

cherwell
cqgc18

lead the change

Better Performance through
User Research



Chris Paddock



- Director of Cherwell's inaugural User Experience team
- Chris has over 20 years of experience in UX and digital strategy. He has built teams, applications, and processes at startups, not-for-profits, and Fortune 500 companies including Bank of America, Fidelity Investments, Sallie Mae, and Virgin Pulse

Housekeeping items you should know:

- Wifi Network:
- Beverages will be provided throughout the day in the lobby of Broadmoor Hall and Colorado Hall. Breaks will also be in both lobbies from 10-11am and 2:30 - 3pm.
- Lunch will be served in the International Center, next door. [for morning sessions]
- [We will fill in these details for you on your final slides.]
- There will be lab times to reinforce your learning.
- Virtual Machine instructions with unique passwords were handed out at the door.
- Cherwell staff are here to help you with the labs. If you need help, do not hesitate to ask.

Learning Objectives

In this workshop, you will learn:

- Fill out this section using action verbs from Bloom's taxonomy
- https://www.missouristate.edu/assets/fctl/Blooms_Taxonomy_Action_Verbs.pdf
- These key objectives will help you to organize your presentation, labs and knowledge check points.

PART 1

User Research Defined

Chris Paddock



What Is User Research?

User research focuses on the “**End User.**”

- Uses the product/feature you’re trying to change.
- Uses it *every day*
- *Highly dependent* on it to perform their regular duties.

Cherwell End Users?

Technicians and Customers



How Does It Help?

- Identify what to focus on
- Understand how users use an application
- Discover pain points . . . and opportunities
- How to improve the user experience
- Validate proposed solutions

**Better UX means
less time on tickets**



Why Is It Important?

- Risk mitigation (measure twice, cut once)
- Cost savings (less time on tickets)
- Improve KPIs
 - First response
 - Rate of resolution
 - Customer resolution

Less risk, more savings



When Do I Research?

- Pre-launch
 - Identify user goals
 - Understand user workflow
 - Document pain points
 - Validate design solution
- Post-launch
 - Measure effectiveness

Research early and often



Saving Time & Money

Understand what's important, spend less time on what is not

- Project vs. no project
- Less development work, and rework
- Working from the same page (less noise, more proactivity)
- Less training



PART 2

Methods of User Research

Chris Paddock



Research Dimensions

1. Attitudinal: what people say
2. Behavioral: what people do
3. Qualitative: direct observation
4. Quantitative: indirect observation

A mix of dimensions is always best.



Attitudinal vs. Behavioral

Attitudinal **Att**

- Understand their beliefs, opinions
 - How would you use this product?
 - Does it remind you of other products?



Behavioral **Bh**

- Observe users using your product
 - Do their actions match their beliefs?



Qualitative vs. Quantitative

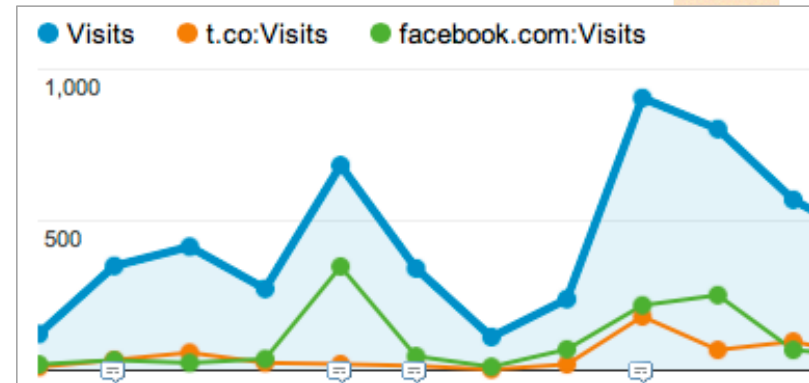
Qualitative

- Often open-ended
- Relies on direct observation



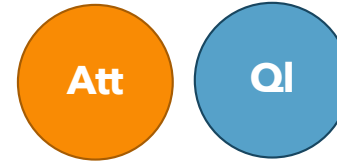
Quantitative

- Analysis is mathematical
- Relies on indirect observation



User Interviews

- Great place to start
- One-on-one discussion
- Knowledge transfer
 - How do you do your job?
 - How do you use this product?
- Likes and dislikes
- Helps set up subsequent research



Surveys

- Looking for opinions
- Quantity in response is key
- Identify trends and hot spots
- Not definitive answers, helps provide areas of focus

If you want to know if **users “like” your design or product**, use this tool.



