

SIEMENS TRAINGUARD PTC BACK OFFICE SERVER

Compared with the rest of the world's railroads and technology used for safety, The US has an old railroad structure that is not as up-to-date as it should be. A few years ago, a deadly accident, a massive railroad collision between two trains, triggered the creation of a Siemens Mobility branch to update the Railroad PTC backend admin tool in charge of sending messages between the terminal and the train.

My general task was to assist in defining the necessary information to win a pitch and complete a full prototype for the new Back Office Server Messaging Administrator, a Tool that Rails transportation businesses like CSX Transportation, Norfolk Southern Railway, and Canadian National Railway use between US and Canada.

- The general task was: to use UX strategies, and bring a B2b tool from the 90s to the 2000s so I worked on research, a New UI kit definition, plus the Redesign of the BOS interface, and a Complete Figma Prototype
- Creation of a Second Project: Tablet View for a mobile utility for on-field workers

One – Team Interview

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First Impression Activity and Survey aims to identify opportunity areas for the new UI and understand the most important features and why they are essential to the Dev team. (edit if necessary)

s for the Team.

At Screen: Introduction, Reason for this activity, "We'd love to get your thoughts and feedback over the next 10 minutes. We are not validating the answers, just the experience; all the answers are ok."

Question: What would you expect to see from a BOS UI redesign?

Port: Ask the Team to Navigate the Overview part of the Prototype and add comments at Figma (User Tester create an account to login)

Link: <https://www.sigma.com/proto/10CEa0b840bshmbu9b/Siemens-BOS-Uf-node-33A95268scaling=scale-down-width&page-id=93753A0&starting-point-node-id=3011&tab=1>

on Scale: Answer Survey

Question: What could be improved?

is for UDC:

or Insights, and Iterate
size, categorize, Vote for better ideas, and Prioritize
ideas to the UI,
do another Task/Meeting for the next section

- **Question:** at the same time, create one to one interviews with Dev Owner/Topic Panel owner to get insight the features and processes happening at the background or terminal activities
- **Answer:** the info and Complete the User Flows
- **Question:** are any backend activity that can be added to the new frontend UI?
- **Answer:** for insights, and iterate

Questions from Joey + suggested in bullets:

- on what you know, What are the most used features of the current BIOS UI?
- can we take away from the main BIOS overview screen - Suggestion to open the question as your first impression of the new BIOS UI?
- any part of the Overview Panel that confuses you? What part and Why?
- were anything you wanted to find, but couldn't?
- choose only two questions)
- can we gain more screen real estate? Collapsible menus, reorder something, etc?
- use please) Suggestions:
- much truth is in the next page: "The information presented is easy to read and well placed"
- the main thing you can recall from the Overview Panel?
- the font size, shape, and color make sense? Plus other, maybe:
- ell or poorly built you think the new redesign is?
- did you like best/least about the design?
- maybe only two questions)
- would be useful for switching between menus other than navigation on the side? What about something I think there is an easier way to accomplish the navigation around the menu than what you just did?

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How does this redesign compare to the actual BOS interface?
 Are there any elements missing from the actual Overview First screen BOS interface?
 Do you have any thoughts or feedback you want to share?

A US-based technology company that specializes
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A US-based technology company that specializes in offering some machinery including consumer and industrial appliances, aircraft engines, wind turbines, weapons and electric motors among others.

Due to its unique business model, GE is considered amongst the top Siemens competitors.

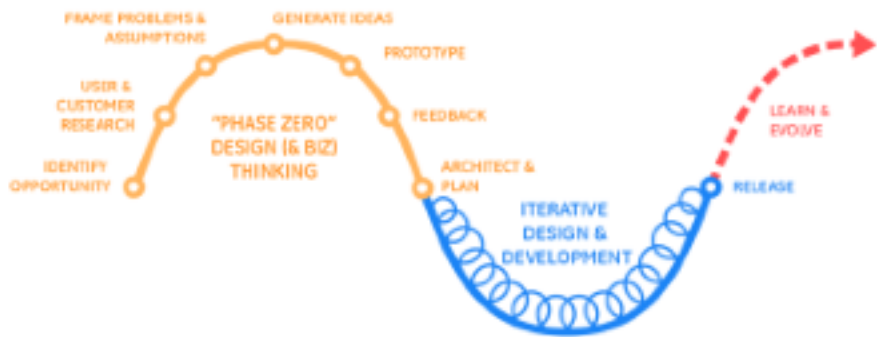
2021

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General Electric

Design and Digital Transformation

Design Thinking + Agile in a Lean World



#IndustNoMatters

https://www.gd.com/digital/sites/default/files/download_assets/06%207%20Design%20%20%200%20%20Transformation.pdf

