
Christophe
Benavent

Caroline
Miltgen

Yann
Bruna

Sarah
Medjek

MESINFOS PILOT 2016 -2018

RESEARCH REPORT VOLUME 2

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01

INTRODUCTION

The massive exploitation of personal data by organizations raises thorny questions about the risks associated with personal data, an issue that is amply demonstrated by a number of recent public scandals (Prism, Cambridge Analytica).

This alarming state of affairs has prompted the emergence of a new category of services called PIMS (Personal Information Management Systems), whose business model is based on personal data protection and privacy. Even if the purpose of these services seems fairly obvious, their appeal and the likelihood they will be adopted by users remain unknown quantities, because what they are offering is unprecedented. In this vein, the MesInfos pilot program offered 2300 testers the unprecedented use and control over their personal data via a personal cloud, hosted by Cozy.

We conducted a quantitative survey to better understand the testers' Cozy use patterns. Our goal was not only to measure frequency of use (number of connections, duration) and service use habits (applications used), but also to gauge testers' level of satisfaction and intention to reuse the platform and services, which are indicators of potential adoption and appropriation behaviours.

In addition, the Orange Labs team conducted a series of individual interviews with twelve testers in Paris and Lyon. Among other aims, these interviews were intended

to gain further insight into testers' use of the platform.

This report synthesizes the results of the quantitative and qualitative analyses, and sheds light on the behaviour of the testers vis-à-vis Cozy.

02

RESEARCH METHODOLOGY

MesInfos experiment observations are based on three quantitative surveys, a series of semi-structured interviews and an analysis of testers' use traces*.

The first survey measured testers' perceptions and attitudes towards personal data (level of concern, perceived risks, trust, etc.), the second survey sought to clarify their use habits and expectations of the platform.

The second survey was carried out between February and March 2018, a few weeks after the launch of the commercial version of Cozy. The timing was intended to allow testers time to use all the services offered by Cozy in its most optimal version.

With the objective of measuring testers' adoption behavior at the midpoint of the experiment, this survey was grounded on existing technological adoption models. The literature being particularly rich and the number of models considerable, we decided to employ the most widely used: the Technology Adoption Model (TAM), including more recent versions of it.

The TAM focuses on two fundamental factors: perceived utility and perceived ease of use. However, the model underwent numerous re-

visions during the 2000s. New variables were integrated, including some related to the collection and processing of personal data.

The second survey is therefore based on 16 variables measuring use and adoption behaviors. We summarise and discuss our results in the following pages, and supplement our findings with an analysis of the interviews conducted by the Orange Labs team.

* From the moment the recruitment process began, testers were told of the existence of the research track, and that they would be able to volunteer only if they wished — they were under no obligation to participate. Participant data was masked/protected using pseudomization.

