PROSPECTIVE DESIGN THROUGH COLLABORATIVE WORKSHOPS BETWEEN ENTERPRISES AND DESIGN SCHOOLS: THE HP & ELISAVA DESIGN SCHOOL EXPERIENCE

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ABSTRACT

Collaborative workshops are a very useful tool both for enterprises and design schools. For enterprises they are a great way to get fresh insights of new trends and new visions not polluted with the biased viewpoints of the company culture. These insights and trends are then interpreted internally through concept creation sessions in order to translate the relevant information into actionable knowledge for the company. For design schools it means the chance to offer to their students better experiences and a better studies' programs. Thus, according to the enterprises participating in these collaborative workshops the school becomes a more attractive option for future students. Moreover, for the students it represents the chance to work in a real environment, with real needs and real methodologies used in the design development process by successful companies.

Through the paper, benefits and results of collaborative workshops carried out between Hewlett Packard EMEA Design Centre and Elisava School of Design are discussed. Moreover, processes that have been used as well as the methodology are deeply analyzed. Through an extensive explanation of the different phases of the collaborative workshop the importance of the balance between the participation of experts from the company and the guidance provided by design professors from the school is recognised. The study leads to consideration of the collaborative workshops between enterprises and design schools as a valid tool for prospective design development.

Keywords: prospective design, collaborative workshops, Hewlett Packard, Elisava Design School

1 INTRODUCTION

A collaborative workshops experience has been carried out between the Hewlett-Packard Large Format Printing design team and the students of the Masters in Product Design at Elisava Design School in Barcelona. These workshops are within the framework of a three years collaboration agreement between HP and Elisava. Each workshop is 10 weeks long with 42 hours of working sessions. The number of students

that participated in each workshop ranged from 20 to 40. The workshops were carried out in 2006, 2007 and 2008 once a year.

There were two different research topics: In the 2006 and 2007 workshops the investigation topic proposed was: "Ideal Large Format Printing Platform for the Creative Professional in the 2020 Timeframe". In 2008 the investigation topic was: "Workgroups, Workspaces and Technology in the 2020 Timeframe. Design the Work Infrastructure of the Future".

Some of the insights found by the students in 2006 and 2007 helped HP define some of the foresights that have been integrated into the company strategy. The 2008 results are still being discussed within HP design team.

2 OBJECTIVES

The general objective for these collaborative workshops is to create knowledge both for students and the enterprise.

The particular objective for the students is to develop specific skills to research, analyze and propose prospective design projects. This is possible thanks to introducing them to work in a real environment, with real design professionals, with real needs and real methodologies used in the design development process by successful companies. Moreover, there is the opportunity for the students developing a successful project that may be of special interest for HP to have their idea bought. Besides the chance of an economic benefit, there is professional success and also a great record for their career. The specific objective for the enterprise is to get fresh insights into new trends and new visions not polluted with the biased viewpoints of the company culture.

3 METHODOLOGY

For the workshop development the students are separated in groups of 4/5 people. Each group has to work on its own project and share its results with the rest in several presentations throughout the workshop.

The main topics to be analyzed and developed in the prospective design project are the user, the workflow and the scenarios [1]. The objective is to define a prospective user and what will be his needs in a work environment in a 20 year time-frame. The workflow analysis helps the students to identify the current experience breakdowns. This analysis helps them to define the requirements that the prospective design project should address. Once the user and his needs are defined, a scenario must be defined where he will interact to achieve his goals using the proposed concept as seen in Figure 1.

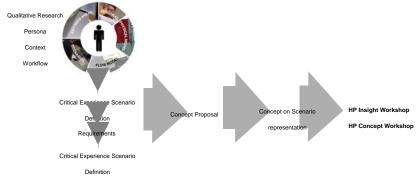


Figure 1 Scenario Definition

The methodology to be used for user research and analysis is the Personas methodology, contextual inquiry and ethnographic research.

Regarding the Personas methodology, the students receive theoretical background in order to help them understand the fundamentals of this methodology. Even though Cooper's [2] or Pruitt's and Grudin's [3] methodologies are very thorough we embrace more the approach taken by Scott Jenson [4] in 'The Simplicity Shift' published in 2002 by Cambridge University. The reasons for this choice are essentially time constraints and the practical evidence that most of the success of applying the Personas methodology [5] comes from creating a solid and shared understanding of the design target.

Regarding contextual inquiry the students also receive theoretical instruction from the HP experts. They train the students on applying the contextual research method employed by the HP Design Centre. The HP contextual research method has been built over the last five years of practice and analysis of the most relevant related field work.

3.1 Working sessions

In the collaborative workshops there are 3 types of working sessions:

- Regular classes, with participation of students and professors from Elisava where the advances of the work are discussed deeply group by group.
- HP design team classes, with participation of students and professors and also members from the HP design team where each group make a short presentation of their project status getting feedback and advice from HP design team members.
- Expert sessions, with participation of several specialists from HP giving specific presentations on their areas of expertise to the students

3.2 Workshop participants

3.2.1 From the Elisava design school

From the Elisava design school there are 2 design professors, both industrial designers. Their main activities are to coordinate and advise the students and driving ideas and processes to ensure a successful learning experience. Also, they cooperate with HP in the development and coordination of the workshop.