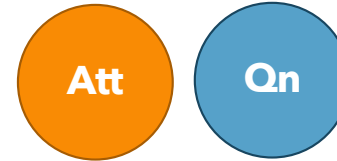
Landscape Analysis



- Evaluate top competitors
- Let users tell you who competitors are
- Analyze based on user needs and workflow
- Identify commonalities across competitors



Best Practices

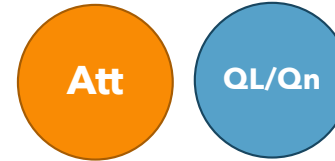


- Identify what you are trying to change, i.e. forms
- Find the authorities on the subject
- Find the canonical research on the subject



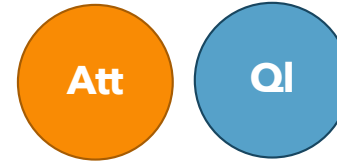
Card Sorting

- Helps understand how information should be organized, e.g. site map
- Users organized predefined cards into categories
- Can help define labels, e.g. navigation, fields



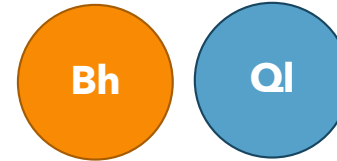
Focus Groups

- Often confused with user testing
- Seeking early opinions on an idea
- Group discussion
- Written and verbal feedback



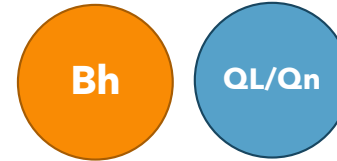
Field Studies

- Observe end user in their work environment
- Ask questions as they work
- Helps understand user's workflow
- Identify obstacles and opportunities in workflow



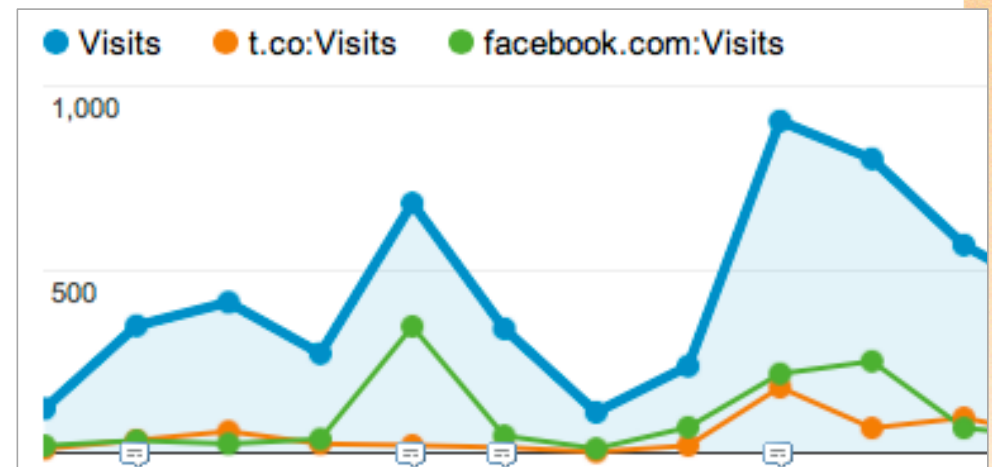
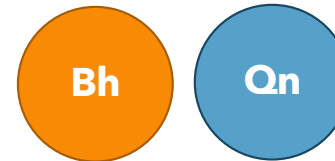
Usability Studies

- Great for validating designs
- One-on-one sessions
- Users perform specific tasks
- Results based on how well they complete tasks
- User opinions may identify areas for follow-up research



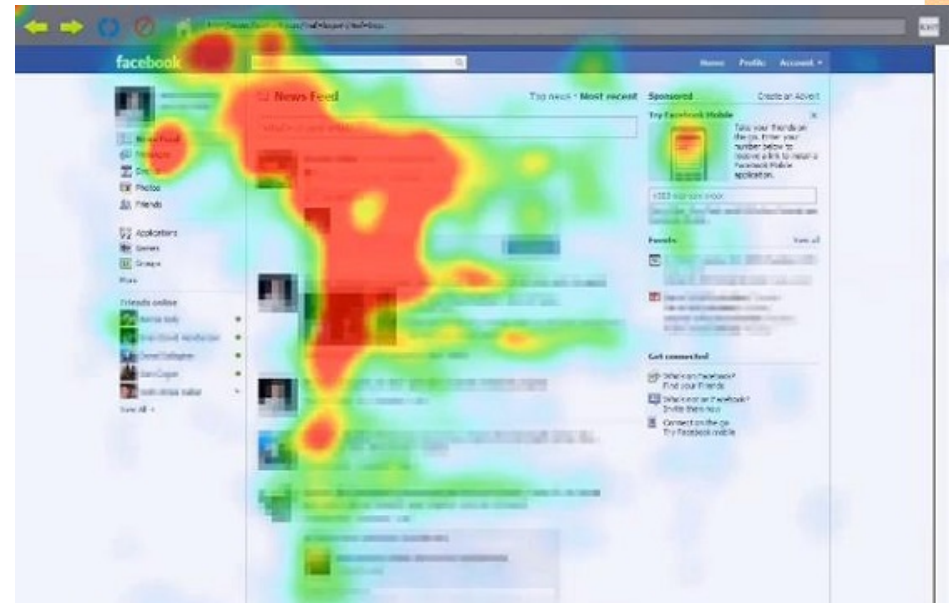
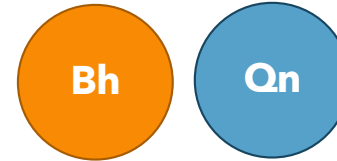
Analytics