03

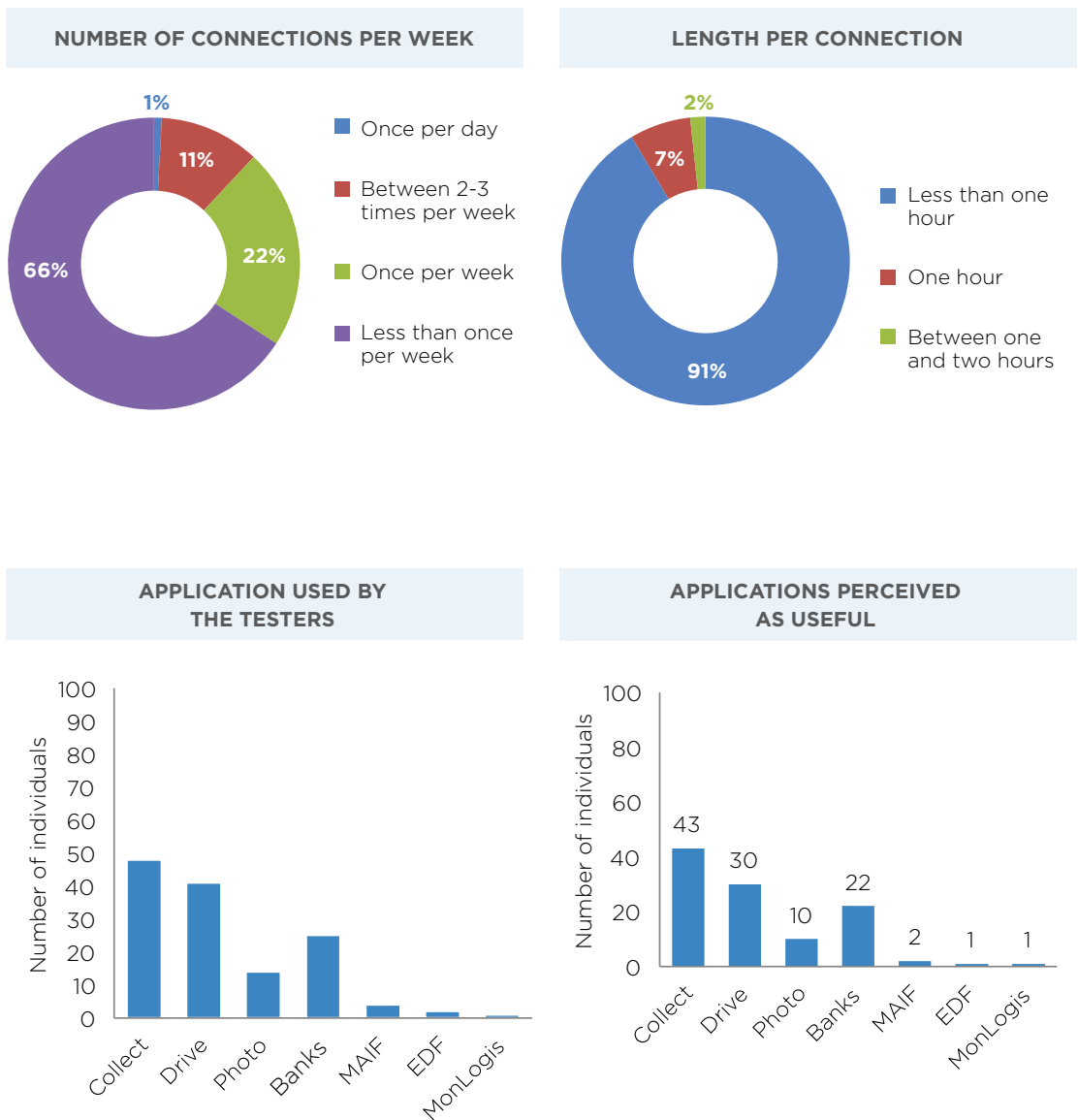
**QUANTITATIVE
RESEARCH RESULTS:
VOL. 2**

3.1 USAGE

This variable measures testers' (declared) use of the platform in terms of :

- Number of connections
- Duration of each connection (minutes/hours)
- Applications used
- Applications perceived to be the most useful

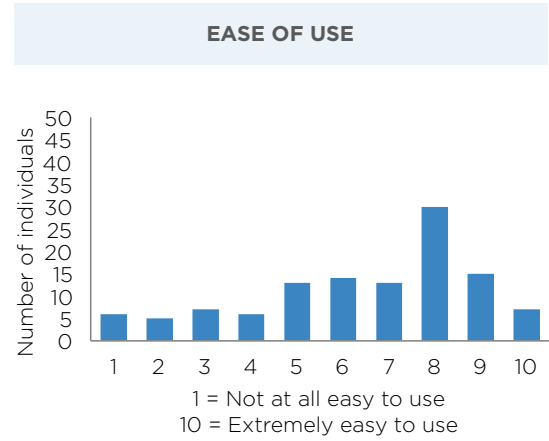
According to the testers' responses, the majority of them connected less than once a week to Cozy and usually for less than one hour at a time. The applications used by the testers are Collect, Drive, Photos, Banks, MAIF, EDF and MonLogis. The two most frequently-cited applications were Collect and Drive, and the testers also ranked these as the two most useful apps.



