

# User Experience Design - IBM Planning Analytics

## Overview:

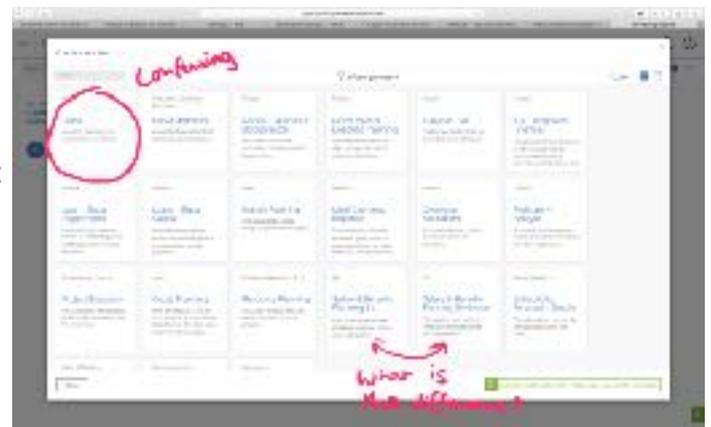
In the User Experience Design module of my course, we were introduced to IBM's Planning Analytics cloud software, a complete redesign and rethink of their current software. Instead of being on-premises, the software worked through the IBM cloud, opening the software up to smaller businesses. The previous version of the software allowed many functions but also needed experts in their fields to work it. The new software aims to be a lot easier to use and faster to set up, hence requiring a much more user friendly user interface, whilst still having the function for highly complex calculations and data to be extrapolated. To get a feeling for the whole experience, I interviewed the programmers who created the software, user design personnel who were working on the UI and potential users of the software. From these findings and other sources, I have come up with a more efficient design for the Introduction to the workspace which sources said was not intuitive, adding some extra functionality and better user experience, taking ideas not only based on Planning Analytics software but also from widely used software.

## User Research:

To collect research, I first went to the developers of the system (both programmers and designers). Here I interviewed them on the product as a whole, including special questions on the UX and UI. The aim of the team mainly was to create a simpler system than the current IBM implementation that appealed to smaller businesses, allowing for faster on-boarding. They also stressed the fact that the business did not need hardware of its own and that the tool could be used from any system with a web browser. It was also evident that they wanted to attract users from the free trial, and therefore needed to simplify the system to make sure that users did not need to know a lot about the software before use (previous softwares needed people who had been trained in the software to be able to use it). This allowed me to understand the target market for the product.

I therefore decided to interview a few external people about their experiences. The first was from IBM and used the software to plan the current project, giving me a real world usage insight. I recorded his voice and took notes whilst others asked questions. He explained that he was happy with the product and felt it was easy to use, however had used the previous generation and therefore was already quite used to how it worked. He explained how the software used the same engine as the previous in house software but delivered a solution that was massively broader in appeal. He did not have any specific complaints about the product and said that it was easy for non-coders to use and was impressed by the way that all the data was easy to change. He did not mention anything specific to the introduction to the workspace part of the design however noted that users may need prior knowledge about their area of expertise (not the software, but just business terms).

For my second interview, I interviewed a small business CEO who had previously only used Excel. To interview him, I shared screens with him and watched what he was doing. He also took a few notes. When looking at creating a new project, he felt that a lot of the templates overlapped (very similar descriptions) and felt that it was hard to understand why each template was needed. He also noted how the user had to go and select each template individually to see the video - taking a long time to find the correct option. He was not very convinced that he would need the extra features and said it was very different to Excel. He felt that the 'Introduction to the workspace' option in the help menu was very useless and referred to as an advert rather than a tool.





My third user was someone who was experienced with basic word processing, browsing the web and the occasional use of Excel. I interviewed her over FaceTime whilst sharing her screen with me. When presented with the splash screen, she noted that there was no real way to find individual projects and that with many of them, it would be difficult to tell each one apart. She also noted that the help menu was confusing due to 'Help' then 'Help' again option. In reference to the creation of a new project, she wasn't quite sure about some of the functions that each project did and found the videos took a long

time to load, were on different mediums (in built, Youtube) and took a long time to load (easily missed).



