

UXPA Boston

Manny Ikomi

A Beginners Guide to Contextual Inquiry

A story-driven account of my first time conducting contextual inquiry research with key takeaways.

May 16th, 2023



Intro

Hey there, I'm Manny 🐶

Manny Ikomi (he/him)

- Associate UX Designer, IBM iX Cambridge 🧑💻
- Joined IBM in June 2022 🐝
- BFA Interactive Design, Lesley University 🎓
- Guncle, Gaymer, Rollerskater 🏳️‍🌈



Client

- Heavy industrial shipbuilder
- Highly complex and specialized work
- One of few companies in the world that do what they do



Project Rundown

- Currently the shipyard is trying to introduce new technology to improve their operations.
- Our team was tasked with discovering their maintenance processes and understanding downtime causes at the shipyard.
- We were invited on-site to conduct design research and learn about their current workflows.

Team

Manny Ikomi

IBM User Researcher
(full-time)



IBM User Researcher
(part-time)



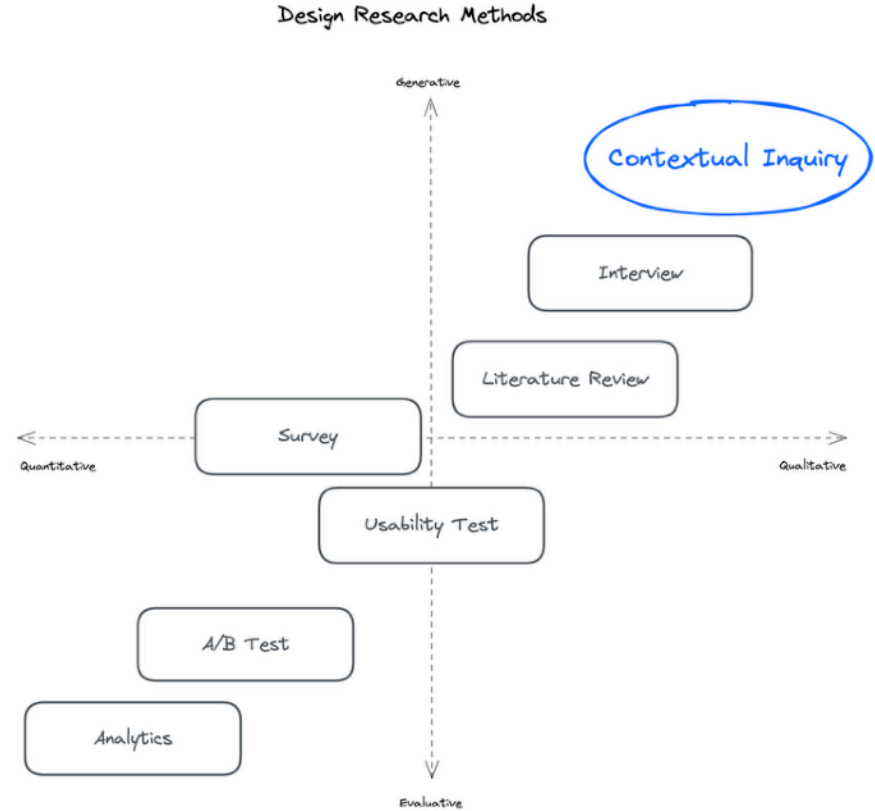
Client-side point of
contact

Contextual Inquiry

What is Contextual Inquiry?

Contextual inquiry is a type of ethnographic field study that involves in-depth observation and interviews of a small sample of users to gain a robust understanding of workflows and behaviors.

The method was developed by Hugh Beyer and Karen Holtzblatt as part of *Contextual Design*



Why

“One of the greatest strengths of this methodology is that **you get to see things you wouldn’t anticipate and uncover low-level details that have become habitual and invisible.** You get to see the interruptions, superstitious behaviors, and illogical processes that directly influence UX work.”

— Kim Salazar, NNGroup



“What people say, what people do, and what they say they do are entirely different things”

— Margaret Mead



Dr Margaret Mead, Australia, September 1951, by unknown photographer, State Library of New South Wales, ON 388/Box 069/Item 135 9624559 <https://collection.sl.nsw.gov.au/record/YRlBQaPh/QLj25ewk853qG>

When

When TO

- Starting from scratch
- Deeper understanding of people and workflows

When NOT

- Tight resources (time and cost)
- Team of 1*
- Lack of access to the right people and environments

How I Prepared

- Asked for advice from more experienced IBMers
- 12 discovery interviews with stakeholders and potential participants.
- Developed a list of areas and workflows of interest with stakeholder input.