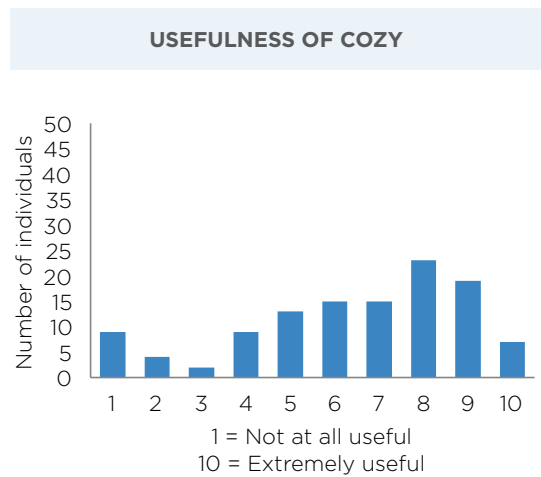
3.2 EASE OF USE

This variable is one of the two cornerstones of the TAM. It refers to the extent to which a person thinks that the use of a particular system (applications, platform, etc.) demands little effort. The more the system is perceived as being easy to use, the more likely the person is to adopt it.

In the case of MesInfos testers, 68% of them declared that Cozy is relatively easy to use.



3.3 USEFULNESS



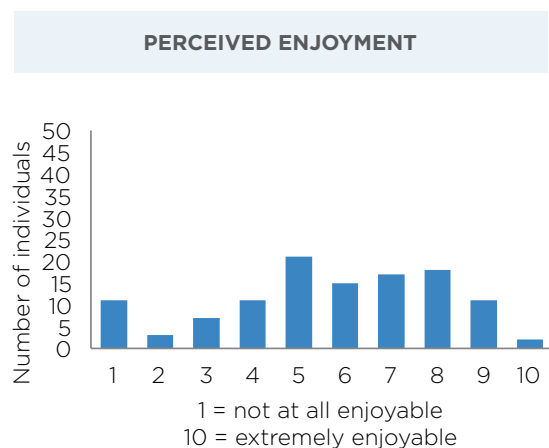
Similar to ease of use, perceived utility is of paramount importance. It refers to the extent to which a person thinks that the use of a service or a product will improve their daily life (saves them time, improves their performance, etc.). The more the person perceives the service as useful, the more likely she/he will adopt it.

In this case, 68% of respondents perceived Cozy as useful.

3.4 PERCEIVED ENJOYMENT

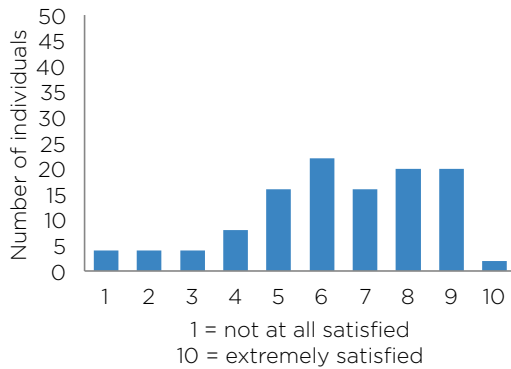
This variable measures the degree of enjoyment provided by the use of a service or product, because it is entertaining and/or because it satisfies a need.

In the case of the MesInfos testers, 52% of the respondents in the second questionnaire indicated that they felt little or no pleasure in using Cozy, compared to 48% who felt they did.



3.5 PERCEIVED SATISFACTION

SATISFACTION



Degree of satisfaction reveals to what extent a person feels that the quality of a service or product meets her/his expectations. Satisfaction is determined by both the level of expectation and the perceived level of performance of the service.

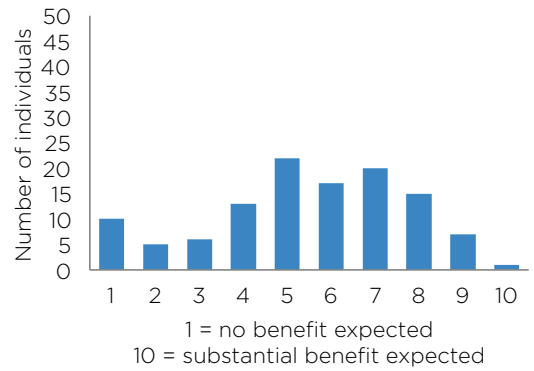
Among the MesInfos testers, 69% answered they were relatively satisfied with Cozy.