- Measure exactly how users use your product
- Identify high or low usage of a feature
- Low usage \neq remove feature
- Good to compare with observed behavior



Eye-Tracking

- “Visual” analytics
- Heat maps show you where users look while using your product
- Hot spots can help identify workflow of a given feature
- Equipment is unobtrusive and mobile
- Renting can make it affordable



PART 3

Case Study: Research in Practice

Chris Paddock



Incident Redesign

- Lots of anecdotal data tells us our design is dated
- New UX team identifies a lack of best practices in the product
- Analytics tells us Journals are most used object by our customers

The screenshot displays the 'Incident 10238' form in the Cherwell Service Management system. The interface is organized into several sections:

- Header:** 'Incident 10238' with a 'New' status and 'Next: Back: Work' links.
- Left Sidebar:** Contains metadata such as 'Requestor: Atlanta Contact Info', 'Owned By: - select owner -', 'SLA: Corporate (Default SLA)', and 'I Want To:' options like 'Take Ownership' and 'Escalate to Level 2'.
- Main Form Area:** Divided into three steps:
 - Step 1: Record the Details:** Includes fields for 'Short Description', 'Description', and 'Call Source' (set to 'Phone').
 - Step 2: Classify:** Includes dropdowns for 'Service', 'Category', and 'Subcategory', along with 'Priority' and 'Impact' fields.
 - Step 3: Investigate the Incident:** Features an 'Additional Details' text area.
- Bottom Panel:** A table with columns for 'ID', 'Title', 'Description', and 'Portal Description', currently showing no records.

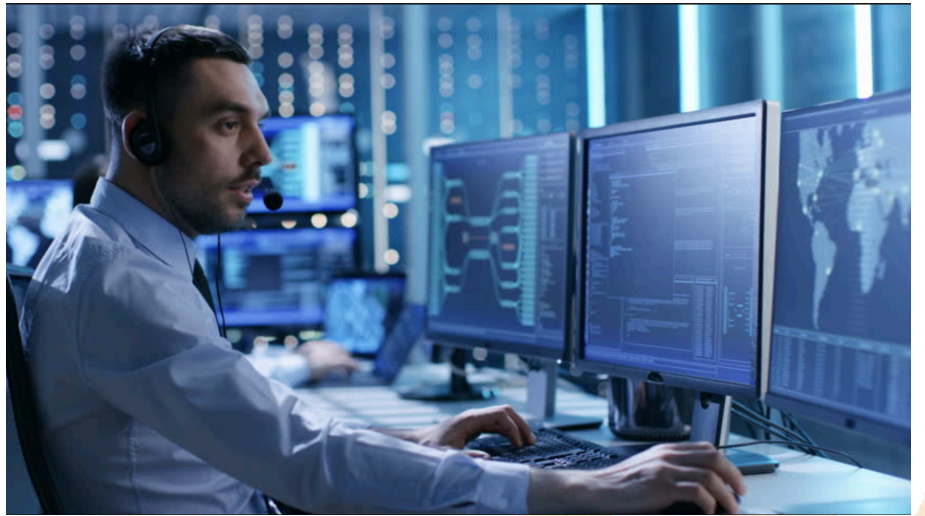
The End User

- Who uses Incident?
 - Technicians
 - Customers
 - Managers



What We Need to Know

- What are technician goals?
- What is their Incident workflow?
- What are competitors doing?
- What best practices do we need to know?



User Interviews

- How do techs use Incident?
 - Tech 2 come in “blind”
 - Can take 60 min to assess a ticket
 - Scan meta info first, then ignore
 - Classification can take time
- Journals are the focus
 - View as a timeline
 - View entries in detail
 - Customer comms often broken out



Self-Evaluation

Does not use.

