UX consultant: A profession to aspire to

I) How Mr. P found a job, on a quiet Tuesday morning in the corridor of 45 rue d'Ulm, and how it came to be a life-changing event

Mr. P is a rather broad-minded fellow, who doesn't like to impose himself barriers as to what to learn. After his "classes préparatoires B/L" in literature and social sciences, some of the most diverse studies a post-bac can undergo, Mr. P dug even wider and subscribed to both a bachelor's degree in Philosophy at Paris 1 and a Cognitive science degree at ENS. What to do with all this in head?
The answer came at the turn of a corridor, on a quiet Tuesday morning on the last year of his studies. Chatting away with a professor, he was hinted about an internship offer in a Numerical Design firm, which he knew nearly nothing about. Let's jump. After 11 month of learning, redaction of a designer's guide and project management, he felt more confident.

He would then take up the mantle and pursue these tasks alone.

II) What are the main activities of Mr. P's job, and what is even his job?

Today, Mr. P is a free-lancer in UX design, or User eXperience design. His role is to, prospectively or posteriori, evaluate the experience of a user on a service or product; that is, to verify the main function is well understood, all the features are used, that there is no friction in the process. For instance, a UX designer might evaluate an existing product, say a VR headset, by ensuring that most users do understand how to use them, that they do not experience nausea or inability to focus… and how to improve it, if so.

Prospective evaluation
A large part of a UX designer's task amounts to understand how a product should be designed, before launching the production process. Taking in account the direction of the client, this is done by meeting the prospective users and anticipate any needs / complication / extra features. Passed the optional literature review on the topic, three phases can be outlined.
(i) Through qualitative interviews with a few dozens of individuals, Mr. P can assess their needs, pinpoint what are the relevant metrics for the new product and grasp the user's "mental model" of the situation.
(ii) Armed with the relevant metrics for the product-to-be, a quantitative study can be conducted. Hundreds of questionnaires can be send, the easy way, or more complex data can be gathered. Cameras yield videos to map how the users move in an

environment, Eye-tracking can be used to evaluate where the user's attention goes, Galvanic skin response might assess any stress arising from the experience…

(iii) Once fine-grained needs and larger behavioral data has been gathered, the UX designer deducts directions for the product development. The client (firm) implements these. The final phase consists in a co-construction workshop: the actual product's makers and users meet in a room for an afternoon, and discuss the features of the new products, trial-test it…

In theory, this quite complete method yield solid insights on how to design a product. However, it is quite expensive: this is only conducted by large firms having doubts on the quality / usefulness of their product.

In 2018, Mr. P worked with "Air liquid" to assess the relevance of a ideated product, a chatbot to help their researchers to conduct literature reviews. Such reviews are essential in a researcher's work, to avoid them "re-inventing hot water". Chatbots being extremely trendy, they tend to be mindlessly and overly used. Was this worth the shot? Mr. P's job was to evaluate the need for such a chatbot. Going through the first step, qualitative interview, was enough: the needs of the physicists where too distant from the capacities of the current (understand, 2018) chatbots, which were too inflexible. The project was abandoned.

Posteriori evaluation

A second, more down-to-earth part of the UX designer's task is to evaluate current products. The methodology is rather different here; taking field trips and observing the user's behaviors becomes a large part of the process.

Mr. P loves to travel, and such evaluations allow him to do so. They typically consist in going to the place where the user-product experience occur, observing the users and possibly becoming a user himself. Passed the required literature review on the topic, two stages can be outlined.

(i) Through interviews with the user, observation and personal experience of the product, the designer can assess the qualities and drawbacks of a product.

(ii) Discussing with the actual product designer / manufacturer, they can assess what is to be improved, trial-test it with a sample of users, and generalize the modification.

In 2019, Mr. P worked with Veolia (an automobile light firm, producing the lamps in our cars) on an attention management project: how to improve the driver's attention, that is direct it on the road, in difficult weather? In bright day, we automatically pay attention to what is in front of us, with little attentional cost. However, in dim / dark condition, drivers experience attentional cecity: focusing on the road in front of them, to discern it, leads to ignore other potentially relevant stimuli. How to attract their attention when the gas is low, or when oil is lacking? It was found that users are disturbed by lights in the car, narrowing their pupils and impeaching them to see the road in dim / dark conditions. Aside, usual sounds of alarm do not pass through the momentary attentional cecity.

Trying several solutions on a driving stimulator, the best one turned out to increase the intensity of usual signals in difficult driving conditions, as to overpass the cecity and inform the driver.

III) What skills do these activities require?

To become a freelance UX consultant, several types of skills are required: methodological, computer and social.

(i) Methodological skills: each project requires a new and adapted research methodology. To be as creative, the UX consultant needs to draw from a large base of scientific methods: how to design experiment, how to create a survey, how to conduct in-depth interview… Most of these skills were acquired by Mr. P during his Master in cognitive science, and his early-aborted thesis. Plus, running several projects in parallel makes the organization even more intense!

(ii) Computer skills: to analyze and present the reports. For data analysis, Mr. P uses Excel and Jamovi, an open-source software akin to R, but simpler. In more complex cases, he reaches out to colleagues knowing how to use R, or analyze physiological data (eye tracking, Galvanic skin response…) with specific software. For the presentation, being fluent with Powerpoint is a must: 80% of his time is spent there. The final report is the essential piece of work: it needs to be painless to read, with as few texts as possible but graphs, pictures, videos, schemas…

(iii) Social skills are crucial to transform the results of the abovementioned skills… in a well-understood advice. During the delivery of the report, the hardest part for the consultant is to convince the client (the firm, the product designer) that his advice is worthy of attention. Most often, the client has its preconceived ideas on what should be done, what is efficient, based on the product's designer personal experience. Mr P's job is to convince them that his study, albeit coming from an outsider, is more general and insightful, so that they can implement his advices. Mr. P mentions three weapons to convince, in increasing order of power. First, use direct citations from the users: a third party, directly involved in the experience, *has to* be neutral! Second, using actual videos of user experience, to show the problems to the client. Third, if the latter is still doubtful, bring the client / product designer on the field, in front of users experiencing difficulties. If this is not enough, nothing will ever be.

IV) What kind of difficulties Mr. P experienced

Mr. P experienced mainly three kinds of difficulties on his job

(i) Manage his timetable: with multiple studies, multiple samples, multiple interlocutors… But he still need continuous work, there is no guaranteed pay at the end of the month! This induces a lot of variability in working rhythms (some weeks are calm, in other periods he can work every day for 20 days).

(ii) Identify which mission is interesting before answering "Yes". Often, an agreement is reached before beginning to work on the projects, which might turn out to be tedious and uninteresting

(iii) Inability to assess if his advices are heard, and if the products / services are indeed updated. Sometimes, after having worked for weeks on a project, the whole added value drops to zero when a chief executive doesn't personally like the output…