3.6 PERCEIVED BENEFIT

This variable is used to measure the level of benefit expected from a service or product. Such benefits can vary: expected savings of time or money, receiving personalized service, etc. The higher the level of expected benefit, the more likely the user is to adopt the service.

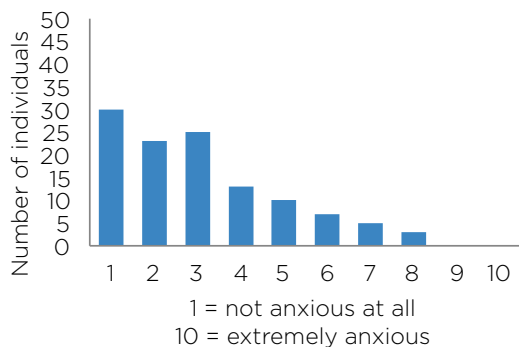
As regards our testers, 52% of our testers have high benefit expectations.

PERCEIVED BENEFIT



3.7 ANXIETY

ANXIETY ASSOCIATED WITH COZY USE



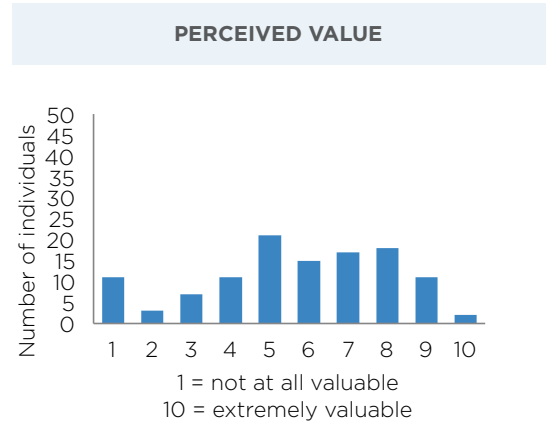
Here, we measure the anxious emotional reaction of a person when using a service or a product — in other words, an emotional state tinged with nervousness caused by negative anticipation. We wanted to know whether using Cozy was distressing for the testers, especially as regards to threats related to their personal data and/or privacy.

The results revealed that for 87% of them, using Cozy is not worrying at all.

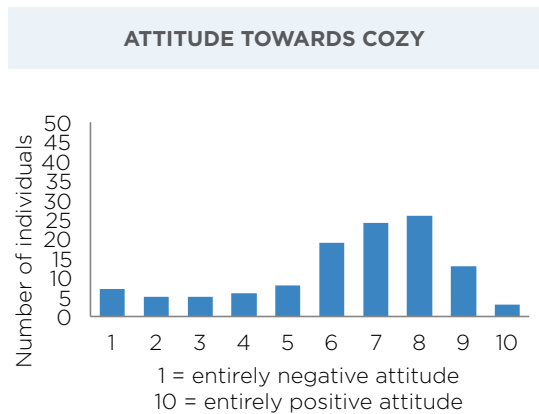
■ 3.8 PERCEIVED VALUE

This variable measures the value a person associates with a product and/or service after estimating the benefits and costs (time, effort, price ...) necessary for its acquisition and/or use. In the case of MesInfos, this means measuring the value of Cozy with regard to the advantages it provides (recovery, storage, reuse of the data) and the effort it takes to use it (beta version).

54% of the 2nd survey's respondents found that using Cozy provides value despite the effort it requires.



■ 3.9 ATTITUDE



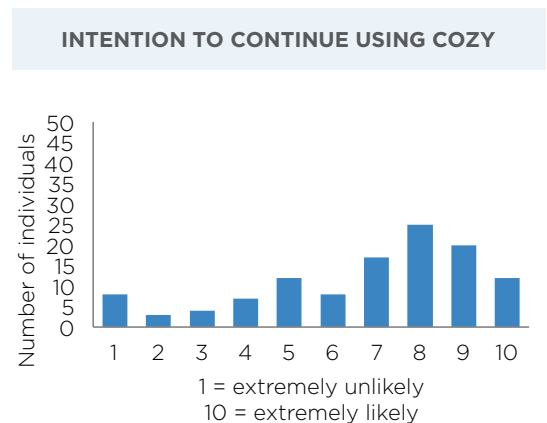
In the technology adoption literature, attitude is cited as a core variable. It paints a picture of a person's favorable or unfavorable state of mind with respect to a service, product or performance. A user's attitudes are fueled by his or her beliefs and experiences.