Shipyards environment and constraints

- 5 consecutive days for contextual inquiry activities
- Highly industrial environment
 - Heavy machinery moving around
 - Loud noises
 - Indoor/outdoor locations
- PPE required
 - Steel-toe work boots
 - Safety goggles
 - Hard hat
- Highly secure environment
 - No unauthorized photography or recording



How can I best document
what I see, think, and
hear without taking
photos and recordings?



MAIN CAM

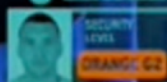
PAST ENTRIES

SUBMIT

TASK

REC

 RDA



LOG ENTRY: 12

LOCATION: SITE 26

RESEARCHER: SULLY, J.

P.I.: AUGUSTINE, G.

ID# 256 07U 004

ID# 013 SGO 023

LST: 21:32:33:03

DATE: 05/30/2154

Record daily audio journals describing what I saw, thought and heard.

- Mitigation, not solution
- Subject to recency bias



On-site activities

- Visited areas of interest
- Observed and/or interviewed 20 participants
- Captured mitigations, pain points, opportunities and quotes
- Iterated on journey maps, filled in gaps

The image shows a blurred grid table with the following structure:

Area	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
Objectives									
Methods									
Findings									
Recommendations									
Pain Points and Challenges									
Opportunities and Solutions									

Imma do the
best I can
with what I
GAWT!

— Mariah Carey



What I got...

Inputs

12 interviews

5 days of contextual inquiry

4 diary recordings

Survey Responses

Outputs

4 personas

End-to-end service map

5 pain-point themes

2 problem insights

Outcomes

Revealed pain-points and insights challenging their maintenance workflows.

Thick data they can use to make more informed human-centered decisions.

4 actionable quick win ideas they can implement in the near term.

“This is my first time having user experience people coming in.

Thank you for the level of detail. I think you captured our break/fix process very well.

You were able to pull out all of the nuggets and some information we already know but you consolidated all of this information and made it actionable.”

— Stakeholder

Key Takeaways

Align with stakeholders

- Share early and often
- Set guard rails and expectations
- NDA's, consent forms, time charge codes, etc...



Plan ahead

- Define the people, props and processes
- Have a cheat sheet



Be adaptable

- Traditional interview
- Ask questions while participants demonstrate a task
- Observe the demo without interference
- With a group or individuals



Be personable

- Introduce yourself (and UX)
- Empathize however you can
- Show gratitude



In a perfect world...

- Bring a research buddy.
- Become an apprentice (or Avatar).
- Preserve participant privacy.



Inspiration

“Do the best you can until you know better. Then when you know better, do better.”

— Maya Angelou



“Not everything valuable is measurable”

— Tricia Wang



Thank You 🙏

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Don't be shy, let's connect!

Polywork 

polywork.com/manny

LinkedIn 

linkedin.com/in/ikomi

Twitter 

[@mannimoki](https://twitter.com/mannimoki)

Twitch 

twitch.tv/mannimoki

Discussion

Appendix

Emic & Etic

Emic

- From the view/voice of the participant
- Perspective of the insider

Etic

- From the perspective of the researcher/observer
- Perspective of the outsider

Thick Data

Thick Data	Big Data
Relies on human learning	Relies on machine learning
Reveals the social context of connections between data points	Reveals insights with a particular range of quantified data points
Accepts irreducible complexity	Isolates variables to identify patterns
Loses scales	Loses resolution

Quantification Bias

The unconscious belief of valuing the measurable over the immeasurable.

[The human insights missing from big data by Tricia Wang \(07:20 - 08:38\)](#)

References

- [Contextual Inquiry: Inspire Design by Observing and Interviewing Users in Their Context by Kim Salazar](#)
- [Why Big Data Needs Thick Data by Tricia Wang + Video](#)
- [Contextual Inquiry, Looking Methods - Luma Institute](#)
- [Contextual Design: Defining Customer-Centered Systems](#)