sustainability

Supplementary Material: Results of the Experimentations with the DIMM Model

The present document gathers the results of the experimentations conducted to test the Design Impact Measurement and Management (DIMM) model. The version of the model presented in this document is the prototype version used for the test sessions, which was developed in the third phase of the research process as shown in the Figure 1 of the article. Therefore, it does not correspond precisely with the final version of the model presented in the article, although the main structure and contents are maintained.

Testing the model with organisations indeed uncovered opportunities to refine it. The refinements added to the model in its latest version included: a legend indicating the meanings of the 1 to 5 rating scale used in the 'design perception' and 'design process' levels, and the adaptation of the questions to the rating system; a box beside each assessable item in the 'design perception' and 'design process' levels to note any relevant comments, evidences or metrics that supported the numeric assessment; the reformulation of questions not interpreted as expected by the interviewees; and the correction of spelling mistakes. These refinements are included in the final version of the model presented in the Figure 3 of the article.

The DIMM model was tested with four organisations: Contcen, FoodCollective, Bankop and Propind. The experiments were carried out through a semi-structured interview with each company. The model itself was followed as an interview guide, given that it is designed to be used in this way. The interviewees' responses are represented in blue to facilitate differentiating them from the questions and statements of the model. The responses include the subjective evaluation of the participants in each point (for instance, rating them 1 to 5, or yes or no), as well as relevant notes, evidences or metrics highlighted by the participants that support their responses.

1. Contcen

The first experiment with the DIMM model was carried out with Contcen members. The interview was audio-recorded to facilitate the capture of information and lasted approximately one hour and fifteen minutes. Five members participated in the interview:

- Director of Projects and Technology
- 2 Designers
- Team Coordinator
- Project Manager

Below tables gather the results of the interview session, each one corresponding to one of the four levels of the DIMM model.

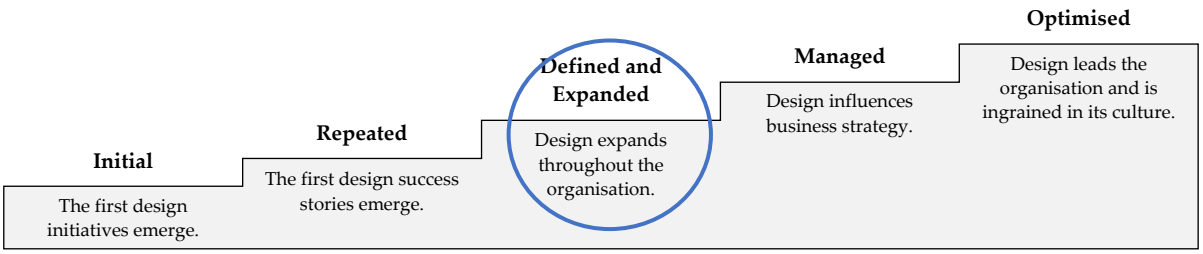
Level 1. Design Results	
1.1. Design Objectives* What organisational goals do we aim to address through design? Assess financial, market, internal and/or growth objectives.	**1.2. Results Measurement*** What metrics can be used to measure the objectives set and what results do they show? Assess financial, market, internal and/or growth metrics.
Objective 1: *Develop a more attractive value proposition for Contcen customers and potential customers.*	Metric 1: ***Value proposition: development of a new service.*** *Contcen launched a new service based on user research and prototype design and testing. This service provides tailor-made solutions to each client, thus, Contcen can prescribe more comprehensive services that result in higher turnover for the company.*
Objective 2: *Excel project development processes in terms of effectiveness and efficiency.*	Metric 2: ***Incident no: decrease*** *The number of incidents regarding project development processes and service quality decreased considerably.*
	Metric 3: ***Project duration: decrease*** *The new work methodology has given structure to project development processes, improved interdepartmental communication and reduced the number of iterations due to the avoidance of incidents, resulting in shorter project development times. The reduction of project duration rates is associated with a reduction in project development costs.*
Objective 3: *Increase profit.*	Metric 4: ***Turnover:*** *expected increase, but not yet measured.*
	Metric 5: ***Project profitability:*** *expected increase, but not yet measured.*
	Metric 6: ***Market share:*** *expected increase, but not yet measured.*
*The number of objectives and metrics to be established is not determined.	

Level 2. Design Perception						
2.1. External perception How is our organisation perceived by clients and other external stakeholders?	**Indicator (optional)**	**Valuation**				
Satisfaction: How satisfied are our customers? Do we use satisfaction surveys and, if so, what do they indicate? *Some clients have manifested to be "impressed" with the new value proposition.*		1	2	3	4	5
Relationship: Evaluate the type of relationship the company has with clients. Can design help us to improve the relationship with clients? *Time spent with clients augmented.*		1	2	3	4	5
Loyalty: Assess the degree of customer loyalty. Does the organisation use indicators to assess loyalty such as NPS? What do they indicate? *We home some important clients who are loyal to us. Some other are sporadical.*		1	2	3	4	5
Brand: How does the market perceive our brand, what value does it have? Can design increase the value of our brand?		1	2	3	4	5
Recognition: Has the organisation received awards, recognitions, mentions, etc. as a result of its design processes or other reasons? Which ones? *Participated in a design conference as a case of success.*		1	2	3	4	5
2.2. Internal perception How do people within the organisation perceive design?	**Indicator (optional)**	**Valuation**				
Collaboration: How collaborative are the teams? How does design influence internal collaboration? Is communication between departments fluid? *The new work methodology enables an structured communication between teams. Some improvement measures are still to be adopted in this regard.*		1	2	3	4	5
Participation: To what extent does the staff participate in decision-making and propose ideas for improvement, and how does design influence this? *The new work methodology is based on multidisciplinary teams and integrates the knowledge of all staff members involved in the project.*		1	2	3	4	5
Motivation: What is the level of motivation of our staff? Do we use questionnaires to measure it? And, if so, what do they show? *Staff members perceive the improvement brought about by the new work methodology and their involvement is strengthened.*		1	2	3	4	5
Knowledge: To what extent does the staff know about design and the ways in which it can generate value for the organisation? *11 staff members, including managers, have participated in design training programs.*		1	2	3	4	5
Influence: To what extent does design have an important role in the organisation? To what extent does design have an influence on the management team? *Design drives every project development process, yet it plays a limited role in strategic decision-making*		1	2	3	4	5