Among the testers who participated in the 2nd questionnaire, 73% expressed a favorable attitude towards using Cozy.

■ 3.10 INTENTION TO REUSE

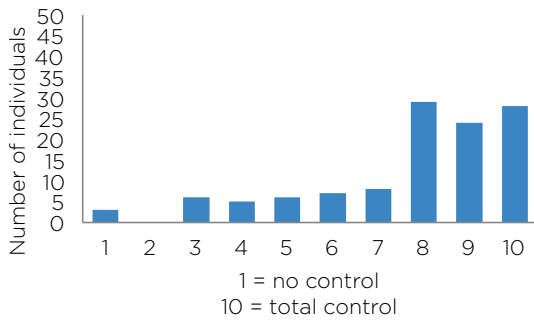
In the same way as attitude, intention is an essential variable in the measurement of technological adoption. This refers to a particular mindset leading to decision-making, in this case the choice to continue using the Cozy platform after the first connexion.

According to their responses, 71% of participants intended to continue their use of Cozy.



3.11 PERCEIVED BEHAVIORAL CONTROL

PERCEIVED BEHAVIOURAL CONTROL



Perceived behavioral control refers to a person’s perception of their own ability to exhibit a particular behaviour. In the case of MesInfos, this means knowing if the testers think they have the requisite abilities to use Cozy appropriately.

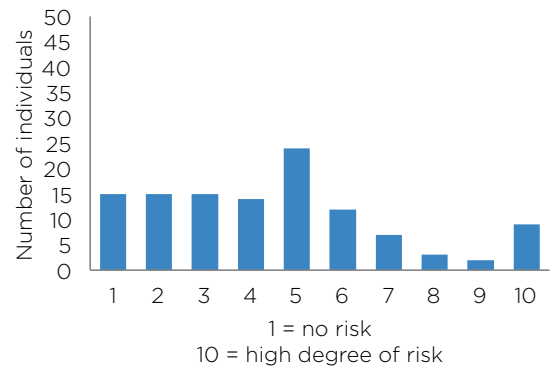
As the diagram on the left indicates, 83% of them thought they were able to use Cozy.

3.12 PERCEIVED RISK

This variable measures participants’ level of perceived risk associated with using Cozy (associated with data recovery and storage, and especially data reuse via third-party services). Thus, the more risk perceived, the less likely participants are to continue using Cozy.

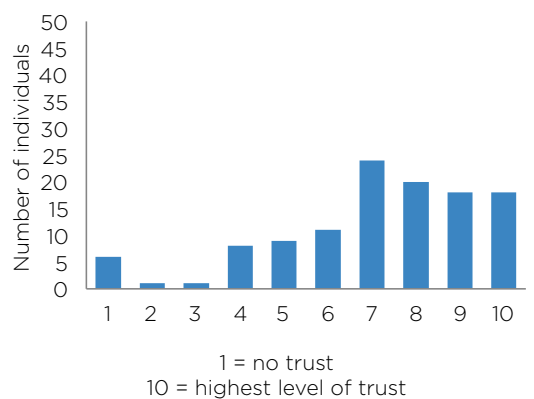
The results of the second survey indicate that 72% of respondents associated little to no risk with using Cozy, while 28% thought that using Cozy could put them into danger.

PERCEIVED RISK



3.13 TRUST

TRUST IN COZY



In the context of privacy, trust is defined as an individual’s conviction, or perception, that a company he or she is a client of (Cozy in this case) has taken the necessary precautions to protect their customers’ personal data and privacy.

