Collaboration Personas:
A New Approach to Designing Workplace Collaboration Tools

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Problems with collaboration tool design

Adoption of collaboration tools is a problem.
Which should we choose?
How do we use them?
This just doesn’t do what we need it to.
Help, my team keeps using email!
Problems with collaboration tool design

Lack of methods for considering collaborative groups in design.
Collaboration tools are not well-targeted at the groups who use them.
Personas

Personas – hypothetical archetypes of actual users.

“What support would Samantha need for her work?”

“How would Samantha react to this new design?”

“That is an interesting idea, but would Samantha use it?”

Why personas?

- **Standard approach** for software product design within our company.
- Power of personas is in their ability to **engage** development teams and help them **predict user behavior** w.r.t. their software designs.
- Avoid others evoking the “**elastic user**” who can be bent and stretched to suit edge cases or one’s own beliefs.
- Long track record in research and practice showing they are **effective design tools**.
Problems designing for collaboration using personas

- One persona doesn’t help us understand how an entire group works.
- A persona has many goals not relevant to a group’s collective goals.
- Individual personas overlook critical aspects of collaboration.
Collaboration personas (CPs)

Precise descriptions of hypothetical collaborative groups identified from user studies.

“What support would this group need to collaborate?”
“How would this group react to this new collaboration tool design?”
“That is an interesting idea, but would this group use it?”

Research question: What information goes in a persona that describes a collaborative group to make it an effective tool for collaboration technology design?
Study of collaboration in the workplace

Semi-structured phone interviews with 21 employees at a large, multi-national technology company about collaboration in their jobs.

Gathered data about each active collaborative group the participant worked on and their roles:
  • goals, outcomes, duration of collaboration, how many members, what roles, distribution of members, how do members interact, tools used, collaboration challenges and needs

Categorized collaborative groups into types.
Attributes to include in a collaboration persona

- **Goals** help us understand *why* the group does what it does.
- **Members & roles** tell us *who* share these collective goals.
- **Tasks** are one instantiation of the goals, helping us see *what* the group does.
- **Work style, leadership style** and **tools** show *how* they accomplish the goal.
- Collectively, these illustrate certain **collaboration needs**, which are summarized in the persona for **usability**.
- **Name, photo**, and **personalization** improve **memorability**.
- Other attributes of importance to a specific product’s user population (national or corporate culture, how well group members get along, etc.).
Collaboration persona example: A dynamic project team

Dynamic Project Team Persona

Group name: The Dynamic RFP Sales Team

Group goal
This group of Global Corp sales professionals was formed for a single, temporally-bounded purpose: addressing a customer need to make a sale. The customer, Rainbow Bank, has put out a request for proposals (RFP) describing a technical need for which they are accepting bids. Jeff and Quan, Global Corp’s client relationship leaders for Rainbow Bank, have decided they have the time to respond and can provide a quality response. They need to pull together a rock star team to prepare a proof of concept demo and request for proposal (RFP) submission. Jeff already has a great relationship with Rainbow Bank’s CIO and feels optimistic about their chances to win the sale by showing that Global Bank products will improve Rainbow Bank’s operations.

- The team was formed to address a customer opportunity with Rainbow Bank. The ultimate goal is to close the sale.

Member goals
All members are aligned around a single goal—making the sale—since all sales employees are evaluated on the revenue they bring in. Each member is also motivated to improve his/her reputation as a good team member and strong expert in their areas, since this increases the number of sales opportunities they are asked to contribute to in the future (and also the revenue they bring in).

- Each member wants to ensure that their duties are fulfilled.
- As future dynamic team membership relies on reputation and expertise, each member wants to be helpful to team members and prove themselves as knowledgeable in their area. If they lack knowledge relevant to their area, they will seek help from their professional networks and communities of practice.

Group tasks
- The team needs to develop a solid proof of concept demo and request for proposal (RFP) submission. The proposal consists of a presentation and a document describing Global Corp’s best solution to the client’s requirements.
- If Global Corp’s proposal is accepted by Rainbow Bank, a pilot will need to be deployed and maintained on-site at the bank.
- The team needs to carry out extensive discussions and negotiations with the client that tends to require several months.
- Throughout the project lifespan, customer questions and requests need to be addressed in a timely fashion.