Level 3. Design Processes						
3.1. Design Leadership and Individual Roles		**Valuation**				
To what extent is it defined who should lead design in the organisation? *The Director of Projects and Technology is the ultimate responsible for design processes, but her tasks as a design manager are ill-defined.*		1	2	3	**4**	5
To what extent do we have a team in charge of leading design processes and disseminating the knowledge acquired to the rest of the organisation? *Two designers were hired and a new team was created for this purpose.*		1	2	3	4	**5**
To what extent is the management involved with design? *Senior executives are committed to design, yet they are not directly involved with design practices.*		1	2	3	**4**	5
To what extent is design pervasive in the organisation? How many people and teams use design in their regular processes? *An increasing number of employees is involved in design-related processes.*	*~30 staff members*	1	2	3	**4**	5
To what extent are staff trained to put design methods and tools into practice? How many people have received some kind of training in design? *There are 2 expert designers and 11 staff members have received basic design training.*	*11 trained staff*	1	2	3	**4**	5
To what extent do we have design expertise in the organisation? How many people have advanced capabilities in design? *There are 2 expert designers.*	*2 expert designers*	1	2	3	**4**	5
3.2. Design Management and Measurement		**Valuation**				
To what extent does design have specific objectives assigned to it?		**1**	2	3	4	5
To what extent are metrics used to manage the processes and impact of design in the organisation?		**1**	2	3	4	5
To what extent do we have adequate procedures and tools to use design in a systematised way? *A new work methodology was developed based on design principles, and it is used systematically in every development project.*		1	2	3	4	**5**
To what extent do we invest resources to carry out design processes properly? *Dedication to design processes has gradually increased.*		1	2	3	**4**	5
To what extent do we have specific spaces to carry out design processes properly? (e.g. participatory sessions, visualisation tools, prototyping, etc.) *There are suitable spaces, but they could be improved.*		1	2	3	**4**	5
To what extent do we have the capacity to involve experts from outside the organisation to assist us in the implementation of design? *They have already collaborated with external service designers.*		1	2	3	4	**5**
To what extent do we have the capacity to absorb external knowledge about design and do we have active mechanisms to do so? *No specific mechanisims were implemented to absorb design knowledge.*		1	2	3	**4**	5
3.3. Design Principles		**Valuation**				
Human-centred: To what extent is the generation of value propositions based on the identification of users' needs? *Client needs are present in every project, as well as operators' needs. However, end users are barely considered.*		1	2	3	**4**	5
Visualise emotions and experiences: To what extent do we use visualisation tools throughout the process? (e.g. Personas, Customer Journey Map, Service Blueprint, etc.) *Some visualisation tools are occasionally used, such as empathy maps and personas.*		1	2	3	**4**	5
Prototype products and services: To what extent do we use prototypes to evaluate different ideas and strategies? *Prototyping is used for the development of digital interfaces.*		1	2	3	4	**5**
Fail early, learn fast: To what extent are our processes iterative and do we embrace uncertainty and controlled risks? *This is somehow achieved thanks to prototyping, but the general mindset is still linear and risk averse.*		1	**2**	3	4	5
Multidisciplinarity: To what extent do we integrate knowledge from different disciplines and team members from different areas of the organisation? *An increasing number of staff members from 5 departments are engaged in design-driven processes.*		1	2	3	**4**	5
Stakeholder engagement: To what extent do we integrate users and other stakeholders in development processes according to the following participation roles?						
• **Indirect:** Users/stakeholders are considered without the need for their participation. *All stakeholders' needs are regarded during development projects.*		1	2	3	4	**5**
• **Informant:** Users/stakeholders share their knowledge about their habits, experience, concerns, etc. *Mostly clients and operators, though not end users.*		1	2	3	**4**	5

• **Evaluator:** Users/stakeholders adopt a critical attitude towards a product or service in search of opportunities to improve it. *Mostly clients and operators, though not end users.*	1	2	3	**4**	5
• **Creator:** Users/stakeholders identify problems and/or propose opportunities and solutions. *Meetings with clients are sometimes used to co-ideate solutions.*	1	**2**	3	4	5
• **Developer:** Users/stakeholders are integrated into the project team.	**1**	2	3	4	5

Level 4. Design Culture		
4.1. Initial	**Valuation**	
Individual design enthusiasts, self-taught, who go it alone to try to practice it.	Yes	**No**
There are no financial resources or official time commitment for design.	Yes	**No**
Little fluidity in communication between departments.	Yes	**No**
No Design and User Experience responsibilities assigned.	Yes	**No**
4.2. Repeated	**Valuation**	
The first project team is formed by a few enthusiasts to apply design methods.	Yes	**No**
Design tools such as the customer journey map are experimented with for the first time.	Yes	**No**
There are few resources to implement design properly.	Yes	**No**
The management does not encourage the use of design, although it does not oppose it either.	Yes	**No**
There is a tendency to contract design capabilities out to external entities.	Yes	**No**
No human-centred metrics have yet been established to measure design outcomes.	**Yes**	No
4.3. Defined and Expanded	**Valuation**	
More people are involved in the design process; design capabilities are shared among more people.	**Yes**	No
Resources are allocated to design.	**Yes**	No
Some spaces are transformed to promote the use of design.	Yes	**No**
The Design Department is set up and specialist design positions are created.	**Yes**	No
The frictions between the new way of doing things and the organisation's departmental structure become obvious.	**Yes**	No
Human-centred indicators are used to evaluate the performance of the Design Department.	Yes	**No**
4.4. Managed	**Valuation**	
Most people are involved with design.	Yes	**No**
Standard design methodologies and tools are created to unify their use throughout the organisation.	**Yes**	No
The language of design and human-centricity is evident throughout the organisation.	Yes	**No**
Communication between departments begins to be fluid and innovation processes are transdepartmental.	**Yes**	No
The use of human-centred indicators is widespread throughout the organisation.	Yes	**No**
4.5. Optimised	**Valuation**	
The whole organisation is involved with design.	Yes	**No**
The design methodology becomes flexible and experimentation with new tools is encouraged, which gives rise to the continuous learning and adaptation of design methods to new needs.	Yes	**No**
The organisational structure encourages the co-creation of service experiences in multidisciplinary teams.	**Yes**	No
All initiatives are tied to human-centred indicators and deliverables.	Yes	**No**
Result:		