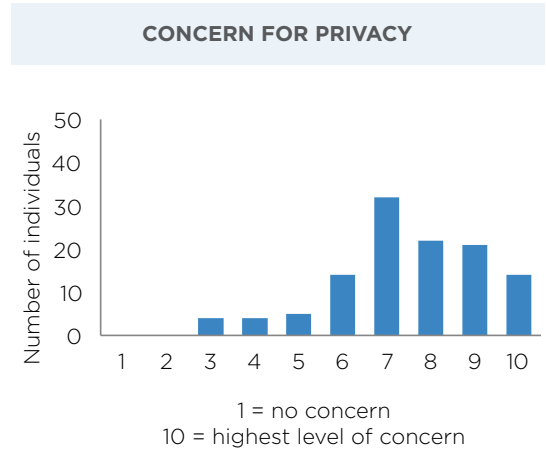
The quantitative MesInfos surveys measure this variable on three occasions, to track its evolution.

78% of the testers from the first survey responded that they trusted Cozy. The second survey saw that figure increase slightly to 79%, nearly the same level.

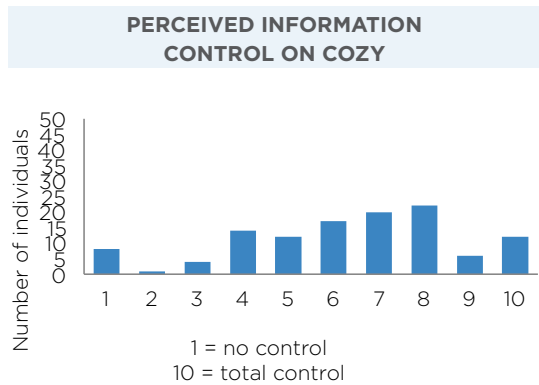
3.14 CONCERN FOR PRIVACY

This parameter indicates individuals' level of concern regarding the impact that the use of their personal data may have on their privacy. The more concerned individuals are, the less likely they are to disclose their personal data to businesses. In addition, the assumption is that the higher the level of concern, the more individuals are looking for ways to better protect their data and privacy. Like trust, this variable will be measured longitudinally.

While 91% of participants in the first questionnaire expressed high level of concern, that number dropped to 89% in this second survey.



3.15 PERCEIVED INFORMATION CONTROL



This variable, a common feature of the privacy landscape, can be defined as the perception that individuals have regarding their ability to exercise control over their personal data (collection and access). We wanted to understand whether the testers thought they could control their data via Cozy. The higher the perception of mastery, the more likely testers would be to continue using Cozy.

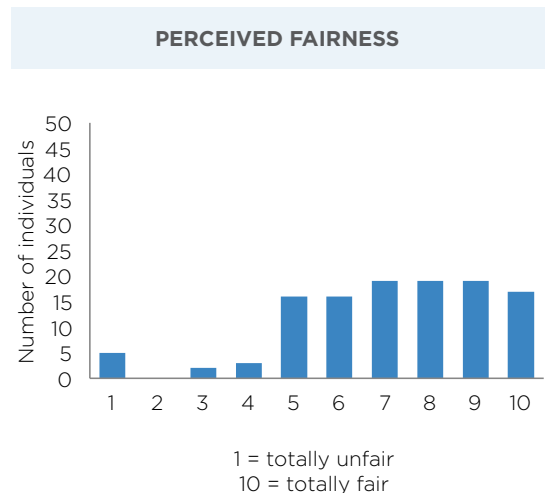
According to the results, 66% responded that they were more able to control the data that they stored on Cozy.

3.16 PERCEIVED FAIRNESS

This variable focuses on users' perceptions of a product's or service's fairness — does the service in question respect the promises and commitments made to its customers?

In the domain of privacy, this variable is very important, because users often feel that companies do not clearly inform them about their personal data collection and use policies, or change those policies so often without the explicit consent of their customers.

77% of the MesInfos testers we surveyed thought that Cozy was fair.



The results of the second survey indicate that MesInfos experiment testers are generally satisfied with Cozy. Some variables, such as attitude and reuse intent, suggest that testers are more likely to continue the Cozy experience.

However, we must remain cautious — the results also indicate that even if testers' intentions are favorable, their actual use of Cozy is limited.

To dig deeper into these aspects, individual interviews were conducted with twelve testers. The following pages present the results from those interviews.

