Research and Workflow Techniques: Designing complex applications with digital and manual components

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When does it make sense to transform a manual process into a digital one?

When does it make sense to integrate applications?

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And how do you decide?

For example

The case of the institutional banking organization that needed to optimize operations applications

What did we do?

1. We talked to the client.

2. We talked to the client's clients (who use the applications).

3. We documented and analyzed their team structure, interactions and workflow.

4. We made recommendations for workflow improvement (some digital, some not).

Why do research?

To find out HOW users work and WHY they work that way (the why is often more important).

You might be surprised at how they are using your system.

Who should you conduct research with?

1. Use your analytics to identify heavy (power) users and light users).

2. Pick people based on their roles, their usage of important applications, types of clients.

3. Find out who they interact with and interview them, too.

How many people should you talk to?

More is more…

Talk to at least 10 people.

(For statistically significant samples, you need many more).

Where should you interview them?

Anywhere you can.

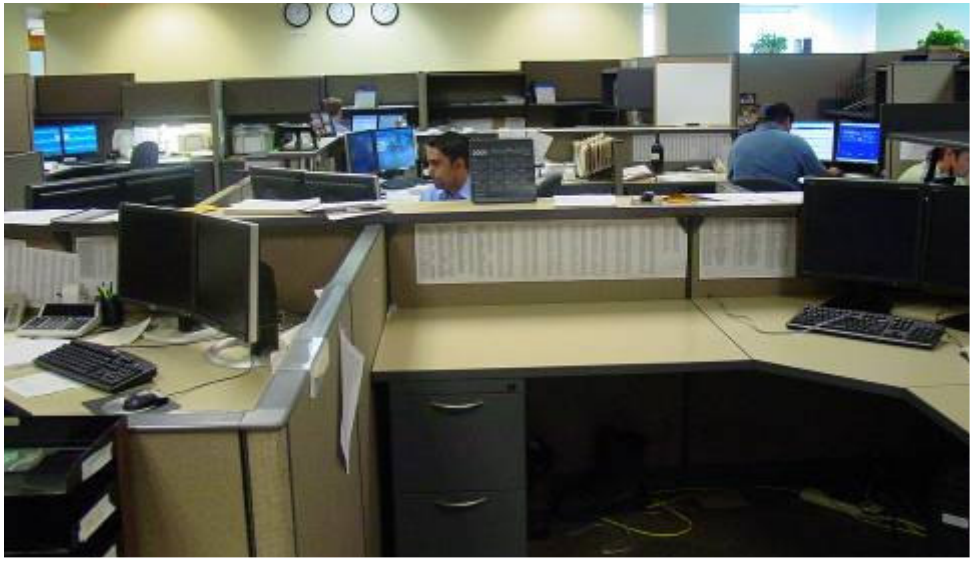
1. At desk (the ideal scenario)

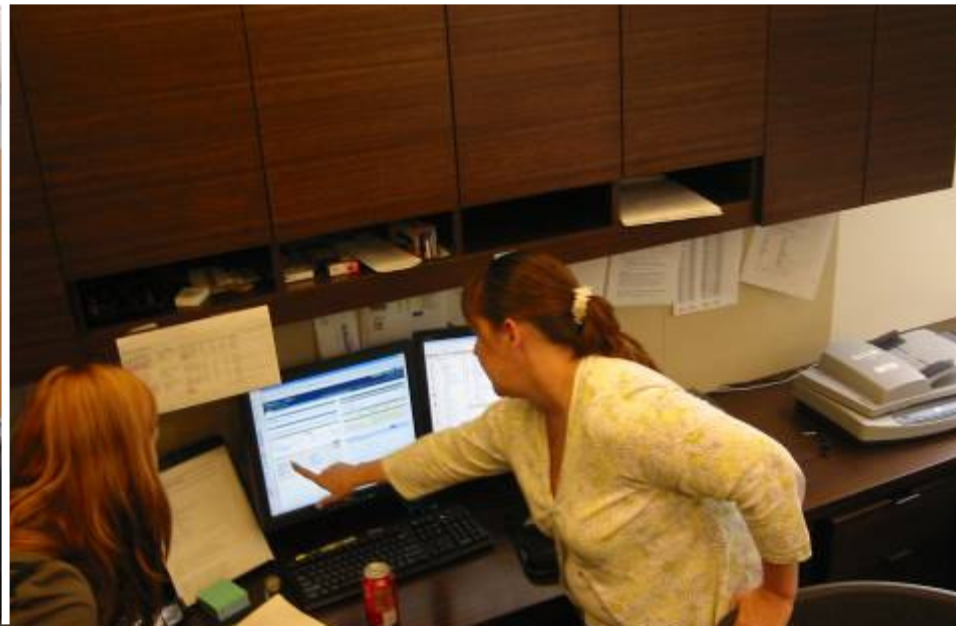
2. Via Webex (and share their desktop)

3. Over the phone

(Interview them individually to get their personal process or in groups to get workflow dynamics.)