Rarely revisited post entry.

Classification is hard.

Spends most time here.

Cherwell SERVICE MANAGEMENT

Incident 10238

Status: New

Priority

Requestor: Alternate Contact Info

Owned By: - select owner -
- select team -

SLA: Corporate (Default SLA)
Respond By: (choose a priority)
Resolve By: (choose a priority)

I Want To:
Take Ownership
Escalate to Level 2
View Detailed Date/Time Information
Link to Existing Major Incident
Submit to Knowledge Base
Track Time

Step 1: Record the Details

Short Description:
Description:

Call Source: Phone

Step 2: Classify

Service:
Category:
Subcategory:

Priority:
Major Incident
Impact:
Urgency:
Primary CI:

Step 3: Investigate the Incident

Additional Details:

Service Catalog Templates | Journals | Tasks | Last 30 Days | Configuration Items | SLM History | Change Request | Problem

Columns: ID, Title, Description, Portal Description, Business Owner, SC

Self Evaluation

The screenshot displays the Cherwell Service Management interface. The main area shows a list of journal entries with columns for Type, Created, By, and Details. A callout box at the top points to the list and the detail view, stating: "Wants both timeline and detail view". A second callout box on the right points to the detail view, stating: "But detail is too linear (one entry at a time)". A third callout box at the bottom points to a specific entry in the list, stating: "Techs document everything, even rewriting existing info." The interface includes a top navigation bar with "New", "Searches", "One-Steps", "E-mail", and "Dashboards". Below the navigation bar are various toolbars and a search bar. The list of entries includes various types such as "Journal - History" and "Journal - Customer Request" with specific dates and user names.

Type	Created	By	Details
Journal - History	2/13/2018 1:45 PM	Cherwell Admin	The value in the field Priority was set from the value 2 to the value 3 on 8/19/2016 by CSDAdmin.
Journal - History	2/13/2018 1:45 PM	Cherwell Admin	The value in the field Urgency was set from the value Company to the value Medium on 8/19/2016 by CSDAdmin.
Journal - History	2/13/2018 1:45 PM	Cherwell Admin	The value in the field Impact was set from the value High to the value Department on 8/19/2016 by CSDAdmin.
Journal - History	11/9/2017 12:48 PM	Cherwell Admin	The value in the field Short Description was set to the value E-mail down on 3/3/2014 by CSDAdmin.
Journal - Customer Request	10/28/2017 10:09 AM	John Allard	
Journal - Customer Request	10/8/2017 9:38 AM	Andrew Simms	Added by Andrew Simms on Friday, December 20, 2013 via the Company Portal. Please contact me Added by John Allard on...
Journal - Customer Request	10/8/2017 9:28 AM	John Allard	
Journal - Customer Request	10/1/2017 10:32 AM	Andrew Simms	Added by Andrew Simms on Friday, December 13, 2013 via the Company Portal. Hey Added by John Allard on Friday, Dece...
Journal - Customer Request	10/1/2017 10:26 AM	John Allard	
Journal - Customer Request	10/1/2017 10:21 AM	John Allard	
Journal - Customer Request	9/27/2017 10:54 AM	John Allard	
Journal - History	9/24/2017 12:38 PM	Andrew Simms	The value in the field Urgency was set from the value High to the value Company on 8/5/2013 by andrew.
Journal - History	9/24/2017 12:38 PM	Andrew Simms	The value in the field Impact was set from the value Company to the value High on 8/5/2013 by andrew.
Journal - History	9/24/2017 10:26 AM	Andrew Simms	The value in the field Status was set from the value In Progress to the value Pending on 10/30/2013 by andrew.
Journal - Customer Request	8/9/2017 12:26 PM	John Allard	
Journal - Customer Request	8/24/2017 12:15 PM	John Allard	8/7/2013 1:14 PM by John Allard Please inform me of the status of this Incident
Journal - History	8/24/2017 11:55 AM	John Allard	The following changes were made to the Incident 101325 by john on 8/7/2013: Field Priority was changed from the value 1 to 1...

Self Evaluation

The screenshot displays the Cherwell Service Management interface. On the left, an incident record for 'Incident 102374' is shown with a status of 'Pending' and a priority of '1'. The incident details include a short description, call source, and a list of assigned technicians. An email composition window is overlaid on the right side of the screen. The email is addressed to 'Test.Recipient@company.com' and has the subject 'Regarding Incident 102374'. The body of the email begins with 'Dear John,' followed by a line of text: 'Regarding your [Incident 102374](#), logged on 4/3/2018 11:11 AM, we have the following question or update:'. The email window includes a 'Send' button and an 'Options' button. Two orange callout boxes are present: one pointing to the email body text and another pointing to the incident record details.