2021

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General Electric

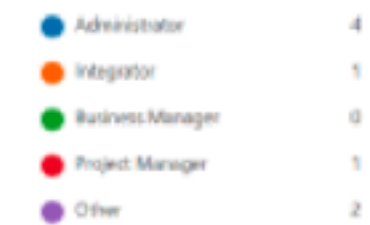
Why Cards?



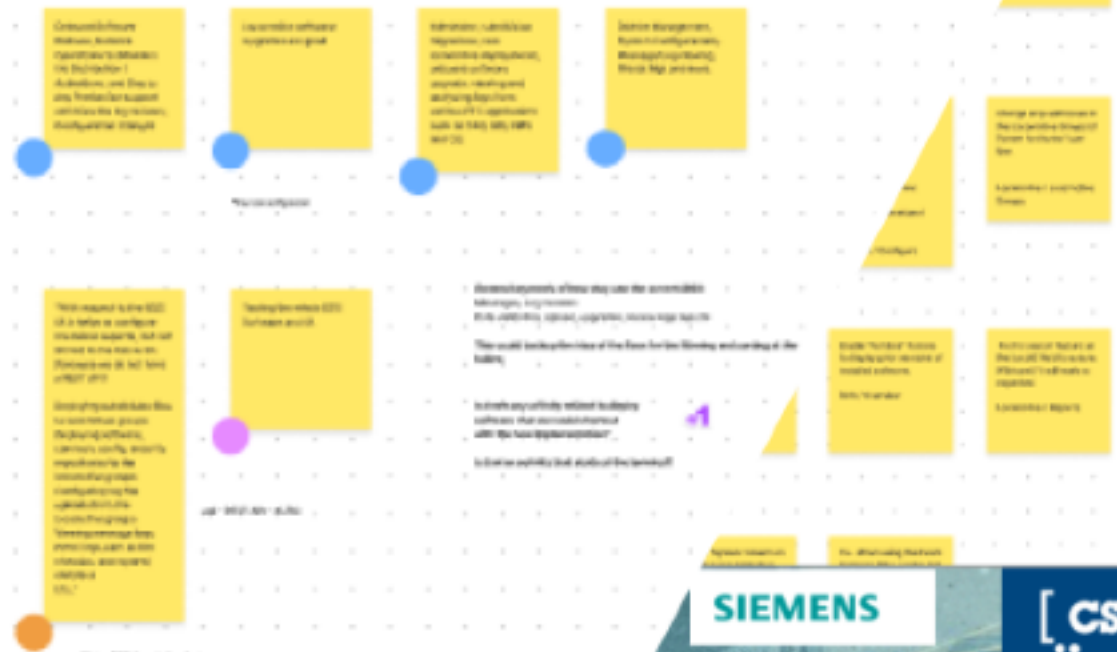
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Group	Percentage of respondents who have used a mobile phone to access the Internet
Used mobile phone to access the Internet (n=100)	85%
Did not use mobile phone to access the Internet (n=100)	15%

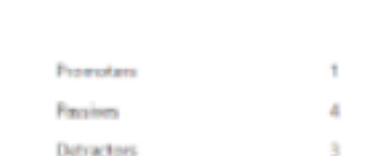
1. Tell us a little bit about yourself. What's your current role?

[View Details](#)

2. How does the BOS System best help you accomplish managing your railroad?
(i.e. subdivision migration, locomotive software upgrades, viewing logs or statistics)



3. How satisfied are you using the Trainqua

[Mikene Daria](#)

the solution was pretty straightforward.

- Research around the competence found only one tool from General Electric but as a bigger tool than the PTC Back Office Server.
- We were in the middle of the COVID pandemic, so I ran online activities like stakeholder interviews and Devs interviews.
- Since we didn't have a way to measure quantitative data from the old version because it was built in a particular C++ language, I worked with a Customer Survey to understand the use cases for the onfield workers.

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