Interview people where they work.

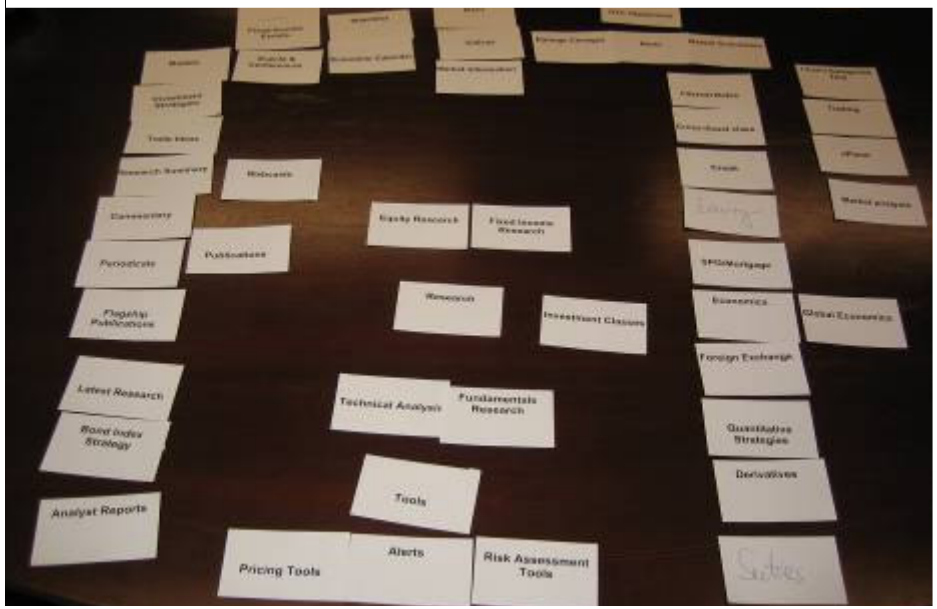




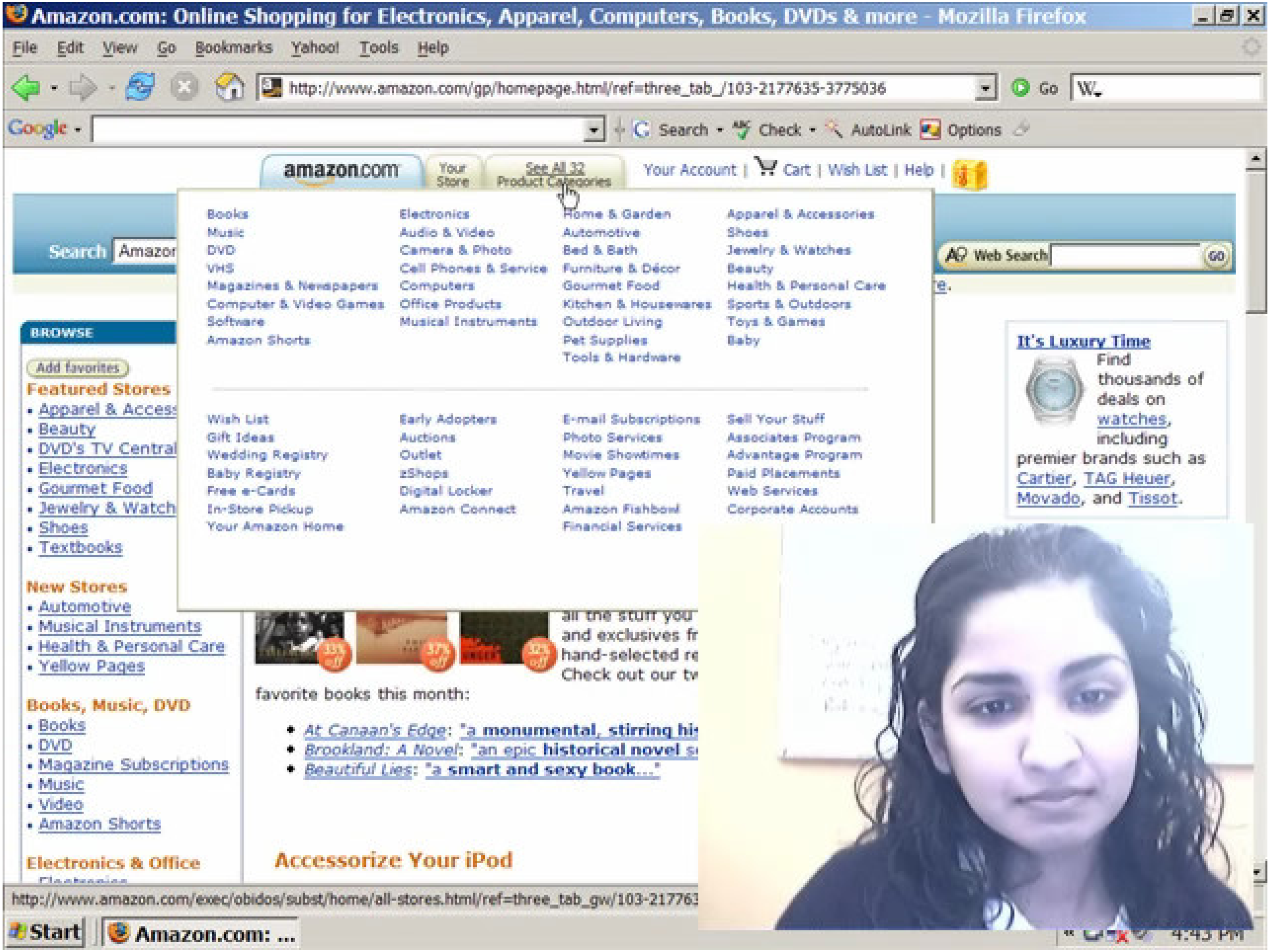
The Research Process:

1. Analyze usage statistics.
2. Write screener for interviewees.
3. Write interview script.
4. Interview users.
5. Record actual usage.
6. Perform card sort exercises.
7. Shadow users.
8. Document findings.

Learn how they organize with card sorts.



Don’t just ask them…
Watch them.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Now what?

Present what you learn about the users in the form of a persona

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This information must be easily readable and should represent your key user types

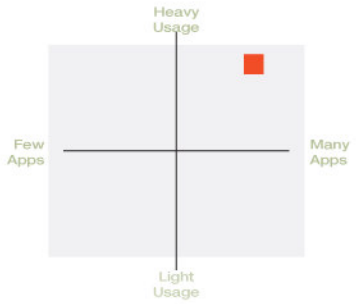
What are our typical users like?
(showing 1 of typically 3-5 personas)

OPS/GENERALIST

Ops/Generalists are responsible for a broad range of operations tasks and use a wide variety of applications throughout their day

Ops/Generalists provide support for all aspects of middle-office trade operations. Their daily tasks involve an assortment of moderately complex activities and processes that require them to be very detail oriented, disciplined and organized. Ops/Generalists will juggle several [redacted] applications which they visit a few times a day, primarily in the morning.