Techs like customer comms to be separate.

But comms, as well as knowledge, are hard to use with journals.

Self Evaluation

Clean, modern UI.

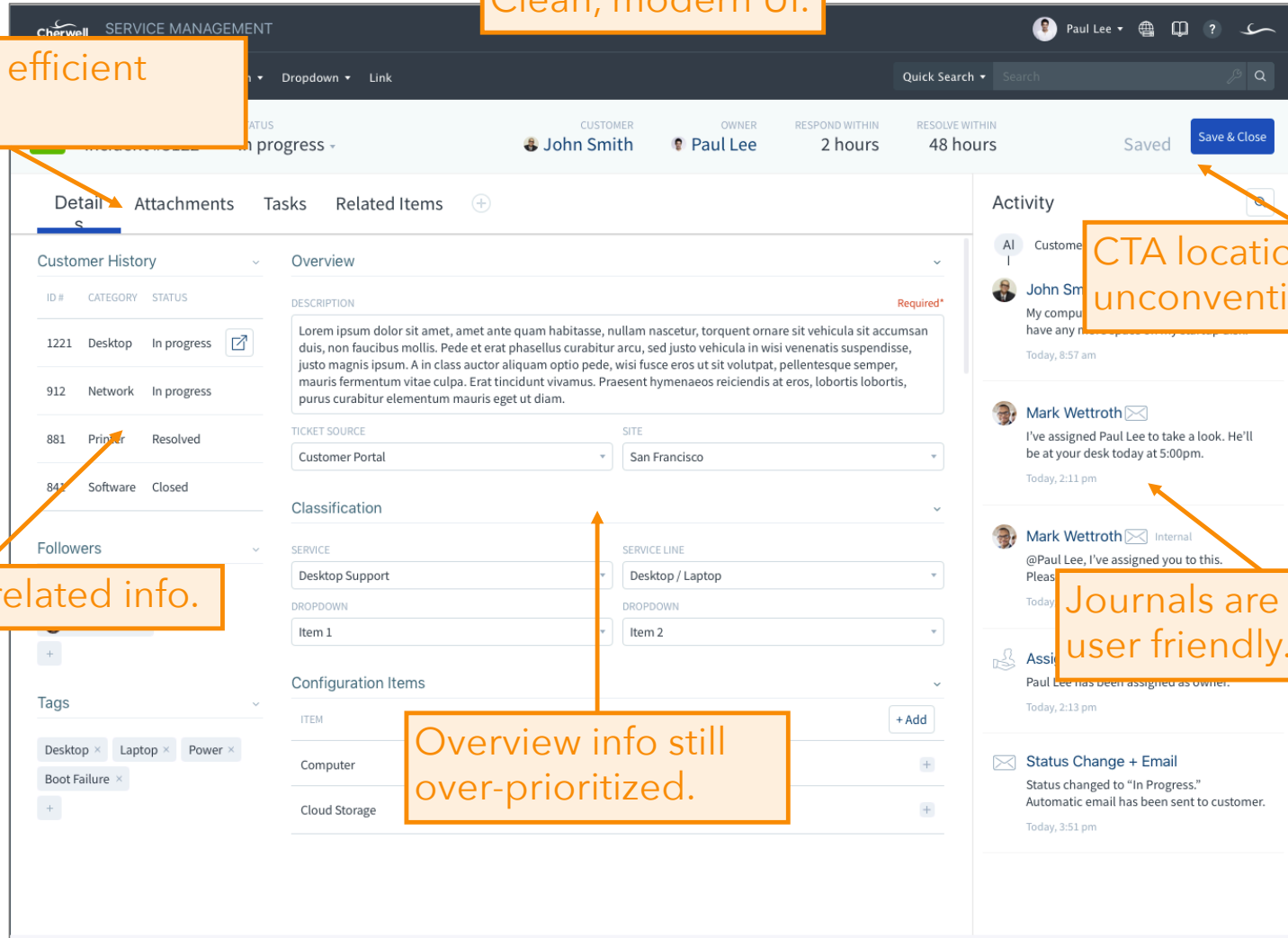
Tabs relocated, efficient workspace.

CTA location is unconventional.

Useful intake-related info.

Overview info still over-prioritized.

Journals are exposed, user friendly.



Competitor Research

Show All Active Incidents (record 53 of 102 search records)

Clean, modern UI.