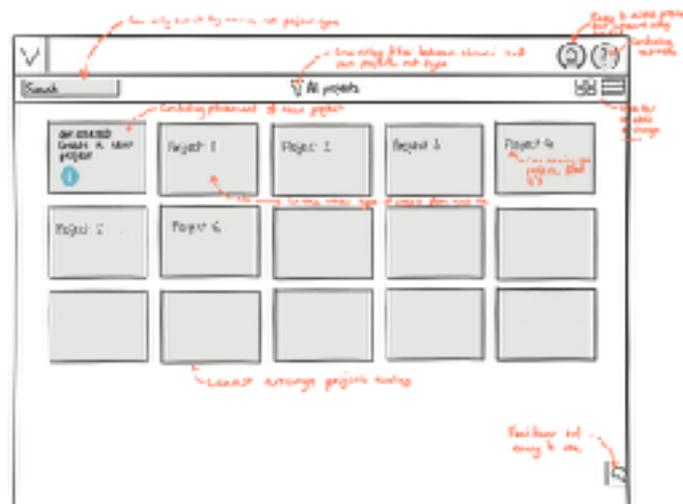
In reference to the Creation of a new project button, she noted that it was not instantly obvious where this was when there were lots of projects. She also felt that it was hard to navigate the 'Help' view as it took a lot of scrolling and reading, which would lead to the user having to read a lot of things before starting use it, potentially putting the user off. She liked the list view of the software and felt it was easy to find. She however noted that there were only a few sorting options and they were not very useful. In the

options menu, she also noted the inclusion of a 'Copy' button which did not seem to serve any purpose due to the lack of a 'Paste' button and was confused by the 'Archive' button. For more information on interviews, see appendices.



**Insights:**

- From my user research I found that the 'All Projects' screen was very simple and easy to use, however did not allow the user to arrange their projects in any way apart from sorting. This meant that files that were tied to each other in projects were not easily found and this would slow users down considerably.
- Creating a project was very easy and the descriptions for each template helped to direct users to the correct template for them. However there were overlaps between templates such as the two HR templates (of which one of the titles did not display correctly) and the two Finance ones which used the same descriptions. Users should also be able to create their own templates to use and share, even if they are only slightly edited from the initial version. This would avoid copy and pasting projects which could in turn lead to errors.



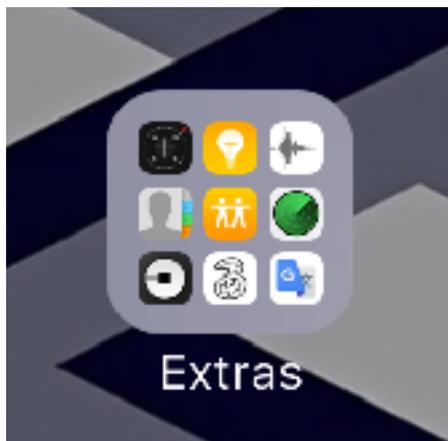
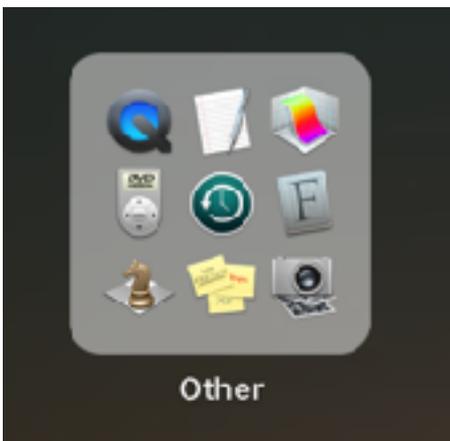
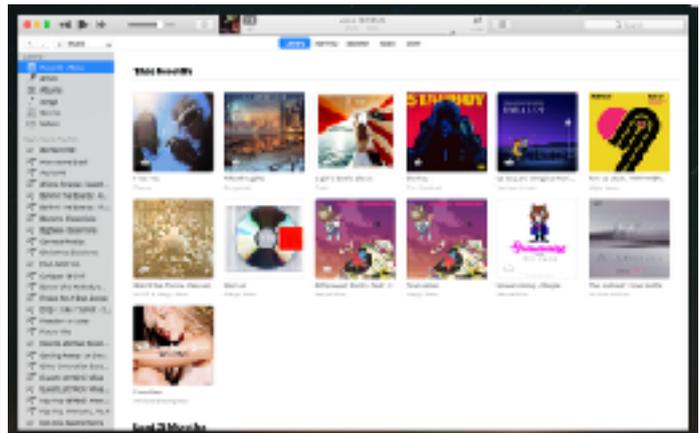
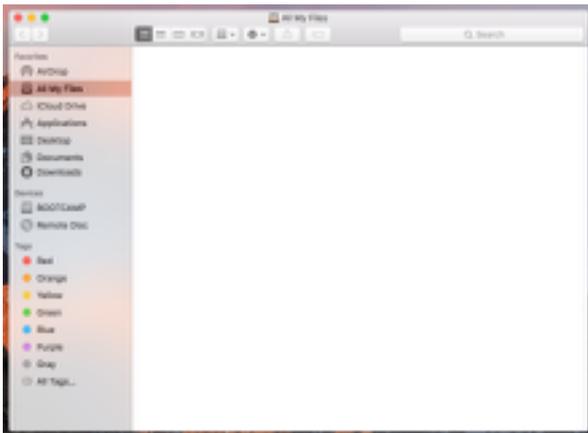
- From the 'help' menu, it was not very clear what each option did apart from going through it. Selecting the 'Help' icon and then having to select 'Help' again was confusing for the user. The help videos were literally a page of videos, without any order, just in a row. It was useful to have a windowed help menu, but it was hard to find specific instructions in this, Full Screen was a lot more useful, even though the small window's size could be dynamically changed.