Job titles include: Receptionist, Operations Specialist, Trade Assistant, Operations Assistant, CFO



Ops/Generalists are different from other users because they are heavy users of a broad number of [redacted] applications, and use these applications throughout their day

Paul
Operations Staff
Gallant Capital | New York, NY

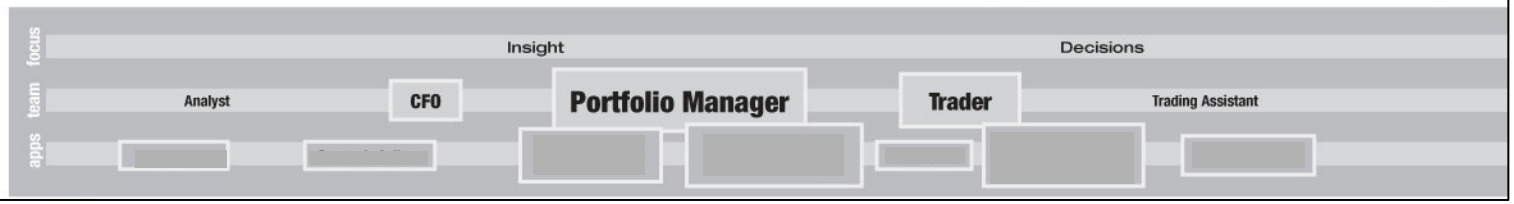
I have been in this industry a total of two years, the last year and half at Gallant. I act as a backup for the two other operations people here, and because my company uses more than one prime broker I use multiple PB systems throughout my day. Many of my tasks need to be completed before the market opens, particularly the reports that I provide to the trader and CFO. I am a big user of Microsoft Outlook – I use the calendar for corporate actions and proxy vote reminders. In general, if I am not working in Outlook, Excel, Access, or [redacted] then I am either on the phone, faxing, copying, on the trading floor going over discrepancies, or discussing an issue with my colleague who backs me up.