List View New Incident Apply Template Save Refresh Pin It Share Assign Incident to Me Add New Task Close Incident Add Problem Print In

Incident: 10502 (Active)

Customer & Owner

Customer: Ron B Thomas
RThomas@saasitdemo.com
+27 (0)11 575 7555

Status: Active
Team: Service Desk
Owner: Ron B Thomas

Response Target: Met
Resolution Target: 1/26/2012 9:42 AM
Breach: Breached 1/26/2012 9:42 AM

Details Task (1) Master Incident

Summary

g network Access Time Out

access time out in the South Africa office when attempting to access shared network resources.

Service: Network Service
Category: Network Folder Failure
Source: Phone
Impact: Medium
Priority: High

Attachment: Attach file Paste from clipboard
Asset: Link Unlink
Audit Info: Created By Self Service, 1/23/2012 9:42 AM
Modified By Frs_Ed, 2/20/2015 11:36 AM

Journal: Create Unlink

Resolution: AutoClose

Cause Code: Linked Problem
Actual Service: Network Service
Actual Category: Network Folder Failure

First Call Resolution

Clean field alignment.

Classification is hard.

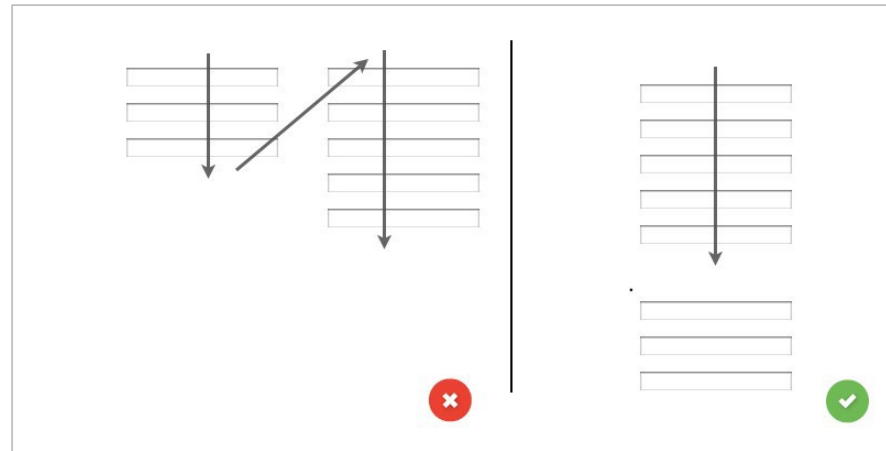
Journals are exposed, user friendly.

Process flow is unconventional.

Best Practices

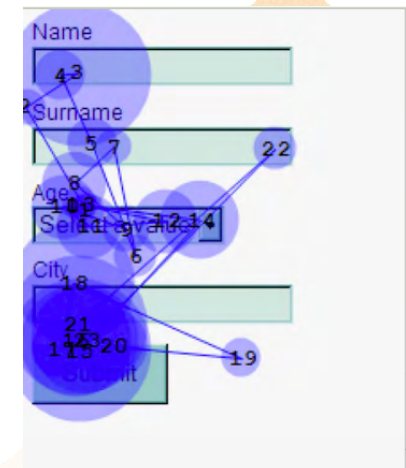
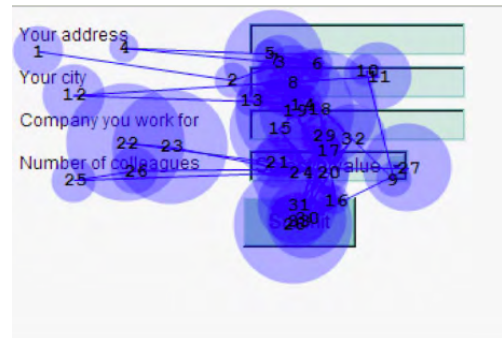
- **Form Best Practices**

- Eye-tracking studies
- Vertical alignment
- Top-aligned labels



- **Other Resources**

- Credit card apps (all on one page)
- Mortgage applications



Solve: First Draft

The screenshot displays the Cherwell Service Management interface for an incident titled "Incident 55259". The interface is divided into a left sidebar and a main content area. The sidebar contains meta-information such as "Response 2 Hours Remaining", "Resolution 1 Day 2.5 Hours Remaining", "Customer Tony Arch", "Assigned Team Tier 1 Support", and "Description SubCategory". The main content area shows a form with fields for "Customer*", "Primary CI", "Description*", "Classification", "Team", "Assigned To", "Impact*", and "Urgency*", along with a "Collect Details" button. The interface includes a top navigation bar with "New", "Searches", "One-Steps", "E-mail", "Dashboards", "Pages", and "Reports" options, and a search bar. Annotations with orange boxes and arrows highlight specific features: "Tab relocation creates focused workspace." points to the "Overview" tab; "Meta-info is easily referenced or ignored." points to the sidebar; "Field alignment optimized." points to the input fields; "Enhanced classification." points to the "Classification" field; and "Improved transition." points to the "Collect Details" button.