3.2.2 From HP

From the HP design team there is 1 designer and 1 design manager. Their main activities are to bring the HP perspective, driving ideas to fulfil business requirements, provide the HP wide vision, design trend info, and general consumer perspective.

Also from HP participates a group of experts from different fields. They present their experience to introduce the students into specific topics related with user and market research and product design and development among others.

There are 3 experts' sessions:

- User research methodologies: ethnographic research, contextual inquiry,
- Contextual design cycle: Personas, Workflow analysis and Scenario proposals.
- Product development and life cycle analysis

4 WORKSHOP PHASES

4.1 Phase 0: Briefing - Debriefing

The objective of the Phase 0 is to introduce the students to the company culture and put them into context in order to set the bases for later workshop development. They are given a quick view about the company, the environment, the expectations, objectives and methodology to be used along the workshop.

4.1.1 Briefing session

The first contact of the students with HP consists in a short introductory presentation about the workshop itself and about HP. The briefing of the workshop is explained step by step and dynamics and methodologies are introduced. The main topics treated at this session are:

- Workshop Info, objectives discussion, phases, dynamics and deliverables, etc.
- HP information, large format printing business, customer experience, market segments & products, industrial design management, inkjet printing technology

4.1.2 Debriefing session

In the debriefing session the objective is to have defined the teams and each group to present a summary of its understanding about the project, doubts and initial thoughts in order to have an open discussion about the project with the HP design team and Elisava design professors.

4.2 Phase 1: Research

The main objective of this phase is to identify investigation topics to drive later concept work, detect and analyze problems and define requirements. There are some topics proposals from HP but it is open to the students the possibility to propose other topics. This is to give a framework to start and situate the students in the type of research to be done. Some examples of the topics proposed are: freelancers and creative professionals, work/private life, professional/consumer, worker/gamer, mobility, equipment sharing, communities, customization, life cycle and eco design among others.

The students are required to consider not only the user's point of view, but to think of its clients and vendors, and also to investigate sideways, current professionals but also students, freaks, regular consumers, etc.

The deliverables for this phase are a report covering research methodology and analysis, and outcome (user profile, environment, needs and usage model). The students are required to be as visual as possible and the presentation format is free: pictures, storyboards, videos, examples, metaphors, etc.

4.3 Phase 2: Concept proposal

The objective of this phase is to define a concept that solves all of the requirements identified during the investigation phase.

The deliverable of this phase is a short report showing:

- requirement list
- design elements that solve those requirements
- proposal of architecture (basic layout)
- critical experience scenarios
- integration of that concept on the experience scenario

Also as a summary, two A2 boards are required to present in a visual way the concept proposal

4.4 Phase 3: Concept development

This phase is oriented to deeply develop the identified concept and start defining a styling proposal.

The deliverable required is a report showing:

- requirement list
- design elements that solve those design requirements

- proposal of architecture (basic layout)
- scenario proposal to check the suitability of the concept for the experience goal
- styling proposal

Also as a summary, two A2 boards are required to present in a visual way the developed concept and the styling proposal.

4.5 Phase 4: Presentation

The results of the processes along the workshop are presented to HP staff members from marketing and R&D. The objective is to have feedback from the different departments from HP. Also to have the chance to present to a large number of HP executives.

The deliverable required is a report showing:

- investigation
- requirement list
- design elements that solve those design requirements
- proposal of architecture (basic layout)
- scenario, storyboard, video or other support explaining concept usage model, workflow and environment.

Also as a summary, two A2 boards will be required explaining in a very visual way the concept development. According to the type of concept developed a mock up will be required in order to verify usability aspects.

5 RESULTS

At the end of the collaborative workshop the results are a number of 5 to 10 projects where many useful ideas, concepts, trends, insights, opinions, prospective users' profiles and scenarios are condensed. On each project there are different balances of the mentioned elements and a lot of interpretation work will be required from the HP design team to translate the relevant information into actionable knowledge for the company. Some of the projects are being patented by HP with a previous economical agreement with the students that created those projects.

On the other hand, for the students the results are:

- a project for a world renowned company to add to their portfolio
- a set of developed design skills highly required in today's industry
- learned useful research methodologies applicable to several fields and not only for design projects
- a mind setting on user centered design that makes the difference on today's design practice
- experience dealing with top professionals on real projects with real needs and demands

6 CONCLUSIONS

As a global conclusion we might say that the collaborative workshops were a fruitful experience both for students and HP. Although the general balance is positive, we would like to specify some points where improvements could be made. Thus, future experiences related to collaborative workshops could be even more successful.

• The number of participants (students) with which the dynamics worked better and the experience was more useful both for students and HP is around 25. More than 25 did not lead to better results or more variety of proposals. With 40 students the results were not as good as with 20 students due to shorter times for discussing

- deeply with each group. Also with 40 people, class management proved to be more complex and time consuming and productivity was diminished.
- The experts' sessions from HP proved to be more useful when taught in the early stages of the workshop. Thus, the students had more time to assimilate the acquired information and use it accurately on their projects.
- The balance between regular classes (with informal discussions group by group and working sessions between students and professors) and HP design team classes (with short presentations and short feedback from HP professionals) should be better-balanced in order to have more "quality time" with the students. This is because the students tend to spend more time working on the presentation than on the project development itself.

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