Members & roles
Members are either from the Sales division of Global Corp or the customer, Rainbow Bank. The team consists of a stable leadership sub-team, which comprises the original client relationship group (Jeff and Quan), and provides an importantly consistent point-of-contact for the customers (Sophie and Marie). However, these stable members do not have the range of expertise needed to close the sale alone, so it is
Goals

Collective group goals and member goals that affect the collaboration – critical predictive aspect.

- Sometimes, group goals are tied to a particular effort = more specific goals than individual personas.
- Many ways to accomplish goals = more general than scenarios.

Group goals

... The team was formed to address a customer opportunity with Rainbow Bank. The ultimate goal is to close the sale...

Member goals

... Members can claim revenue from a successful sale, motivating their participation...

... As future dynamic team membership relies on reputation and expertise, each member wants to be helpful to team members and prove themselves as knowledgeable in their area...
Group tasks

Typical tasks to accomplish the goal – add concreteness.

... The team needs to develop a solid proof of concept demo and request for proposal (RFP) submission. The proposal consists of a presentation and a document describing Global Corp’s best solution to the client’s requirements. ...
Members and roles

Sketch multiple people playing interlocking roles and providing different expertise.

Global Corp leaders (stable):
- Jeffrey Thompson (Global Corp, Coverage Sales Rep): Rainbow Bank relationship leader across software and hardware sales. Jeff is a people-person and he knows Rainbow Bank’s business and needs inside-out. He is aware of and motivated to sell Global Corp’s offerings across brands. He needs to be aware of all Rainbow Bank opportunities and is involved in any that include multiple products.

Global Corp members (dynamic):
- Diane Stallman (EfficientWorker Sales Rep), Hans Strohbach (FastServer Sales Rep), and Wendy Liu (BestMiddleware Sales Rep): Handle sales related to their specific brands. Once introduced to a new client, they will maintain the management relationship pertaining to their brand’s products. They are primarily motivated to sell their own brands.

Rainbow Bank members (stable, customer):
- Sophie Bessette (CIO): The Rainbow Bank person who makes technology purchasing decisions. Sophie cares about making sure her company has the technology it needs to run smoothly. She is incredibly busy and hard to get ahold of, but since Global Corp has been helpful in the past, she will reach out to Jeff when she needs something.
Group work style

Characterize collaborative aspects – who will do the major group tasks and how they work together.

Work is highly collaborative... Because of their dynamicism and the RFP deadline, the team is high-energy and fast-moving. They quickly react and adapt to new customer requests and questions... However, they are each balancing multiple projects, so it is not uncommon for members to “disappear” for a day or respond to email tersely from their mobile.

- The RFP response presentation and document will be co-created by the coverage sales rep and brand sales reps.
- ...

...
Current tools and their problems

Representative tools used now with clear information about frustrations and pain points.

The team is somewhat old fashioned in their use of current technology, partly because they are just too busy to try and learn new tools. They rely on conference calls, email, and more conference calls... a frustration is that key information is buried in emails...

Another problem is that dynamic members, who are coming and going, need an easy way to get up to speed with core project materials... Do not have a repository that works across organizational boundaries, so when they share with customer members, they are forced to use email.

Conference calls are also frustrating... the group has trouble co-creating without a good tool to interactively share materials in real time.
Collaboration needs

- Easily and securely **share materials** (e.g., documents, demo code) with internal and external members.
- **Find and recruit trustworthy people**, who have specific expertise and good reputations.
- **On-board new members**, i.e., get them up-to-speed on necessary client information and the status of the project.
- **Capture outputs** and required knowledge from dynamic members who have completed their tasks for the group.
- **Co-create materials**, e.g., the RFP document and demo code.
- **Maintain awareness** of members’ task status.
- Keep an **open communication channel** with the customer.
Attributes to include in a collaboration persona

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Collaboration types

Distinguished by **goals, work style, membership & leadership style.**

- **stable project team**
- **dynamic project team**
- **client-supplier relationship group**
- **community**
- **committee**
- **professional relationships**
## Attributes to include in collaboration personas

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Differences in collaboration personas: Committee example

Shows how distinct **goals & leadership style** lead to different **work style**.