Cherwell SERVICE MANAGEMENT

Incident 55259

Response
2 Hours Remaining

Resolution
1 Day 2.5 Hours Remaining

Customer
Tony Arch

Assigned Team
Tier 1 Support

Description
SubCategory

Overview Details Conversation Similar Incidents Audit

Customer*

Primary CI

Description*

Classification

Service / Category / SubCategory

Team

Assigned To

Impact*

Urgency*

Collect Details

Tab relocation creates focused workspace.

Meta-info is easily referenced or ignored.

Field alignment optimized.

Enhanced classification.

Improved transition.

Solve: Forms

508 compliant design.

Frog UI + new branding.

Enhanced toolbar.

Larger, expandable description.

cherwell SERVICE MANAGEMENT

Henry Bryce

Quick Search

Tier 1 Support Queue

Save Attach (1) Cancel Delete Knowledge

P3 SERVICE REQUEST 102384

STATUS
In Progress
Next: Start Work
Respond: 2h
Resolve: 1d 2.5h

CUSTOMER
Tracy Aubin

ASSIGNED TEAM
Tier 1 Support

DESCRIPTION
Desktop Support > Computers > Request New Computer
Computer has been broken for a week. I can't get it to charge or turn on.

ACTIONS ^
[Take ownership](#)
[Escalate to Level 2](#)
[View detailed date/time](#)
[Link to existing Major incident](#)
[Submit to Knowledge Base](#)
[Track time](#)

Customer *
Tracy Aubin

Primary CI
Laptop

Description *
Computer has been broken for a week. I can't get it to charge or turn on.

Classification *
Request New Computer

Team
[Dropdown]

Assigned To
[Dropdown]

Impact * [Dropdown] Urgency * [Dropdown]

Cancel Collect Details

Solve: Journals

"Narrative"-driven design.

The screenshot displays a Cherwell Service Management interface for a service request. The top navigation bar includes 'cherwell SERVICE MANAGEMENT', a search bar, and user information for Ty Hodges. The main header shows 'SERVICE REQUEST 102384 HTML PAGE MANAGER - ERROR' with status 'IN PROGRESS', response and resolve times, and assigned team 'Tier 1 Support'. The 'Activity' tab is selected, showing a text editor with a note about user information. Below the editor is a 'Save Note' button and a search bar. The activity log is divided into sections: 'Audit' (Juliana Albert opened record), 'Attachments' (video), 'Communication' (Levi Matthews update), and 'Note' (Levi Matthews recap). A right-hand sidebar titled 'Related Knowledge' contains an 'Event Timeline' with a list of events including 'New Incident', 'Owner', 'Classification', 'Status', 'Communication', 'SLA Response Breach Warning', and 'SLA Resolution Breach'. Annotations in orange boxes point to specific elements: 'Separate comm streams.' points to the communication log section; 'Description carries over as first entry.' points to the audit description; 'Timeline or detail' points to the event timeline; and 'Journal-centric.' points to the overall activity log structure.

Journal-centric.

Separate comm streams.

Description carries over as first entry.