### Design Concept:

I have rearranged the whole design of the project view so that it now includes a sidebar that allows the user to organise by type and add one or more tags to individual projects to categorise them. Recently edited projects are available at the top for quick access. Also included are folders which will allow users to group together projects that are the same sort of thing or are related. A rearrangement of the 'New Project' button using a menu that drops down allows organisation into categories for different types of project, making it easier to find templates and presenting less information to the user - making it less complex.



New features also include a redesigned search engine that can search by tags, type, users, date and title keywords. Also added was the function to select multiple projects and do batch processing on them. This makes it much easier to find projects. Finally, I have redesigned the sort function to add some extra functionality. I felt it was a bit sparse and decided more options would be useful to users. I took inspiration from the Finder in MacOS for the tags and the sidebar. I also got inspiration from the Recently Added section in iTunes and for folders I was inspired by MacOS and iOS folder icons, being able to see into each folder to find certain things.



### Critical Reflection:

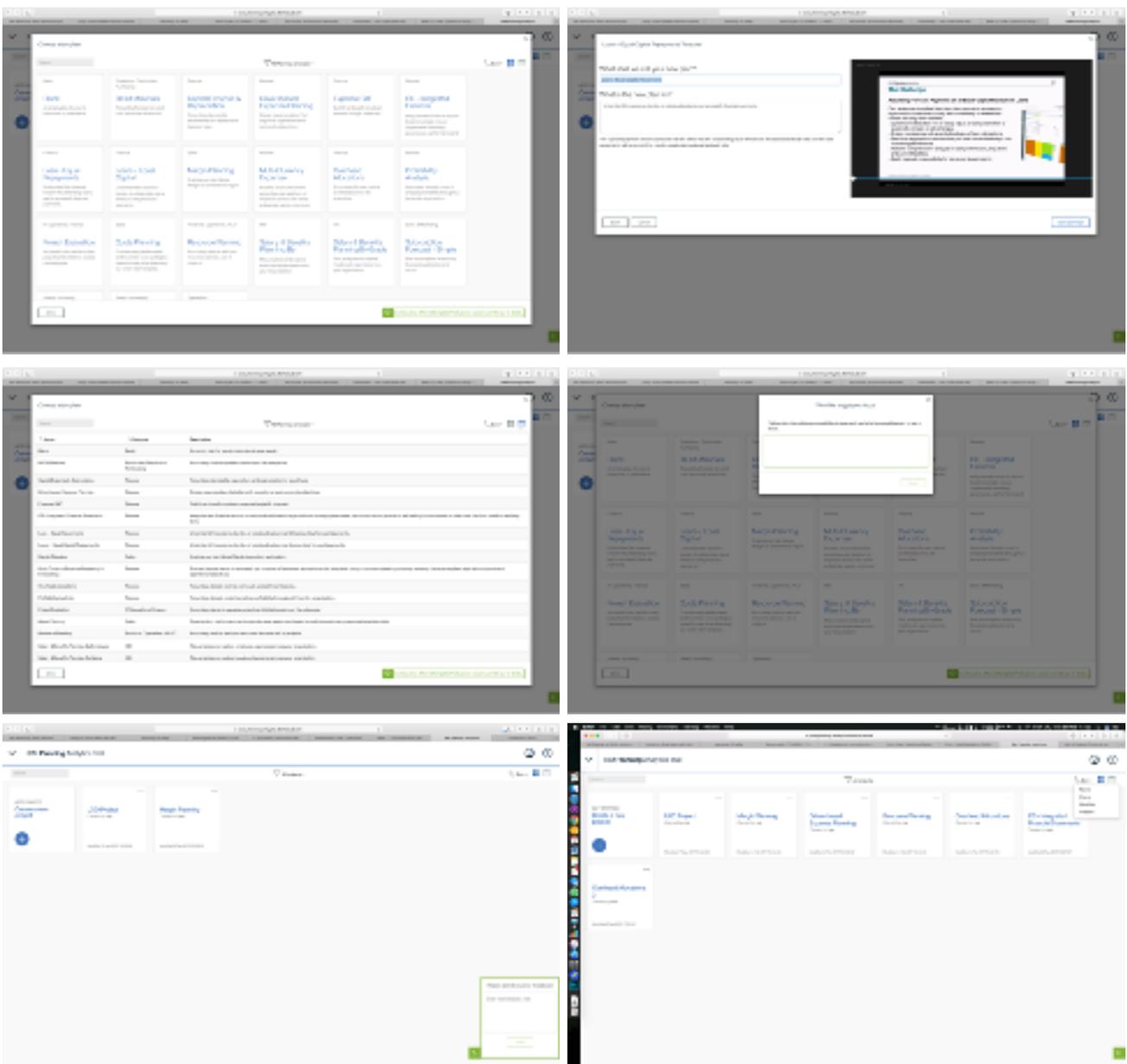
I personally feel like my design is a lot better than the current design and is more user friendly, offering to the user an interface that they are used to or could adapt to very quickly. I also tried to make it easier to access certain features and reduce the amount of information on the screen at once so as to not bombard the user with information.

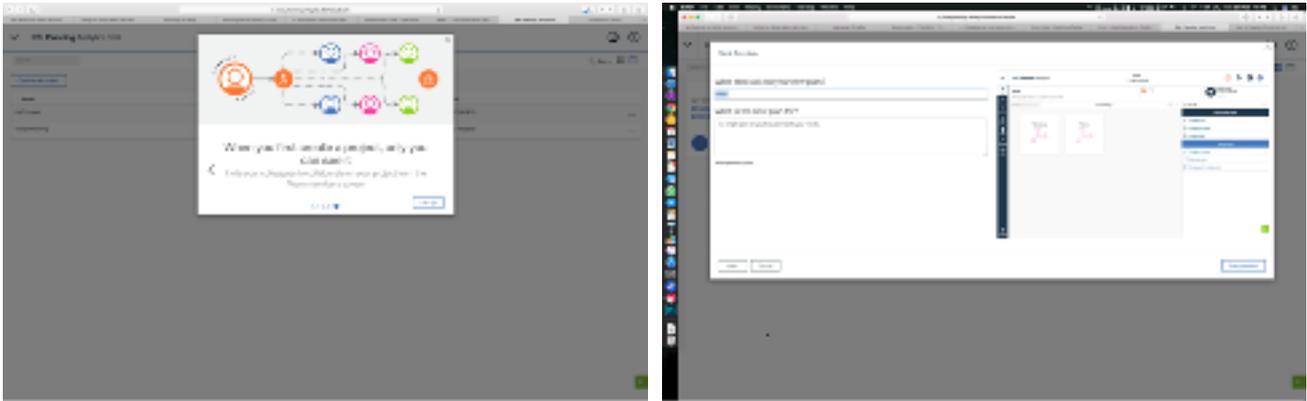
If I were to run my user research study again, I would try and get more views from people who had used the previous software before and tried to limit the amount of IBM employees I interviewed as they will have had bias. I also found that their insight was not crucial at all to the design process. I would also like to get in touch with more people, extending my research to not only people who have used the software before but also people who are new and would be potential customers.