Goals

- To quickly and effectively resolve matters that protect our clients' trading positions
- To complete multiple sequential tasks on time, as driven by market times
- To feel confident that all my numbers are accurate and can be substantiated

Tasks

- Acts as an administrator, assists Controller, Trader and CFO
- Investigates and resolves trade breaks, cancels and corrects trades, retrieves and prepares positions reports for traders and management
- Handles FX Affirmations, reviews upcoming corporate actions, maintains internal calendar, electing and booking actions when necessary
- Maintains pricing, books dividends, completes wire transfers, maintains cash positions, makes cash entries as needed



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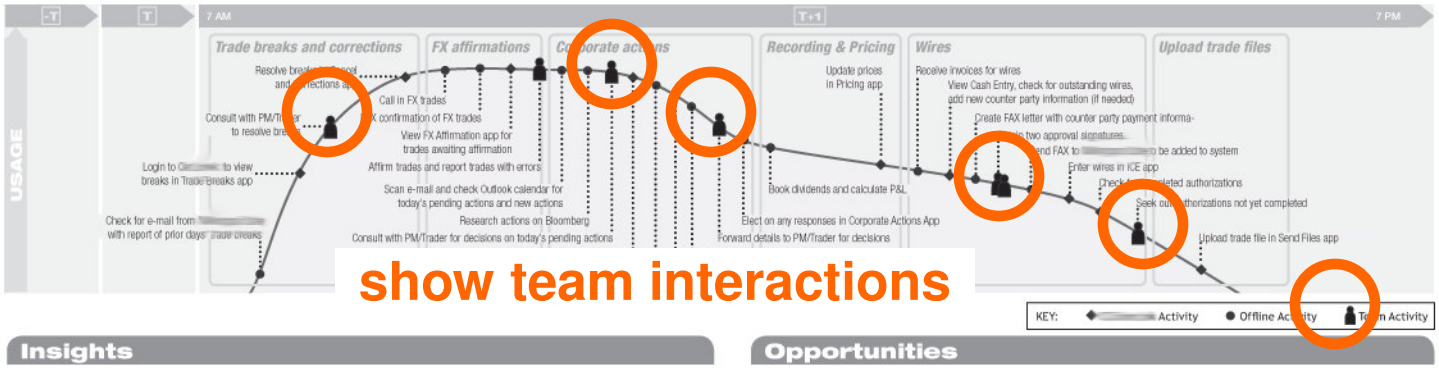
Persona Plus: How do we make the traditional persona more useful for workflow analysis?

"If I can solve problems quickly that means more money for the firm, more money for me... and reduced stress."



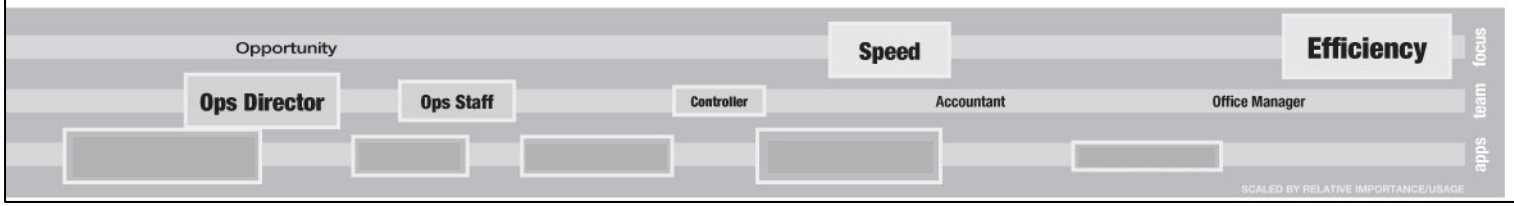
show team interactions

Insights

- Ops/Generalists feel they have too much going on and need more process automation and simplicity
- Client Link applications are not tightly integrated
- Ops/Generalists rely on calendar reminders to keep time critical items organized
- E-mail is an integral part of Ops/Generalists workflow
- There is little or no support material to help clients train new staff on applications
- A clear, simple and efficient UI is most important

