

Are you sure? Really?

A Contextual Approach to Agile User Research by
Marjorie Pries & Josh Evnin



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This is a story about Contextual Design

Contextual Design is a user centered method that incorporates Contextual Inquiry, and other methods toward the goal of creating new systems.

Contextual Inquiry is an "in-the-field" process used to understand how software and environment affect the way a person does their job.



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The Problem

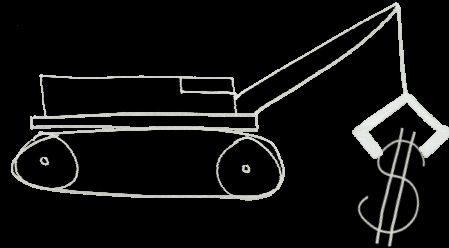
Complex custom application:

- “What if” payment planning
- Credit check & approval
- Legal documents
- Historical reports
- Interfaced to many back-end systems.

Built to support highly silo'd processes at HQ.

Key to an internal business process re-organization.

Rolled out to dealerships “as-is”; no advance research into dealer process.



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More Noise than Feedback

Dealer Surveys.

Ad-hoc wish lists.

Generalized statements:

- Too slow.
- Too hard to use.

Stakeholder opinions.



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Stakeholder preconceptions

Dealers hate the application.

Performance is a BIG issue.

Entire app is too hard to use & needs a redesign.

Dealers want workflows and wizards.

Dealer Info module is rarely used and can be eliminated.

There is a smooth flow of information to dealers: new features, bugs & workarounds, special alerts.

Client-provided training materials are effective and widely used by dealers.



Dealer network



Stakeholder

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We said, "Are you sure? Really?"

A lot of time and money was at stake.

Over 200 collected "issues" could not be easily prioritized or synthesized.

It was the beginning of December and development had to start by February 1.

We thought Contextual Inquiry could help sort things out quickly.

Get out there
and meet the
USERS!

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Perform on-site observations

Cross-functional team visits to six representative sites.

10-15 minute introductions.
2-3 hours of observation.

1-2 hours informal discussion over lunch with informants and other stakeholders.

1-2 days for team consolidated notes after each visit.

1 week for team consolidated models and affinity diagram after all visits.

3-5 days for team to create low-fidelity prototypes and finalize recommendations after consolidation activities.



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Master-Apprentice Observation Model

The (real, live) user is the master of their domain.

The observer is the apprentice, imagining that they will have to take over for the user after the session.

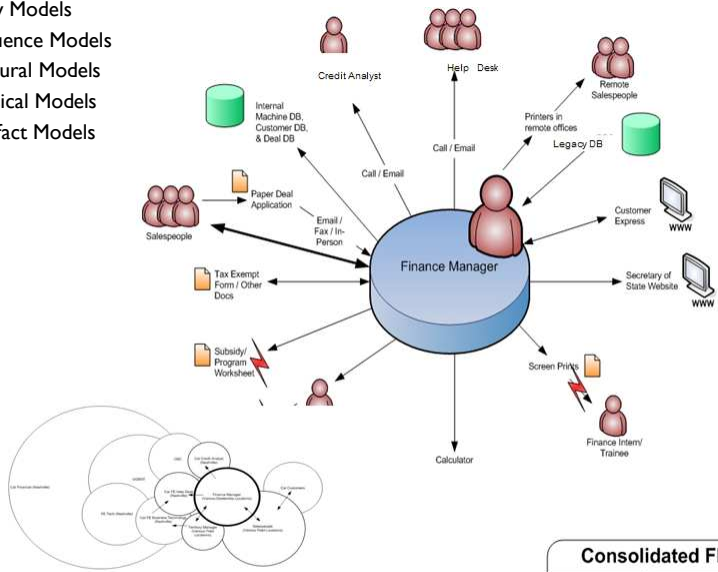


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Collect artifacts & develop models

Flow Models
Sequence Models
Cultural Models
Physical Models
Artifact Models



Consolidated Flow Model

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Affinity Diagram & Brainstorm Sessions

Allows team to see the breadth of collected data across users and roles.

Reveals patterns of use and common issues.

Helps team specify key principles and themes to guide the problem resolution.

Generates insights and ideas quickly.



First impressions revisited:

Dealers hate the application = **False**.

Performance is a BIG issue = **Mostly True**.

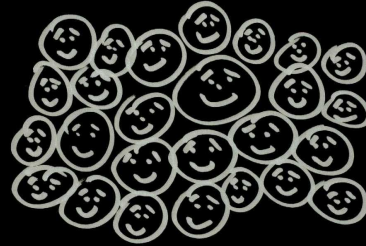
Entire app needs a redesign = **False**.