Design is defined and expanded. The whole organisation is committed to design to some extent, as all projects are approached from a design perspective. However, the organisation lacks experience with design to manage it properly, which is the next step for developing a design-mature culture.

Action Plan What actions should we take to develop our capabilities and get more out of design?
Action 1: *Involve end users in the projects to explore opportunities for improvement and potential value propositions.*
Action 2: *Continue improving internal communication, as well as certain deliverables, to gain project effectiveness and efficiency.*
Action 3: *Implement metrics for design processes to gain knowledge of the profitability of design processes and capture insights for continuous improvement.*

2. FoodCollective

The second experiment with the DIMM model was carried out with FoodCollective members. The interview was audio-recorded to facilitate the capture of information and lasted approximately one hour and fifteen minutes. Two members participated in the interview:

- The Director of Corporate Innovation
- Sales Manager

Below tables gather the results of the interview session, each one corresponding to one of the four levels of the DIMM model.

Level 1. Design Results	
1.1. Design Objectives* What organisational goals do we aim to address through design? Assess financial, market, internal and/or growth objectives.	**1.2. Results Measurement*** What metrics can be used to measure the objectives set and what results do they show? Assess financial, market, internal and/or growth metrics.
Objective 1: *Launch new products and services to the market that capture new clients and generate new revenew streams.*	Metric 1: ***New product/service development: launch of a new service.*** *FoodCollective has developed a new service for school canteens based on stakeholder participation.*
	Metric 2: ***Turnover:*** *an increase is expected in one or two years.*
	Metric 3: ***New clients:*** *an expected increase in one or two years. The new service has been first implemented with some current clients.*
Objective 2: *Generate human-centred structures for innovation, and streamline the explotation of opportunities and the reaction to market threats.*	Metric 4: ***Innovation process:*** *a new work methodology was developed based on design principles and tools.*
*The number of objectives and metrics to be established is not determined.	

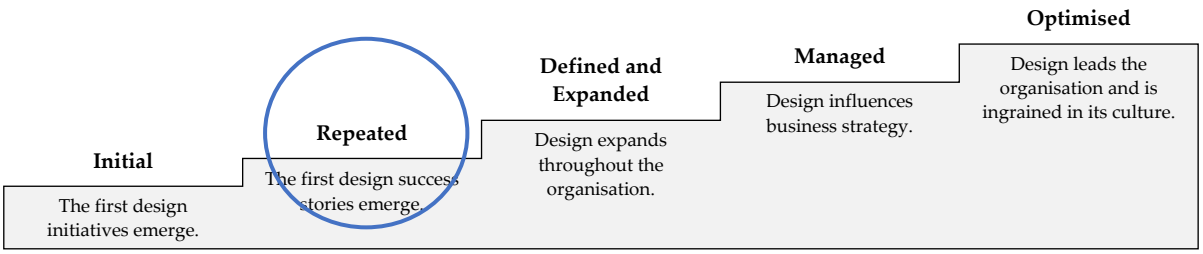
Level 2. Design Perception						
2.1. External perception How is our organisation perceived by clients and other external stakeholders?	**Indicator (optional)**	**Valuation**				
Satisfaction: How satisfied are our customers? Do we use satisfaction surveys and, if so, what do they indicate? *Positive feedback received from clients in regard to the new service.*		1	2	3	**4**	5
Relationship: Evaluate the type of relationship the company has with clients. Can design help us to improve the relationship with clients? *The new participatory service encourages closer collaboration with stakeholders.*		1	2	3	**4**	5
Loyalty: Assess the degree of customer loyalty. Does the organisation use indicators to assess loyalty such as NPS? What do they indicate? *NPS: expected to increase (it is measured anually and the results are not available yet).*		1	2	3	4	**5**
Brand: How does the market perceive our brand, what value does it have? Can design increase the value of our brand? *The collaboration with the university improves the brand image in the education centres market niche.*		1	2	3	**4**	5
Recognition: Has the organisation received awards, recognitions, mentions, etc. as a result of its design processes or other reasons? Which ones? *Participated as a case of success in an enterpreneurship seminar.*		1	2	**3**	4	5
2.2. Internal perception How do people within the organisation perceive design?	**Indicator (optional)**	**Valuation**				
Collaboration: How collaborative are the teams? How does design influence internal collaboration? Is communication between departments fluid? *There is a certain level of collaboration, but the condition as a large company and the siloed departments organisational structure leave room for improvement.*		1	2	3	**4**	5
Participation: To what extent does the staff participate in decision-making and propose ideas for improvement, and how does design influence this? *The condition of the organisation as a cooperative facilitates internal participation, and the new participatory working processes are also a support.*		1	2	3	**4**	5
Motivation: What is the level of motivation of our staff? Do we use questionnaires to measure it? And, if so, what do they show? *Staff members (specially sales agents) have identified the benefits of design and are committed to it.*		1	2	3	4	**5**
Knowledge: To what extent does the staff know about design and the ways in which it can generate value for the organisation? *Staff members understand the potential of design, though they lack some basick knowledge about how it is brought into practice.*		1	2	3	**4**	5
Influence: To what extent does design have an important role in the organisation? To what extent does design have an influence on the management team? *Although it is expected to scale up, the design function is still localised in a specific area of the organisation.*		1	**2**	3	4	5