Opportunities

- Improve user experience by creating consistent functionality and behaviors throughout applications
- Allow for tighter integration into users preferred workflow by letting e-mailed alerts update the Ops/Generalists desktop calendar software (i.e., Outlook)
- Make the To Do List more effective by making more applications To Do "enabled". Allow user to opt-in or out on the applications represented in To Do
- Create more effective applications by making application alerts actionable, i.e.: assign task, remind me again, go to transaction, elect
- Provide user with important system feedback on aging of data by including date/time stamps wherever appropriate. Give users ability to quickly and instantly manipulate data using filters and sortable data columns



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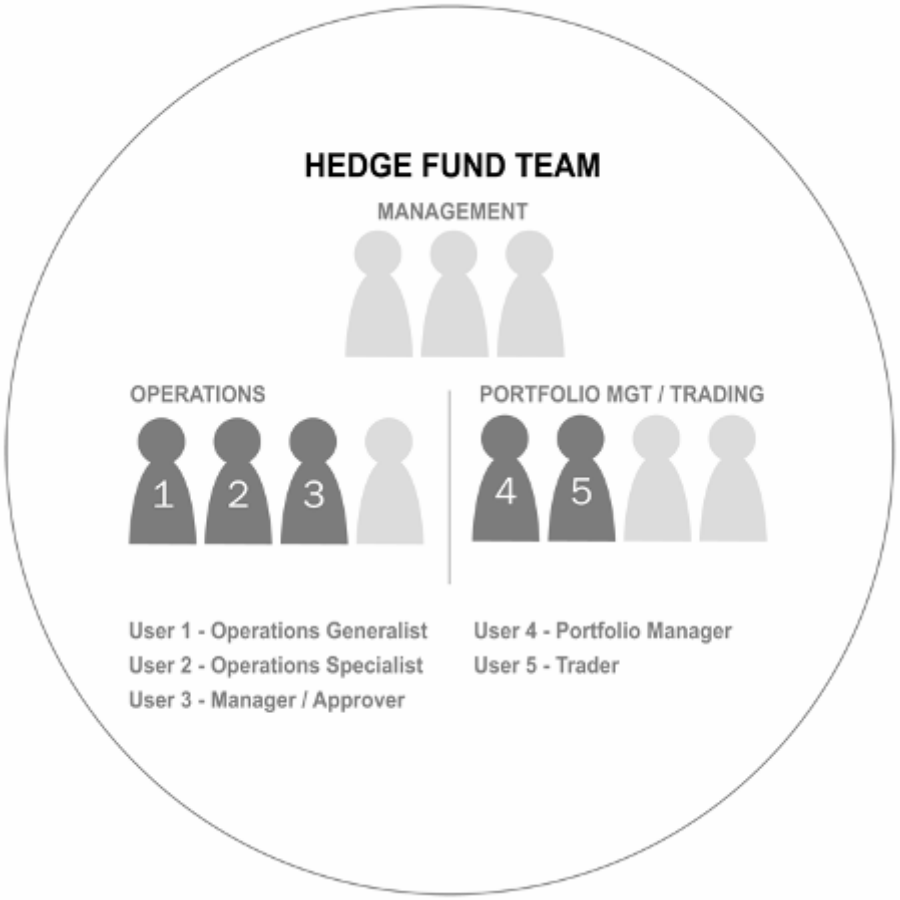
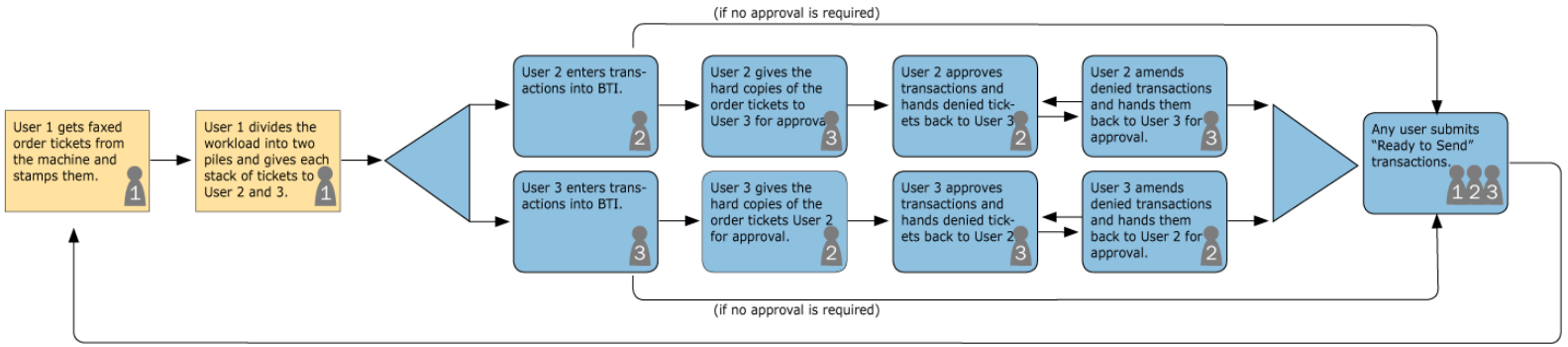
What is the ecosystem in which the applications are used?