Timeline or detail

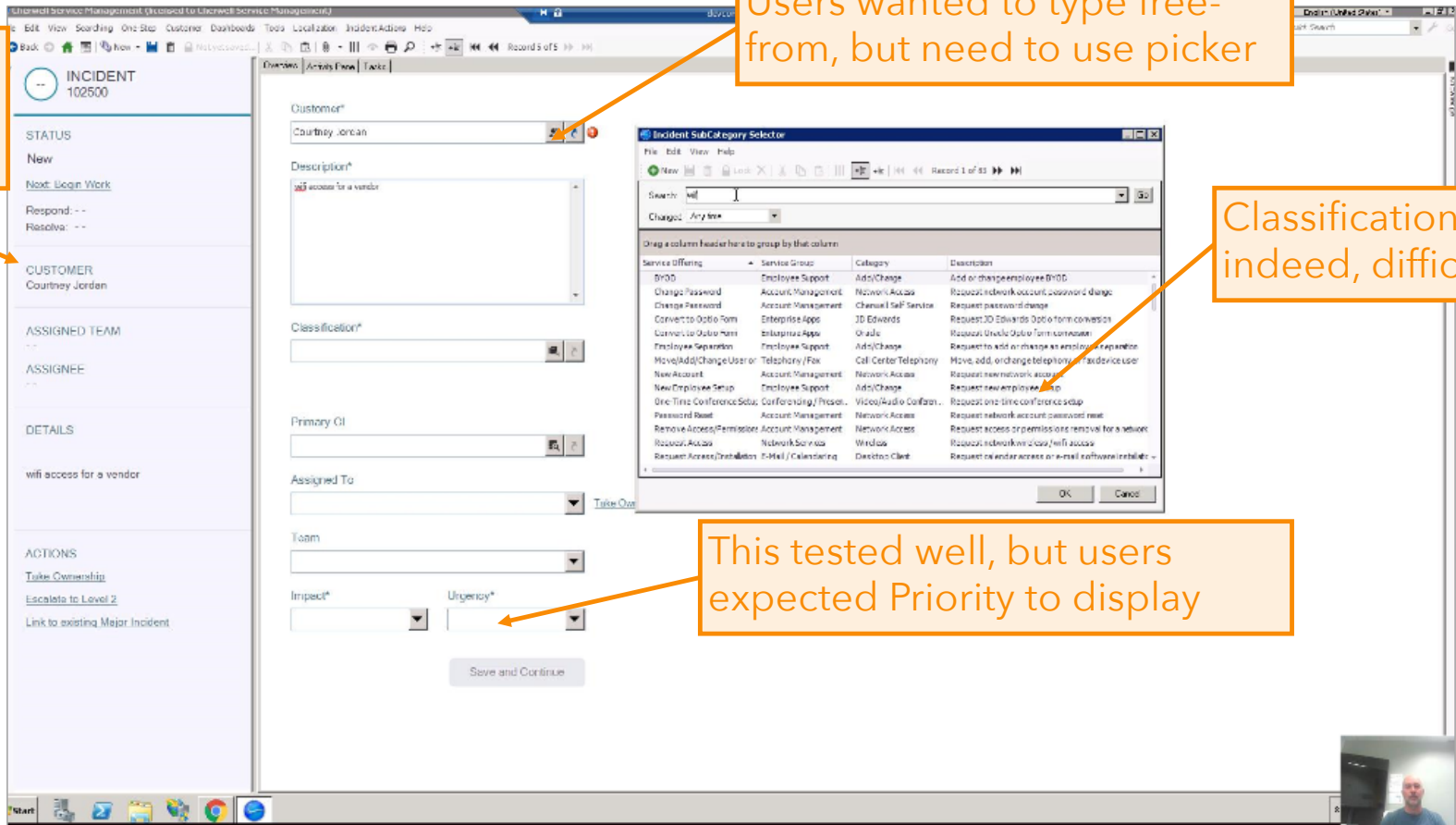
Usability Testing (Validation)

Most users didn't see this info

Users wanted to type free-form, but need to use picker

Classification was, indeed, difficult

This tested well, but users expected Priority to display



Usability Testing, cont.

This area needs more info about urgency, status

Poor wording created consistent confusion

Once used, this was the most very popular

Orientation was sometimes confusing, but this concept proved easy to use

The screenshot shows a web application interface for incident management. The top navigation bar includes 'Languages', 'Henri Bryce', and a 'Quick Search' field. The main content area displays 'Incident 141134' with a 'Closed' status and a 'best Start Work' link. Below this, there are tabs for 'Overview', 'Details', 'Activity', 'Tasks', and 'Approvals'. A 'Create Note' button is visible. The 'Activity' tab is active, showing a list of events with columns for 'Field Name', 'Previous Value', and 'New Value'. One event is highlighted: 'Audit: Cherwell System made changes on 14 Jul 2017 8:06 AM'. The right sidebar contains an 'Attachments' section, a 'Communication' section with an 'Event Timeline' showing various updates and communications, and a 'Status' section indicating 'Pending Development'. A 'Customer History' section is also visible. The bottom of the screen shows a Windows taskbar with the 'Start' button and several application icons. The 'cherwell cgc18' logo is in the bottom left corner. A small video feed of a person is visible in the bottom right corner.

Research Summary

- Interviews provided a great foundation for what may be working, not working
- Analytics told us we were focused on the right thing
- Competitive and Best Practices refined our ideas for change
- Usability testing validated direction, identified lots of opportunities for refinement

UX Research Opportunities

- Interviews
- Field testing
- Eye-tracking

Contact:

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cherwell
cqgc18

lead the change

Please be sure to fill out
the survey for this session
in your App. Thank you!