Level 3. Design Processes						
3.1. Design Leadership and Individual Roles		**Valuation**				
To what extent is it defined who should lead design in the organisation? *The Director of Corporate Innovation and the Sales Manager have led the first steps with design, yet it remains to be defined who will manage the design function in the future.*		1	2	3	**4**	5
To what extent do we have a team in charge of leading design processes and disseminating the knowledge acquired to the rest of the organisation? *A designer was hired to carry out desing practices and disseminate results internally.*		1	2	3	4	**5**
To what extent is the management involved with design? *The management has supported the initiative, though it is not involved with design practice.*		1	2	3	**4**	5
To what extent is design pervasive in the organisation? How many people and teams use design in their regular processes? *Design is localised in an specific area of the organisation, though some other areas have shown interest in it.*	*1 team, ~5 people*	1	**2**	3	4	5
To what extent are staff trained to put design methods and tools into practice? How many people have received some kind of training in design? *Apart from the new designer, no other staff members have been trained in design.*	-	1	**2**	3	4	5
To what extent do we have design expertise in the organisation? How many people have advanced capabilities in design? *One designer.*	*1 designer*	1	**2**	3	4	5
3.2. Design Management and Measurement		**Valuation**				
To what extent does design have specific objectives assigned to it? *The ultimate goal of design is to generate new revenew streams through new/improved products and services. Except for the economic goal, other impacts of design remain unmanaged.*		1	2	3	**4**	5
To what extent are metrics used to manage the processes and impact of design in the organisation? *The top-management tracks the turnover of the new services developed through design processes.*		1	2	3	**4**	5
To what extent do we have adequate procedures and tools to use design in a systematised way? *A new work methodology has been developed, documented and disseminated, though it is only used in a specific area of the organisation.*		1	2	3	**4**	5
To what extent do we invest resources to carry out design processes properly? *The top management has supported design initiatives (also economically) and external funding has been received.*		1	2	3	4	**5**
To what extent do we have specific spaces to carry out design processes properly? (e.g. participatory sessions, visualisation tools, prototyping, etc.)		1	2	3	**4**	5
To what extent do we have the capacity to involve experts from outside the organisation to assist us in the implementation of design?		1	2	3	4	**5**
To what extent do we have the capacity to absorb external knowledge about design and do we have active mechanisms to do so? *No formal structures exist for this purpose.*		1	**2**	3	4	5
3.3. Design Principles		**Valuation**				
Human-centred: To what extent is the generation of value propositions based on the identification of users' needs? *The new work methodology integrates the needs of all stakeholders.*		1	2	3	4	**5**
Visualise emotions and experiences: To what extent do we use visualisation tools throughout the process? (e.g. Personas, Customer Journey Map, Service Blueprint, etc.) *Visualisation tools are used to facilitate stakeholder participation, as well as to visualise customer insights.*		1	2	3	4	**5**
Prototype products and services: To what extent do we use prototypes to evaluate different ideas and strategies? *New products and services are tested in pilot projects.*		1	2	3	**4**	5
Fail early, learn fast: To what extent are our processes iterative and do we embrace uncertainty and controlled risks? *"It could be improved"*		1	2	**3**	4	5
Multidisciplinarity: To what extent do we integrate knowledge from different disciplines and team members from different areas of the organisation?		1	2	3	**4**	5
Stakeholder engagement: To what extent do we integrate users and other stakeholders in development processes according to the following participation roles? *The new working methodology, based on participatory design processes, encourages the participation of multiple stakeholders (students, families, teachers, school directors, cooks, etc.). During the projects solutions are co-created between FoodCollective and stakeholders.*						
• **Indirect:** Users/stakeholders are considered without the need for their participation.		1	2	3	4	**5**
• **Informant:** Users/stakeholders share their knowledge about their habits, experience, concerns, etc.		1	2	3	4	**5**

• **Evaluator:** Users/stakeholders adopt a critical attitude towards a product or service in search of opportunities to improve it.	1	2	3	4	5
• **Creator:** Users/stakeholders identify problems and/or propose opportunities and solutions.	1	2	3	4	5
• **Developer:** Users/stakeholders are integrated into the project team.	1	2	3	4	5

Level 4. Design Culture		
4.1. Initial	**Valuation**	
Individual design enthusiasts, self-taught, who go it alone to try to practice it.	Yes	No
There are no financial resources or official time commitment for design.	Yes	No
Little fluidity in communication between departments.	Yes	No
No Design and User Experience responsibilities assigned.	Yes	No
4.2. Repeated	**Valuation**	
The first project team is formed by a few enthusiasts to apply design methods.	Yes	No
Design tools such as the customer journey map are experimented with for the first time.	Yes	No
There are few resources to implement design properly.	Yes	No
The management does not encourage the use of design, although it does not oppose it either.	Yes	No
There is a tendency to contract design capabilities out to external entities.	Yes	No
No human-centred metrics have yet been established to measure design outcomes.	Yes	No
4.3. Defined and Expanded	**Valuation**	
More people are involved in the design process; design capabilities are shared among more people.	Yes	No
Resources are allocated to design.	Yes	No
Some spaces are transformed to promote the use of design.	Yes	No
The Design Department is set up and specialist design positions are created.	Yes	No
The frictions between the new way of doing things and the organisation's departmental structure become obvious.	Yes	No
Human-centred indicators are used to evaluate the performance of the Design Department.	Yes	No
4.4. Managed	**Valuation**	
Most people are involved with design.	Yes	No
Standard design methodologies and tools are created to unify their use throughout the organisation.	Yes	No
The language of design and human-centricity is evident throughout the organisation.	Yes	No
Communication between departments begins to be fluid and innovation processes are transdepartmental.	Yes	No
The use of human-centred indicators is widespread throughout the organisation.	Yes	No
4.5. Optimised	**Valuation**	
The whole organisation is involved with design.	Yes	No
The design methodology becomes flexible and experimentation with new tools is encouraged, which gives rise to the continuous learning and adaptation of design methods to new needs.	Yes	No
The organisational structure encourages the co-creation of service experiences in multidisciplinary teams.	Yes	No
All initiatives are tied to human-centred indicators and deliverables.	Yes	No

Result:



Despite design is in an emerging condition in FoodCollective, it has produced some permanent changes in the organisational structure and culture. There is a person dedicated to design processes, and there is a defined method to carry out such processes. However, the design function remains located in a specific area of the organisation, and the designer is the only staff member skilled to carry out design practice. Interviewees are cautious about scaling up design to other organisational areas, as they say they need to succeed in existing projects to gain management's backing and to devote more effort and resources to design activity in the company.