I found the initial design period quite challenging as taking on a lot of user feedback and analysing it took time. In the future, I would prefer to interview a few people at once to see what people thought were the main points, suggesting solutions, and getting them to debate and conserve about decisions finalising on how they thought they could be fixed. I found talking to end users, especially those who had no use for the software was particularly useful as they approached it with a more critical viewpoint.

Word count: 1,650

### Appendix A: Research on current software





#### Notes:

- After selecting 'Create a new project', lots of templates
- Video on next screen takes a while to show up, cannot see controls on some - some on Youtube, other on proprietary video player
- Selecting 'Help' gives an 'Introduction to the Workspace' and other options, including another 'Help' option. This is a small window that includes basic information and floats on top of the UI
- Would be useful to be able to have folders or tags for different products
- Not sure what 'Copy' does in the drop down menus
- Archiving and then quickly trying to restore does not work
- No real way to find certain items

#### Appendix B: Questions asked to all users interviewed

1. What do you use/could you see yourself using this product for?
2. Does the design make sense to you after your first few minutes playing with it?
3. Was this inspired/can you see inspiration from other products on the market?
4. Can you identify any advantages this software has either in functions or usability?
5. What skills/knowledge do you think users will have to have before using this software?
6. Can you see any major differences between this product and other similar ones on the market? If so, are they better or worse?

#### Appendix C: Example transcript from interview in person

- What is your role within the team?
  - Responsible for the project that delivered the product being used
  - Have to get requirements organised, people, timescales and cost
  - Things around the building of the software, not the creation itself
- How do you differ from Chris?
  - Chris does how the product goes to market and how the product is conceived by the customer
  - I am responsible for how the project is organised and how it is done
  - Overall responsibility for general management, timescales, critical dependencies
- What is your overall objective?
  - Creating profit from this product for IBM
- Were you inspired/influenced by other products?
  - Yes, but want to make it better
  - Third iteration that is trying to fix the same problem
  - Financial planning tools are key in all companies, and can do much more
  - Have specific, powerful tools that do more than spreadsheets can do
- How does this differ from products before?
  - Instead of being very complex before, do not need multiple people in-between - end user

- Lower skill barrier to lowest as possible
- The same engine powers all, but delivers a solution that is massively broader in appeal
- How many active users do you have at the moment?
  - 1000s
- What advantages compared to others?
  - Quick to change data
  - Everything can be accessed from anywhere
  - Speed and flexibility
  - Even non-coders can understand it
- The first time you used it, how was it?
  - Before it became executable code, knew about the design process therefore had a head start
- Is this the final product?
  - No, we iterate very fast, have only just created an MVP
  - Can develop very easily and changes can happen very fast - continuous delivery
- What assumptions do you have about users?
  - They know spreadsheets and that they can understand basic business problems
  - Like to think we are using the business terminology from business concepts
- So users need prior knowledge?
  - Some
  - They have reached a position in their organisation where you have responsibility for their area in their business
  - Any information they still need, can be accessed

#### **Appendix D: Example conversation from FaceTime interview**

Interviewer: So when you are presented with this screen, what jumps out as the first thing to you, the thing that is grabbing your attention the most?

User: Well I see a big arrow in the corner.

Interviewer: Try pressing it, does it do what you think it should do?

User: No it doesn't, I am confused about what it does.

Interviewer: Now if we wanted to create a new project, could you do that?

User: Yes, I can see it there.

Interviewer: To you, is that the most logical place to put the 'New Project button'?

User: No. It's quite hidden.

Interviewer: So where would it make sense to put it?

User: Somewhere away from current projects so that it is easily accessible. In this current version, I am sure I would get lost in all the different things - there is no way to organise them.