ideas and clusters of ideas selected. 2. Document explaining the selection.	Map of actors in the new system & their interactions (material, information & money flows).	Images + text summarising the main functions delivered to the user.	Sequence (images + text) of the interactions that occur during the production & delivery of the offer.	Images + texts of the key interaction sequence occurring during production & delivery of the offer.	Description of the improvement potential for every criterion of each dimension.	Radar diagram showing improvements. Visualisation of the improvement bringing interactions.
TOOLS						
1. Polarities diagram 2. Portfolio diagram, go/no-go evaluation criteria.	System map	Offering diagram, AD poster	Interaction story board	Sustainabilit interaction story-spot	SDO toolkit - checklist concept	SDO toolkit - radar Sustainability interaction story-spot

DESIGNING [AND ENGINEERING A SYSTEM]

AIM: To develop the most promising system concept(s) into the detailed version necessary for its/their implementaiton.

PROCESSES						
Detailed system design					Environmental, socio-ethical and economic assessment	
SUB-PROCESSES						
Defining the specifics of interactions between (primary and secondary) actors in the new system.	Defining the specifics of the set of products and services that make up the offer (primary and secondary functions)	Defining the specifics of services to the user and the interactions of the other actors during delivery of the offer.	Specifying the role, contribution and motivation of each actor.	Defining material and non material elements required for delivery of the offer (and defining who will design/ produce/deliver it)	Defining environmental, socio-ethical and economic improvements to be expected from implementation of the system.	Visualisation of results.
RESULTS						
Detailed map of the principal and secondary actors and their relationships (material, information and money flows)	Images and text of the principal and secondary functions delivered to the user.	Narration (images and text) of the sequence of all the interactions occuring in the production and delivery of the offer.	Matrix indicating the contribution made by each actor to the partnership, the expected benifits and potential conflicts.	Map indicating the elements required by the system and the role of the actors in designing, producing, delivering it.	Definition of improvement potentials for every criterion of each dimension of sustainability.	<div>1. Radar diagram indicating improvements.</div> <div>2. Visualisations of improvement bringing improvements.</div>
TOOLS						
System map	Offering diagram	Interaction story-board	Motivation matrix	Solution element brief	SDO toolkit - check list concept	<div>1. SDO toolkit - radar</div> <div>2. Sustainability interaction story-spot.</div>

COMMUNICATION

AIM: To draw up reports to communicate the general, and above all sustainable characteristics of the system designed.

PROCESSES		
Drawing up documentation.		
SUB-PROCESSES		
Communicate design priorities for sustainable solutions.	Communicate the general characteristics of the product-service	Communicate sustainability characteristics of the product-service.
RESULTS		
A document indicating design priorities for each dimension of sustainability.	Document with the denral characteristics of the innovation: <div><div>1. Actors making up the system and their interactions.</div><div>2. Set of products and services making up the system.</div><div>3. Interactions between user and offer.</div></div>	Document with the sustainability characteristics of the solution: <div><div>1. Environmental, socio-ethical and economic imporvements.</div><div>2. Elements of the system bringing improvements.</div></div>
TOOLS		
SDO toolkit - radar	<div><div>1. System map</div><div>2. Offering diagram</div><div>3. Interaction table</div></div>	<div><div>1. SDO toolkit - radar.</div><div>2. Sustainability interaction story-spot</div></div>