Action Plan

What actions should we take to develop our capabilities and get more out of design?

Action 1: *Achieve early wins with design projects to gain management's backing.*

Action 2: *Develop the staff's design skills through training and/or hiring.*

Action 3: *Use design in new projects to consolidate design practices beyond the new participatory service.*

Action 4: *Scale up and institutionalise design processes for other innovation practices throughout the organisation.*

3. Bankop

The third experiment with the DIMM model was carried out with Bankop members. The interview was audio-recorded to facilitate the capture of information and lasted approximately one hour. Four members participated in the interview:

- Customer and Service Development Leader
- 2 Customer and Service Development Technicians
- Service and UX designer

Below tables gather the results of the interview session, each one corresponding to one of the four levels of the DIMM model.

Level 1. Design Results	
1.1. Design Objectives* What organisational goals do we aim to address through design? Assess financial, market, internal and/or growth objectives.	**1.2. Results Measurement*** What metrics can be used to measure the objectives set and what results do they show? Assess financial, market, internal and/or growth metrics.
Objective 1: *To introduce customer knowledge in new service development processes to improve service quality and decision making.*	Metric 1: ***Development of a new customer experience design methodology.*** *A new work methodology was developed and tested successfully in the redesign of mortgage services.*
Objective 2: *To be considered a reliable and customer-oriented organisation by customers.*	Metric 2: ***Customer satisfaction reports:*** *information not yet obtained.*
*The number of objectives and metrics to be established is not determined.	

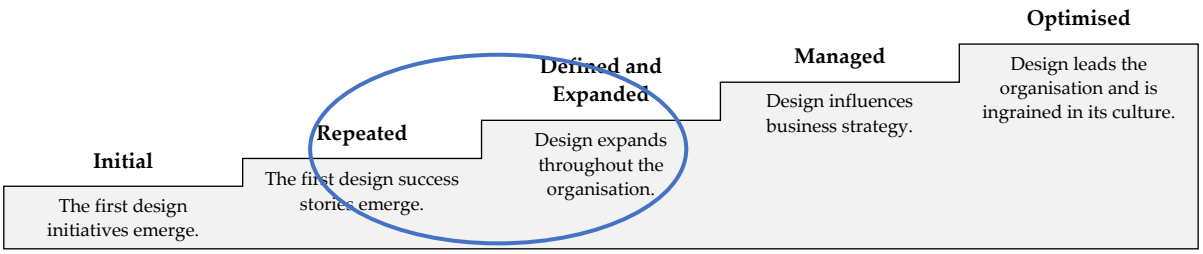
Level 2. Design Perception						
2.1. External perception How is our organisation perceived by clients and other external stakeholders?	**Indicator (optional)**	**Valuation**				
Satisfaction: How satisfied are our customers? Do we use satisfaction surveys and, if so, what do they indicate? *Customer satisfaction rates have traditionally been excellent, and design is expected to reinforce this position.*		1	2	3	4	**5**
Relationship: Evaluate the type of relationship the company has with clients. Can design help us to improve the relationship with clients? *No significant changes were pereceived.*		1	2	3	**4**	5
Loyalty: Assess the degree of customer loyalty. Does the organisation use indicators to assess loyalty such as NPS? What do they indicate? *Expected increase, not yet measured.*		1	2	3	**4**	5
Brand: How does the market perceive our brand, what value does it have? Can design increase the value of our brand? *Bankop already enjoys a good reputation in terms of reliability and customer orientation. Design is expected to reinforce that reputation and enhance the perception of customers as a modern and innovator organisation.*		1	2	3	**4**	5
Recognition: Has the organisation received awards, recognitions, mentions, etc. as a result of its design processes or other reasons? Which ones? *It is too early to evaluate it.*		1	2	**3**	4	5
2.2. Internal perception How do people within the organisation perceive design?	**Indicator (optional)**	**Valuation**				
Collaboration: How collaborative are the teams? How does design influence internal collaboration? Is communication between departments fluid? *Interdepartmental collaboration has always been excellent.*		1	2	3	4	**5**
Participation: To what extent does the staff participate in decision-making and propose ideas for improvement, and how does design influence this? *The structured design methodology has given reliability to the customer experience team to participate in decision making.*		1	2	3	**4**	5
Motivation: What is the level of motivation of our staff? Do we use questionnaires to measure it? And, if so, what do they show? *The motivation and commitment of staff members has always been high.*		1	2	3	**4**	5
Knowledge: To what extent does the staff know about design and the ways in which it can generate value for the organisation? *All middle range and top managers know about the new work methodology, but the capacity to carry out design processes is localised in one team.*		1	2	3	**4**	5
Influence: To what extent does design have an important role in the organisation? To what extent does design have an influence on the management team? *Design is certainly influential, as the top management has firmly supported it. However, design is still an emerging function in the organisation and has only been applied in a few projects.*		1	2	**3**	4	5