04

QUALITATIVE RESEARCH RESULTS

■ 4.1 INDIVIDUAL INTERVIEWS

Between May and June of 2018, individual interviews were conducted with twelve MesInfos testers. The objective was to dig deeper into the testers' relationship to, and with, Cozy.

The semi-structured interviews asked a series of questions grouped into four clusters:

1. **The individual's digital habits,**
2. **The individual's perception of personal data,**
3. **The individual's use of Cozy, and**
4. **The impact of using Cozy on the individual's digital habits.**

For the purposes of this synthesis, we will restrict our presentation to an analysis of cluster 3 responses. The complete results will be presented in the final report to be published in September of 2018.

■ 4.2 MOTIVATION

Before discovering how the testers interviewed used Cozy, let us first look at the reasons that led them to participate in the MesInfos experiment.

For the majority of them it was curiosity, which is explained by their profiles (research-oriented), but the reasons they participated went beyond simple curiosity for most.

Some mentioned that they trusted the tool because it was endorsed and promoted by Maif. Three of them had already tested other Maif tools (Nestor) and the prospect of experimenting with a new tool was motivating to them. Utilitarian logic seems at play here, more so than any sense of subjectivation:

- According to Marie, the discovery and learning of a tool like Cozy is motivated by the search for time savings and conve-

nience (centralization of documents).

- Three of the twelve individuals interviewed highlighted the benefits of having ample free storage space (40GB), well above that of competing cloud platforms.
- The interviewees were interested in protecting their data, *'regardless of the tool used'*, Emmanuel said.

None of the individuals questioned advanced the argument that securing personal data was the *primary* motivation for their participation in MesInfos. It was mentioned, however, as a secondary driver for four of them.

■ 4.3 COZY USES

4.3.1 - Homogeneous uses

Data storage (Drive), data recovery (Collect), and banking services (Cozy Banks), respectively, appear to have been interviewees' three main uses of Cozy. This result appears to be consistent with the two quantitative studies conducted on the subject, as well as the use statistics provided by Cozy to FING. The interviewees again emphasized the practicality of centralizing their data, and the time this 'all-in-one' service saved them.

Their Cozy Drives were mainly used to store administrative documents from services they did not connect to (e.g., taxes, etc.).

Only a few used Photo to store their pictures (Emmanuel mainly), because it was impractical from their mobile devices and photo storage was already being provided by other services they used (e.g., iCloud, Google Drive, Dropbox, etc.).

'To me Cozy was a management tool. For example, [it] manage[s] all sorts of accounts, such as banking and insurance, and anything that can be put on the Internet. Data too, like official administrative data, for example. [For] when one has to look for information to fill out identity documents, or make appointments at the Prefecture or sub-prefecture.' (Thérèse, 55)

'It enabled me to store Word, Excel, PDF and PowerPoint files that I am always looking for, like my RIB [bank account detail] . . . there, I have them on hand and I don't have to search my emails for 'RIB' to find a message I attached my RIB to . . . it allows me immediately to access the document and send it or use it.' (Jean, 40).

4.3.2 - Use-side and service-side evolutions

The ways three individuals used Cozy evolved over time: some began with the data collector service then moved to the drive, others did the opposite. In both cases, the idea of centralization prevailed.

Arllette, a curious user who claimed to be uncomfortable using computer tools, truly discovered Cozy when the Bank service landed, after a fruitless first experience with Cozy one month before. She remains unable to use the Drive, however. Cozy Bank is, to her, the easiest and most intuitive service available on Cozy.

Some individuals even requested that more data collectors be added (3 out of 12 questioned). According to them, the requests were fulfilled quickly, in under a month.

Interviewees who regularly used Cozy (8 individuals out of 12) perceived improvements in Cozy's offering, especially the addition of the Bank service and in the overall amount of services available. These two points were frequently mentioned.