How do multiple team members interact with each other in the course of a day?



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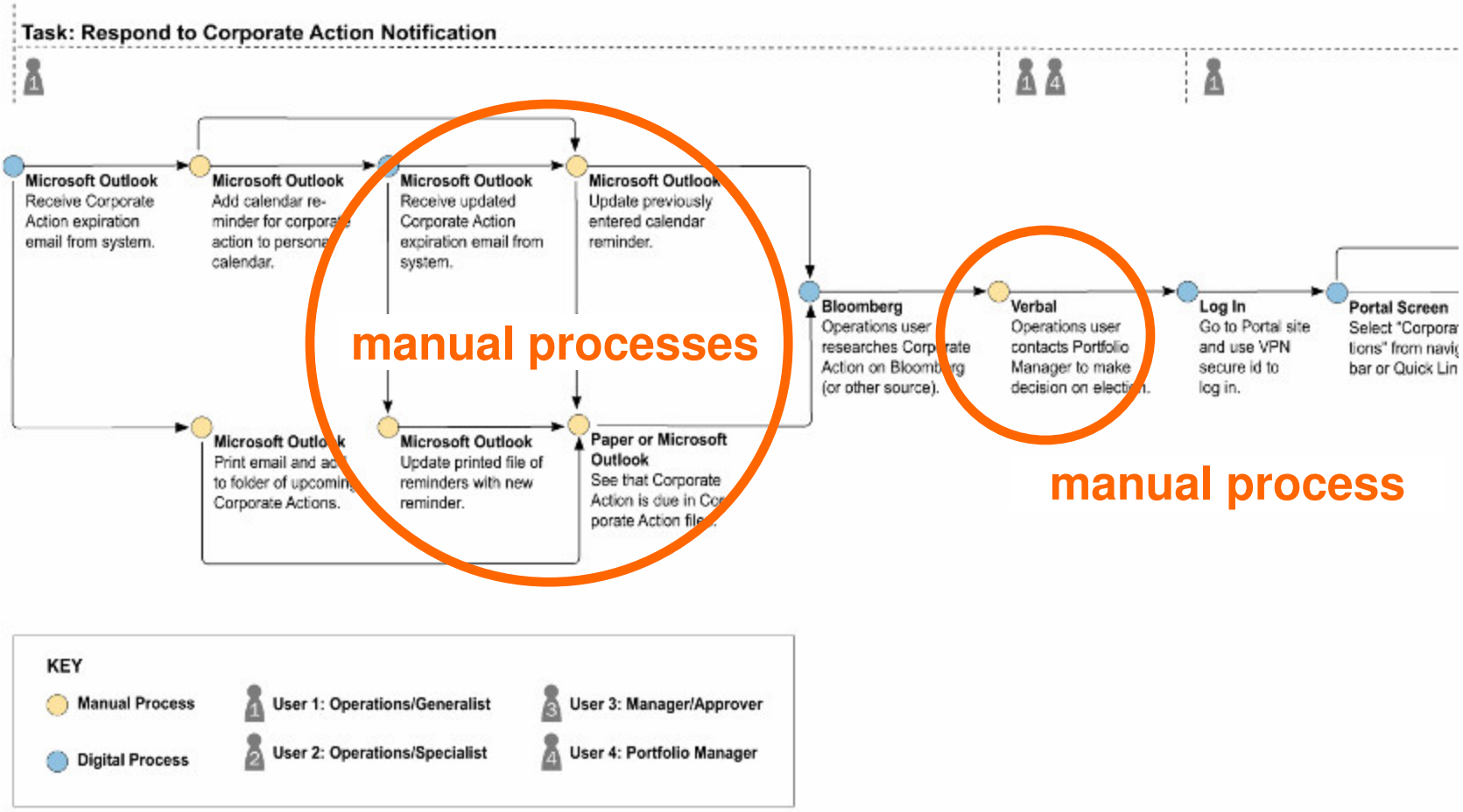
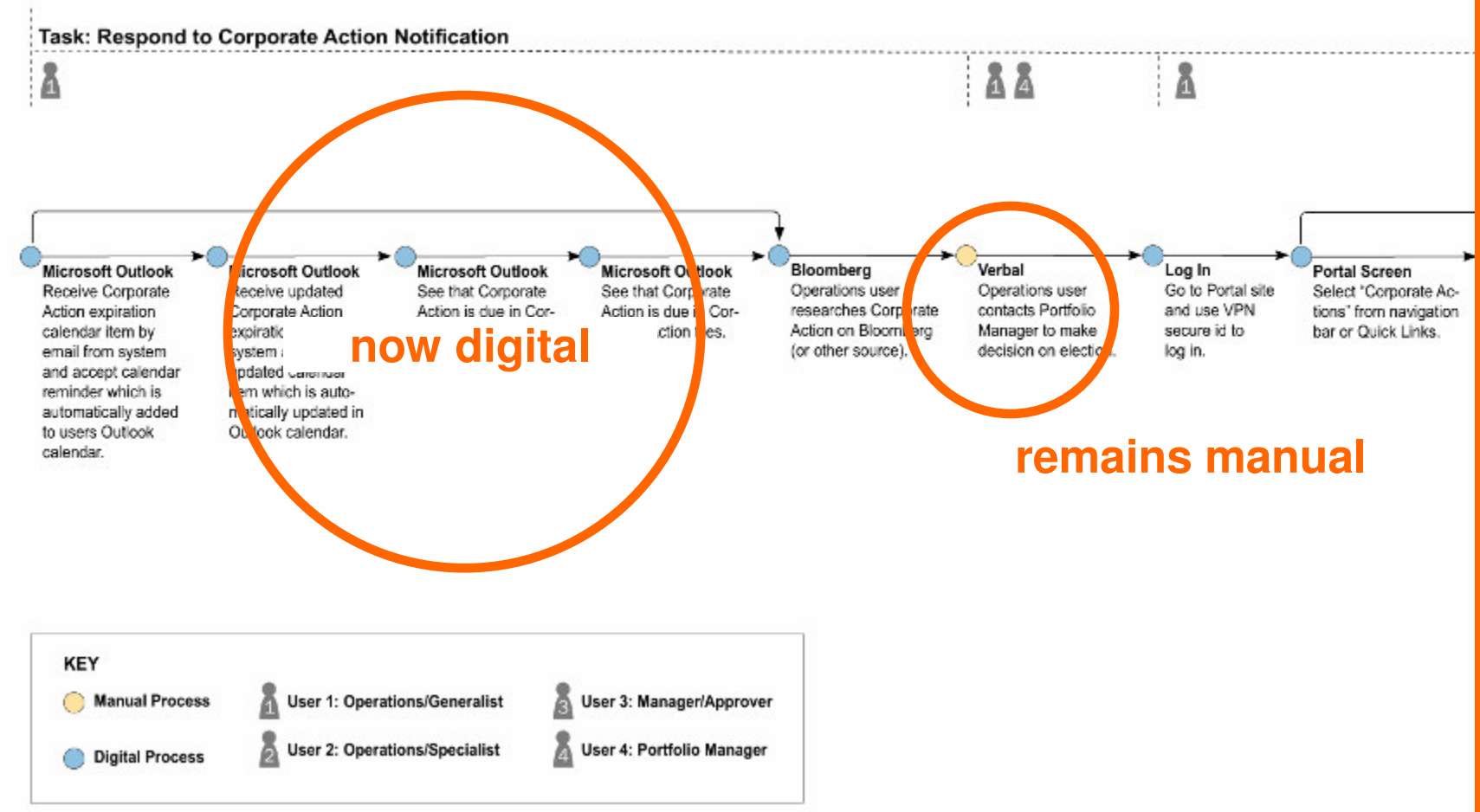
How do teams of users complete their tasks in a *single* application?