Level 3. Design Processes						
3.1. Design Leadership and Individual Roles		**Valuation**				
To what extent is it defined who should lead design in the organisation? *The Customer and Service Development team has taken the lead, but it is unclear how the design function will be organised in the future.*		1	2	3	**4**	5
To what extent do we have a team in charge of leading design processes and disseminating the knowledge acquired to the rest of the organisation? *The Customer and Service Development team has taken the lead, but it is unclear how the design function will be organised in the future.*		1	2	3	**4**	5
To what extent is the management involved with design? *The top management has promoted the development of design capabilities.*		1	2	3	4	**5**
To what extent is design pervasive in the organisation? How many people and teams use design in their regular processes? *Design is acknowledged by the overall organisation, though it is not systematically applied in all development projects yet. Only the Customer and Service Development team applies it regularly.*	*4 people*	1	2	3	**4**	5
To what extent are staff trained to put design methods and tools into practice? How many people have received some kind of training in design? *2-3 teams have received basic design training..*	*2-3 teams*	1	2	3	**4**	5
To what extent do we have design expertise in the organisation? How many people have advanced capabilities in design? *Four people (the Customer and Service Development team) have received advanced design training.*	*4 people*	1	2	3	4	**5**
3.2. Design Management and Measurement		**Valuation**				
To what extent does design have specific objectives assigned to it? *Although it has not been assigned measurable objectives, developing design and customer experience capabilities is a key goal in Bankop's latest strategic plan.*		1	2	3	**4**	5
To what extent are metrics used to manage the processes and impact of design in the organisation? *Desing results have not been measured yet.*		**1**	2	3	4	5
To what extent do we have adequate procedures and tools to use design in a systematised way? *The Customer and Service Development team has developed a new work methodology based on design principles.*		1	2	3	**4**	5
To what extent do we invest resources to carry out design processes properly? *The top management has assigned resources to design projects and design training.*		1	2	3	4	**5**
To what extent do we have specific spaces to carry out design processes properly? (e.g. participatory sessions, visualisation tools, prototyping, etc.) *There are some useful spaces, though they are not specifically prepared for design activities.*		1	2	3	**4**	5
To what extent do we have the capacity to involve experts from outside the organisation to assist us in the implementation of design?		1	2	3	4	**5**
To what extent do we have the capacity to absorb external knowledge about design and do we have active mechanisms to do so? *Bankop has financial capacity for it, but current workloads impede a faster development of design capabilities.*		1	2	3	**4**	5
3.3. Design Principles		**Valuation**				
Human-centred: To what extent is the generation of value propositions based on the identification of users' needs? *The client is at the heart of the new work methodology.*		1	2	3	4	**5**
Visualise emotions and experiences: To what extent do we use visualisation tools throughout the process? (e.g. Personas, Customer Journey Map, Service Blueprint, etc.) *Visualization tools are used throughout the design process.*		1	2	3	4	**5**
Prototype products and services: To what extent do we use prototypes to evaluate different ideas and strategies? *Prototyping and testing is one of the principal steps of the design process, being physical or digital artifacts.*		1	2	3	4	**5**
Fail early, learn fast: To what extent are our processes iterative and do we embrace uncertainty and controlled risks? *The new work methodology encourages idea testing, but the organisational culture still tends to avoid risks.*		1	2	3	**4**	5
Multidisciplinarity: To what extent do we integrate knowledge from different disciplines and team members from different areas of the organisation? *There are important organisational silos, but the communication between them is considerably fluent.*		1	2	3	**4**	5
Stakeholder engagement: To what extent do we integrate users and other stakeholders in development processes according to the following participation roles? *Bankop integrates final users in two phases of design projects: in the exploration phase users inform about their needs, and in the testing phase users test prototypes. However, users rarely have a proactive role in proposing new ideas.*						

• **Indirect:** Users/stakeholders are considered without the need for their participation.	1	2	3	4	5
• **Informant:** Users/stakeholders share their knowledge about their habits, experience, concerns, etc.	1	2	3	4	5
• **Evaluator:** Users/stakeholders adopt a critical attitude towards a product or service in search of opportunities to improve it.	1	2	3	4	5
• **Creator:** Users/stakeholders identify problems and/or propose opportunities and solutions.	1	2	3	4	5
• **Developer:** Users/stakeholders are integrated into the project team.	1	2	3	4	5

Level 4. Design Culture		
4.1. Initial	**Valuation**	
Individual design enthusiasts, self-taught, who go it alone to try to practice it.	Yes	No
There are no financial resources or official time commitment for design.	Yes	No
Little fluidity in communication between departments.	Yes	No
No Design and User Experience responsibilities assigned.	Yes	No
4.2. Repeated	**Valuation**	
The first project team is formed by a few enthusiasts to apply design methods.	Yes	No
Design tools such as the customer journey map are experimented with for the first time.	Yes	No
There are few resources to implement design properly.	Yes	No
The management does not encourage the use of design, although it does not oppose it either.	Yes	No
There is a tendency to contract design capabilities out to external entities.	Yes	No
No human-centred metrics have yet been established to measure design outcomes.	Yes	No
4.3. Defined and Expanded	**Valuation**	
More people are involved in the design process; design capabilities are shared among more people.	Yes	No
Resources are allocated to design.	Yes	No
Some spaces are transformed to promote the use of design.	Yes	No
The Design Department is set up and specialist design positions are created.	Yes	No
The frictions between the new way of doing things and the organisation's departmental structure become obvious.	Yes	No
Human-centred indicators are used to evaluate the performance of the Design Department.	Yes	No
4.4. Managed	**Valuation**	
Most people are involved with design.	Yes	No
Standard design methodologies and tools are created to unify their use throughout the organisation.	Yes	No
The language of design and human-centricity is evident throughout the organisation.	Yes	No
Communication between departments begins to be fluid and innovation processes are transdepartmental.	Yes	No
The use of human-centred indicators is widespread throughout the organisation.	Yes	No
4.5. Optimised	**Valuation**	
The whole organisation is involved with design.	Yes	No
The design methodology becomes flexible and experimentation with new tools is encouraged, which gives rise to the continuous learning and adaptation of design methods to new needs.	Yes	No
The organisational structure encourages the co-creation of service experiences in multidisciplinary teams.	Yes	No
All initiatives are tied to human-centred indicators and deliverables.	Yes	No

Result:



Design is starting to expand to other areas of the organisation. The support of the top management is firm, what motivates the staff to work in this direction. The next steps are oriented to gain more experience in design projects so as to achieve greater expertise on the application of the methods and tools, as well as gradually involving other teams in design processes.