'At first I did not use it for storage. There are data collectors, but beyond them I did not necessarily store other data like official administrative documents, since I kept copies of those in a file on my computer. And at some point I thought, "Why not?" and I created a Cozy folder on my computer. In it I put my administrative documents, whether for home, for the baby, for something else, and uploaded them to my Cozy. And from that moment on it was much easier for me to use those documents . . . thanks to my Cozy, and the fact that it synced to my mobile.' (Marie, 38)

4.4 DIFFICULTIES ENCOUNTERED AND POTENTIAL IMPROVEMENTS

Testing a new service before it is launched also means encountering difficulty. The Mesinfos testers certainly had their challenges, which they shared during the interviews.

4.4.1- User experience

Four interviewees stated that they had problems understanding how the tool worked. It was not the design per se, but the vocabulary used to describe it which seemed less than clear or overly laden with jargon. The vocabulary, which the interviewees did not always master, was one factor contributing to the complexity of Cozy Cloud.

The functionality of certain services was also met with incomprehension, which led to confusion. 'The «Store» was difficult to understand', 'Where is the homepage, in fact?', 'It tells me that Bank did not come out, but I'm already using it,' etc. This lack of readability was destabilising for some interviewees, who remained reluctant to use certain services for this reason.

The slowness that characterized data uploads was often pointed out, and not only because it made the tool uncomfortable to use as a cloud. *'Today everything goes very fast, so when the little ball keeps spinning and spinning like that, it makes me think something is going on behind the scenes with my data'*. (Jacques, 69).

Functionality :

Cozy does lack certain features and file retrieval functions, a concern excused by the individuals interviewed, who conceded that the tool is still in its early stages of development and that improvements were already visible.

4.4.2- Points of contention

In Cozy, the data collector services are front and center. For half of the interviewees, there is real value in using them. However, two of our interviewees, this was a strategic error. To them, Cozy should have first emphasized the file storage and file retrieval functions. According to Pierre, the services *'do not offer much compared to the competition'*.

The mobile version also received criticism, its features being very limited compared to the desktop version. But the criticism was also qualitative — the Mobile Drive was *'not practical at all'*, and file syncing seemed less effective than competitors' versions.

4.4.3 - Trust: security over the long term

Cozy lacks clarity when it comes to data security. For users, *'nothing demonstrated, in practice, how Cozy is more secure than Google Drive'* (Jean, 40). This distinction was lacking even in communications received during the experiment and in the Terms and conditions. Interviewees never received relevant content explaining Cozy's added security features. *'Even if I had to read code, I'd have liked to know more'* (Jose, 26). The interviewees did not take Cozy's distributed information system at face value — they wanted evidence that Cozy could protect their data more than any other cloud tool.

'Fear of the future' was mentioned several times. It hindered interviewees use of the Banks service and sometimes even their decision to upload photos (or not). For now everything is going well, but where will be Cozy in 5 years? If it is bought by another firm where will my data go? What happens if I forget that I connected my banking data? What about user costs once the experiment is over?

Cozy does not have the same 'aura' as older, major players in the cloud market such as iCloud, Dropbox and Google Drive. According to Jean, Cozy does not give *'the impression it is a very stable company, or a market leader, nor that it is large enough to be reliable'*.

With a domain name ending in .io, a corporate-feeling homepage and its lack of official certification, Cozy does *'not really inspire trust'*, and *'lacks substance'*.

Certain results from the quantitative survey are consistent with those of the semi-structured interviews, especially in terms of applications used by testers.

However, other results diverge. Even though the 2nd questionnaire revealed a relatively high level of satisfaction, the individual interviews point to Cozy's numerous flaws. Indeed, the interviews describe a service that still has some way to go in terms of functional efficiency and coherence in its user experience — flaws that were overlooked in light of its positive evolution.

The final analysis (September 2018) of the sum total of data gathered throughout the experiment (questionnaires, interviews, workshops and use traces) will undoubtedly yield a clearer picture regarding testers' appropriation of Cozy.

MORE INFORMATION



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FOR FURTHER INFORMATION ABOUT THE PILOT

Website - <http://mesinfos.fing.org>

Blog - <http://mesinfos.fing.org/blog>

CONTACT

Sarah MEDJEK - smedjek@fing.org

Manon MOLINS - mmolins@fing.org

Guillaume JACQUART - qjacquart@fing.org

MESINFOS PROJECT PARTNERS