And how can that be improved?

(to digitize or not to digitize…)



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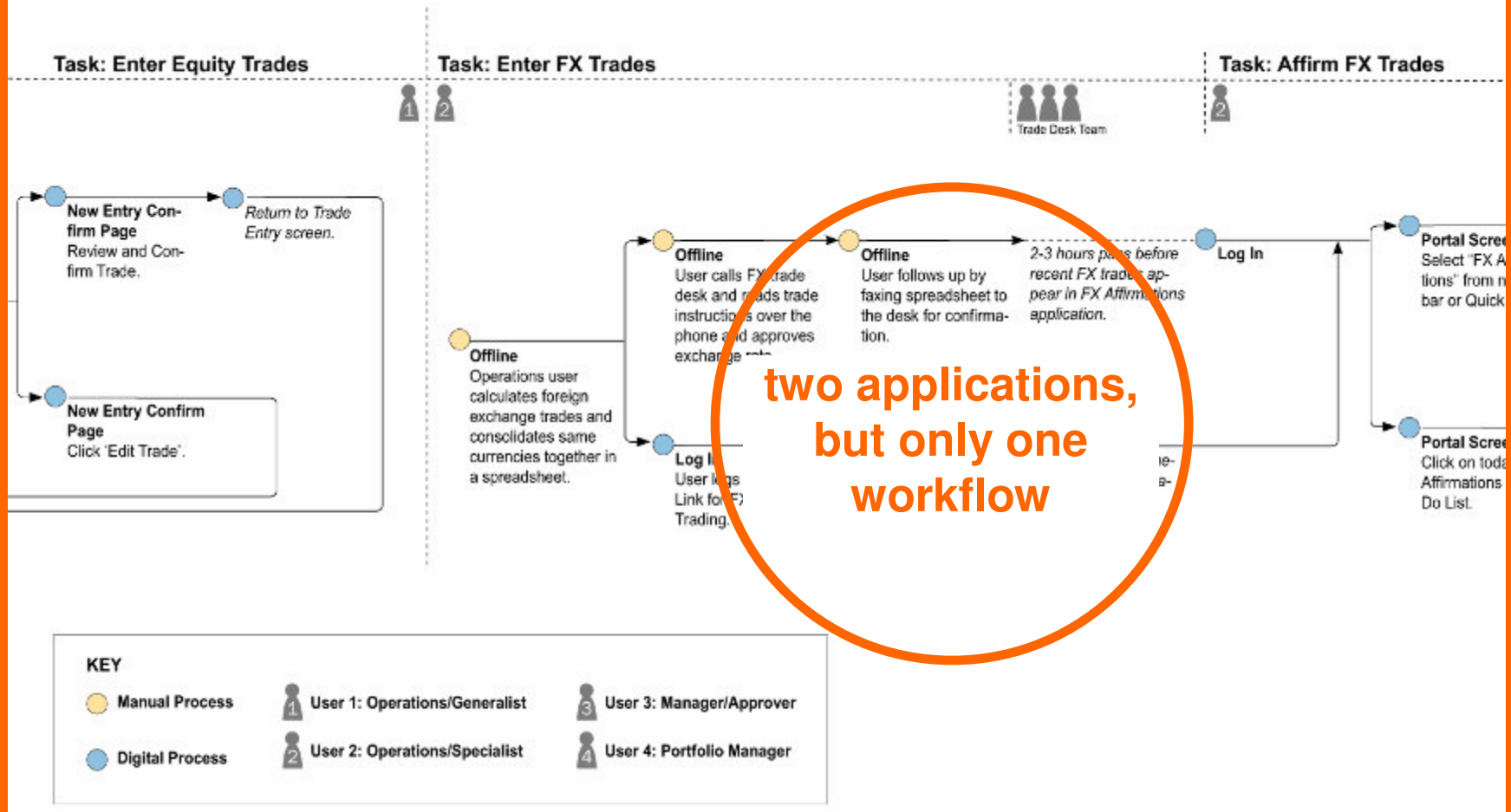
How do teams of users complete their tasks throughout *multiple* applications?



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And now onto design!

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THANK YOU.

;-)

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