Action Plan

What actions should we take to develop our capabilities and get more out of design?

Action 1: *Implement the new work methodology in new projects in which other staff members are involved, so as to gradually develop a culture of customer orientation in development and innovation projects, as well as in the organisation as a whole.*

4. Propind

The fourth experiment with the DIMM model was carried out with Propind members. The interview was audio-recorded to facilitate the capture of information and lasted approximately one hour. Two members participated in the interview:

- Managing Director.
- IP Management Lead.

Below tables gather the results of the interview session, each one corresponding to one of the four levels of the DIMM model.

Level 1. Design Results	
1.1. Design Objectives* What organisational goals do we aim to address through design? Assess financial, market, internal and/or growth objectives.	**1.2. Results Measurement*** What metrics can be used to measure the objectives set and what results do they show? Assess financial, market, internal and/or growth metrics.
Objective 1: *Gain added value over competitors.*	Metric 1: ***Value proposition: development of two new services.*** *Launch of two new services (differentiating between SMEs and large companies) that move from considering IP as a short-term formality to a strategic resource that must be managed with a long-term view.*
Objective 2: *Build client loyalty and increase market share.*	Metric 2: ***No. of new and current clients:*** *the two new services have just been launched to the market and have not been implemented yet. Several clients are interested in participating in pilot projects.*
	Metric 3: ***Divulgation of the new services:*** *Propind has visited potential clients and participated in conferences and training courses to present the new services.*
Objective 3: *Train selected staff members to incorporate strategic design skills to enhance the capture of market insights and innovation.*	Metric 4: ***Application of design methods and tools in future projects:*** *not measured yet.*
*The number of objectives and metrics to be established is not determined.	

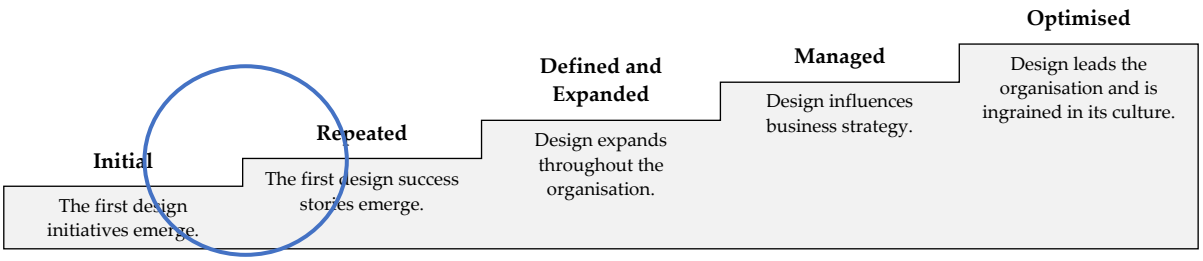
Level 2. Design Perception						
2.1. External perception How is our organisation perceived by clients and other external stakeholders?	**Indicator (optional)**	**Valuation**				
Satisfaction: How satisfied are our customers? Do we use satisfaction surveys and, if so, what do they indicate? *It is expected to improve. Interviewed clients have provided positive feedback to the new value propositions.*		1	2	**3**	4	5
Relationship: Evaluate the type of relationship the company has with clients. Can design help us to improve the relationship with clients? *It is good, but it is expected to improve because Propind adopts a proactive role in the new services, and clients value it.*		1	2	3	**4**	5
Loyalty: Assess the degree of customer loyalty. Does the organisation use indicators to assess loyalty such as NPS? What do they indicate? *It is expected to improve, as the new services are relational in nature and involve a long-term commitment.*		1	2	3	**4**	5
Brand: How does the market perceive our brand, what value does it have? Can design increase the value of our brand? *The new value propositions would help Propind be regarded as an advanced services provider.*		1	2	3	**4**	5
Recognition: Has the organisation received awards, recognitions, mentions, etc. as a result of its design processes or other reasons? Which ones? *If successful, the new services are likely to be awarded, as they shake up the market niche of IP consultancy services.*		1	2	**3**	4	5
2.2. Internal perception How do people within the organisation perceive design?	**Indicator (optional)**	**Valuation**				
Collaboration: How collaborative are the teams? How does design influence internal collaboration? Is communication between departments fluid? *Design methods have helped to improve the communication between staff members, and especially to estabilish a shared view of organisational goals.*		1	2	3	**4**	5
Participation: To what extent does the staff participate in decision-making and propose ideas for improvement, and how does design influence this? *The participation and motivation of staff members have always been high, thanks to the condition of the company as a small size cooperative.*		1	2	3	4	**5**
Motivation: What is the level of motivation of our staff? Do we use questionnaires to measure it? And, if so, what do they show? *The participation and motivation of staff members have always been high, thanks to the condition of the company as a small size cooperative.*		1	2	3	4	**5**
Knowledge: To what extent does the staff know about design and the ways in which it can generate value for the organisation? *The management is committed to design, although most staff members have little awareness about it.*		1	2	**3**	4	5
Influence: To what extent does design have an important role in the organisation? To what extent does design have an influence on the management team? *The role of design is important for the management, but the influence of design in the everyday work is residual.*		1	**2**	3	4	5