Dealers want workflows & wizards = **False**.

Dealer Info module is rarely used = **False**.

There is a smooth flow of information to dealers:
new features, bugs & workarounds, special alerts = **False**.

Training materials are effective and widely used by
dealers = **False**.



Dealer network



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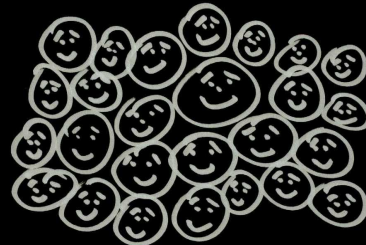
What we observed at the dealers

In general, dealers **really like** the application.

Most issues concentrated in only a few
screens: 'Quoting' the deal.

Bigger problems were external in interfacing
applications.

Use of client-provided training was spotty;
client training materials were not in line with
dealer processes.



Dealer network



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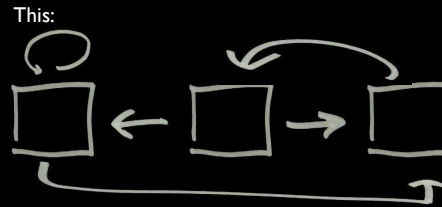


What we observed at the dealers, cont.

Dealers didn't want to be locked into workflow and wizards.

But flow & navigation as done at HQ was not always in line with usage patterns at dealerships.

Location & sequence of functions were not intuitive.



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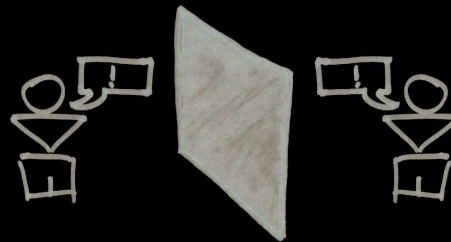
What we observed at the dealers, cont.

Performance *was* a big issue.

But a bigger deal at some places than others.

To some it meant system response.

But we found that for many it meant inefficient or redundant data entry process...this is a usability issue.



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What we observed at the dealers, cont.

Dealer Info module is heavily used & should not be eliminated.

Communication breakdowns occurred:
Business reps > Tech support > Users.

Document generation policy is not in line with document usage.

Docs Generated:

17 Pages Printed

8 Pages Used



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Agile2008
Conference

Opportunities to add unrecognized value

Consider the benefits of automating this activity.

The image shows several handwritten financial spreadsheets. Each spreadsheet has columns for different categories (12, 24, 36, 48, 60) and rows for calculations. Some spreadsheets include sub-totals and grand totals. For example, one spreadsheet shows a total of 987,967 (373,09) 6.69. Another shows a total of 740 (24,14) 7.19. The handwriting is in blue ink on white paper.

At a number of locations, Finance Managers are creating Subsidy Worksheets to help their salespeople understand the current programs.

Artifact Model 2

1/29/2007

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So how did it turn out?

Revisions concentrated on only three screens within the pricing module.

First ever Dealer Conference was held later that year.

Regular series of Dealer advisory conference calls established.

Improved training materials deployed on-line.

Client able to re-focus time and budget on more strategic initiatives for remainder of year.



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Contextual Inquiry: Lessons Learned

Contextual Inquiry works well with Agile – lightweight process, small-scale investigation.

Composition of the team is key to success – domain/project knowledge, client involvement make a difference.

First impressions from surveys, stakeholders, and wish lists are usually misleading.

Client should be prepared to handle wide-ranging results & long-term action plan.

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What you can do

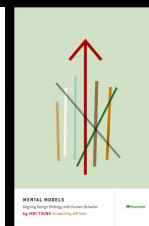
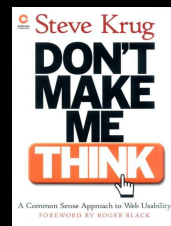
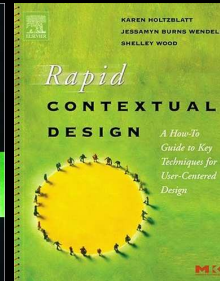
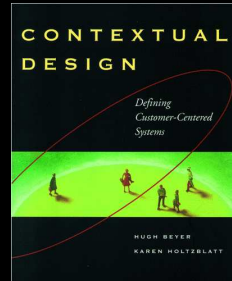
1. Contact Josh & Marjorie with questions/responses:

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2. Read:

- [Rapid Contextual Design](#)
- [Contextual Design](#)
- [Don't Make Me Think](#)
- [Mental Models](#)



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