**Group name:** Global Corp Services Dept. Promotion Committee

**Group goal:** Identify outstanding performers within the Services Department and make decisions about who to promote.

**Members & roles.**

- **Leader:** Lucille Boltz (Services Dept. VP). Lucille is the “lead cat herder.” As this title hints, she must use her charismatic personality to wrangle decisions out of sub-committees and manage decision deadlocks when the full committee meets...

- ...

**Group work style**

- The group is run as a democracy... With the set of personalities assembled, consensus is often hard to come by and debates tend to be drawn out. All members are incredibly busy, so Lucille initiates the process long before decisions are due....

- ...

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Design implications of different collaboration personas

**Deliverable-focused goal** (stable & dynamic project teams, committees)
- Co-creation for distributed teams
- Closely coordinate activities around deliverables

**Dynamic personnel** (dynamic project teams, communities)
- Recruit subject-matter experts to participate
- On-board dynamic members
- Capture knowledge / outputs of dynamic members for use

**Communication-focused work style** (professional relationships, client-supplier groups, communities)
- Various communication channels (e.g., urgent requests, broadcasts, etc.)
- Cross-organizational archives

**Secondary goals & Democratic leadership** (committees, communities)
- Mitigate challenges caused by this not being a primary focus of member attention (e.g., participation incentives)
- Efficient decision making in discussion-oriented, consensus-driven collaborations (e.g., voting)
Ongoing work: Validating collaboration personas

Usefulness

- **Plan products** (requirements, features, competitive reviews)
- **Explore design solutions** (design exploration, scenario based design)
- **Evaluate designs** (design reviews, cognitive walkthroughs, user testing)
- **Support the release** (documentation, marketing, sales)

Accuracy

- Review against original user study data.
- Reviewed by original user study participants.
- Large sample survey.
How do I conduct user research to create new collaboration personas?

Two major goals, require different user research approaches:

1. Group segmentation
   - For what groups should I create collaboration personas?

2. Developing a particular group type’s collaboration persona.
   - Now that I’ve selected a group type, what content goes in the persona?
Method suggestions for group segmentation

Qualitative research to identify possible group types in target population, their member roles, and their key collaborative aspects.

• Select people who likely participate in a range of collaborative group types.
• Ask participants to fill in a collaboration profile for each active collaboration; discuss in moderate detail.

Quantitative research to learn in how many of each group type people in the target population participate and their roles (e.g., via a survey).

Use segmentation to:
• Select the group type(s) on which to focus your design (and personas).
• Classify key roles for the group type in order to select in-depth interview participants.
• Identify key themes for each group type on which to gather more detail in in-depth interviews.

Collaboration name:
Collaboration type:
Goals & deliverables:
My role (core/peripheral, specific):
Other important roles:
Work style:
Tools:
Challenges:
Start date:
Expected duration:
Method suggestions for developing a particular group type’s collaboration persona

Conduct in-depth interviews with a range of people in a group type’s key roles:

- Role goals and motivation.
- Other key roles’ goals and motivations.
- Temporal phases of the collaboration. For each phase:
  - Collaboration tasks completed. For each task:
    - Work style (pooled, sequential, coordinating, reciprocal, co-creating; synchronous/asynchronous)
    - Content being collaborated over.
    - Tools used.
    - Challenges faced.
    - Changes expected/desired in the future.
  - Group dynamics
    - Get along? Competing goals?
    - Openness?
    - Personality descriptors?
    - Leadership style?
Collaboration personas summary

New design method to address limitations of individual personas for collaboration software design:

- Include multiple interrelated personas in same group, various roles & expertise.
- Focus on collective goals and elaborate relevant individual goals.
- Introduce new attributes that characterize group’s collaborative work aspects.
Thank you!

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