Level 3. Design Processes						
3.1. Design Leadership and Individual Roles		**Valuation**				
To what extent is it defined who should lead design in the organisation? *To date, the Managing Director has leaded design processes.*		1	2	**3**	4	5
To what extent do we have a team in charge of leading design processes and disseminating the knowledge acquired to the rest of the organisation?		**1**	2	3	4	5
To what extent is the management involved with design? *Actually, design is mainly used by the management.*		1	2	3	**4**	5
To what extent is design pervasive in the organisation? How many people and teams use design in their regular processes? *Design is not a primary process for the organisation. It is used timely to improve the service offering.*	*None*	**1**	2	3	4	5
To what extent are staff trained to put design methods and tools into practice? How many people have received some kind of training in design? *Some members have basic skills to apply certain design methods, but it is still preferred to collaborate with external service designers.*	*5 people*	1	2	**3**	4	5
To what extent do we have design expertise in the organisation? How many people have advanced capabilities in design? *There are no expert designers in the organisation.*	*None*	1	**2**	3	4	5
3.2. Design Management and Measurement		**Valuation**				
To what extent does design have specific objectives assigned to it? *Although design function is secondary, its goals are clear: capture market insights and improve the service offering.*		1	2	3	4	**5**
To what extent are metrics used to manage the processes and impact of design in the organisation?		**1**	2	3	4	5
To what extent do we have adequate procedures and tools to use design in a systematised way? *In past experiences with design, a well-defined procedure was followed. However, it should be noted that they were usually conducted by external designers who took the lead of the design process.*		1	2	3	**4**	5
To what extent do we invest resources to carry out design processes properly? *It is infrequent but, when deemed worthy, resources are dedicated to design.*		1	2	3	**4**	5
To what extent do we have specific spaces to carry out design processes properly? (e.g. participatory sessions, visualisation tools, prototyping, etc.) *The small size of the office limit the capacitiy for dedicating spaces to design.*		1	**2**	3	4	5
To what extent do we have the capacity to involve experts from outside the organisation to assist us in the implementation of design?		1	2	3	4	**5**
To what extent do we have the capacity to absorb external knowledge about design and do we have active mechanisms to do so? *Collaborating with external designers has been useful to absorb design knowledge.*		1	2	3	**4**	5
3.3. Design Principles		**Valuation**				
Human-centred: To what extent is the generation of value propositions based on the identification of users' needs?		1	2	3	**4**	5
Visualise emotions and experiences: To what extent do we use visualisation tools throughout the process? (e.g. Personas, Customer Journey Map, Service Blueprint, etc.) *During the last design projects many visualization tools were used. It remains to be seen if those tools will be used again in future projects.*		1	2	3	**4**	5
Prototype products and services: To what extent do we use prototypes to evaluate different ideas and strategies? *They don't feel sufficiently skillfull without the help of external designers.*		1	**2**	3	4	5
Fail early, learn fast: To what extent are our processes iterative and do we embrace uncertainty and controlled risks? *This is something that Propind has recently learnt through collaborating with external designers.*		1	2	3	4	**5**
Multidisciplinarity: To what extent do we integrate knowledge from different disciplines and team members from different areas of the organisation? *The profile of staff members is somewhat homogeneous, as most of them are IP advisors or administrative officers.*		1	2	3	**4**	5
Stakeholder engagement: To what extent do we integrate users and other stakeholders in development processes according to the following participation roles? *Commonly, Propind engages stakeholders in semi-structured interviews. They may be engaged to inform about their needs and expectations, as well as to evaluate service concepts before officially launching them.*						
• **Indirect:** Users/stakeholders are considered without the need for their participation.		1	2	3	4	**5**

• **Informant:** Users/stakeholders share their knowledge about their habits, experience, concerns, etc.	1	2	3	4	5
• **Evaluator:** Users/stakeholders adopt a critical attitude towards a product or service in search of opportunities to improve it.	1	2	3	4	5
• **Creator:** Users/stakeholders identify problems and/or propose opportunities and solutions.	1	2	3	4	5
• **Developer:** Users/stakeholders are integrated into the project team.	1	2	3	4	5

Level 4. Design Culture		
4.1. Initial	**Valuation**	
Individual design enthusiasts, self-taught, who go it alone to try to practice it.	Yes	No
There are no financial resources or official time commitment for design.	Yes	No
Little fluidity in communication between departments.	Yes	No
No Design and User Experience responsibilities assigned.	Yes	No
4.2. Repeated	**Valuation**	
The first project team is formed by a few enthusiasts to apply design methods.	Yes	No
Design tools such as the customer journey map are experimented with for the first time.	Yes	No
There are few resources to implement design properly.	Yes	No
The management does not encourage the use of design, although it does not oppose it either.	Yes	No
There is a tendency to contract design capabilities out to external entities.	Yes	No
No human-centred metrics have yet been established to measure design outcomes.	Yes	No
4.3. Defined and Expanded	**Valuation**	
More people are involved in the design process; design capabilities are shared among more people.	Yes	No
Resources are allocated to design.	Yes	No
Some spaces are transformed to promote the use of design.	Yes	No
The Design Department is set up and specialist design positions are created.	Yes	No
The frictions between the new way of doing things and the organisation's departmental structure become obvious.	Yes	No
Human-centred indicators are used to evaluate the performance of the Design Department.	Yes	No
4.4. Managed	**Valuation**	
Most people are involved with design.	Yes	No
Standard design methodologies and tools are created to unify their use throughout the organisation.	Yes	No
The language of design and human-centricity is evident throughout the organisation.	Yes	No
Communication between departments begins to be fluid and innovation processes are transdepartmental.	Yes	No
The use of human-centred indicators is widespread throughout the organisation.	Yes	No
4.5. Optimised	**Valuation**	
The whole organisation is involved with design.	Yes	No
The design methodology becomes flexible and experimentation with new tools is encouraged, which gives rise to the continuous learning and adaptation of design methods to new needs.	Yes	No
The organisational structure encourages the co-creation of service experiences in multidisciplinary teams.	Yes	No
All initiatives are tied to human-centred indicators and deliverables.	Yes	No

Result:



The design maturity of Propind is still in an early stage. However, awareness for design has started to flourish among those who have participated in the design of new services, including the top-management. They have realised that certain design practices (e.g., interviewing clients, using visualisation tools and prototyping ideas, among others) are valuable for the continuous improvement of their services and their routine work. Next steps are oriented to consolidate those practices.

Action Plan

What actions should we take to develop our capabilities and get more out of design?

Action 1: *Implement the new services in pilot projects.*

Action 2: *Consolidate the learned design practices that can bring value to routinary work activities in Propind, especially: interviewing clients, using visualisation tools and prototyping ideas.*