



## Usability : Case Studies in the Real World

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### My Talk:

- Introduction
- Rationale / Business Need
- Case Study 1 : Power Utility Contact Centre
- Case Study 2 : Online Bank Contact Centre
- UI Design Issues

### Who are GT ?

- Founded 1986, Large Co. of 300 Employees Worldwide
- Software/Framework, System Integration, Business Analysis
- Large Blue-Chip Customers
  - e.g. Scottish Power, Severn Trent Water, Egg, Standard Life Bank, Great Universal, Argos, Vodafone, BT
- Usually CRM (Customer Relationship Management)

### So Why Have a Usability Practice ?

- Makes our deployed CRM processes usable by wide range of Customer Service Agents.
  - Cohort varies by age, experience, (IT) literacy, numeracy, conviction.
- Makes our own product & tooling more intuitive, quicker to develop (with).

### Why do our customers need Usability expertise ?

- Needs to be an external body (*and not a cheap one !*)
  - Senior Management lose sight of the shop-floor.
    - "Cannot see the wood for the trees"
    - "What, x is still happening ?"
  - Internal exercises tend to be 'Acceptance Tests'.
- Major metrics that Senior Management live by :
  - Service Level Agreements (Service)
    - e.g. "80% of calls answered in 20s"
  - Average Handling Time (agents paid bonuses for low AHT)
  - Service Level Agreements (Sales)
  - Agent 'Churn'
    - Low pay, conditions, frustration, angry customers
    - Agents tend to feel under-trained, 'thrown in the deep end'

Therefore : Spend days buddying with agents in observational studies, listening in on both sides of the call, noting tasks undertaken and time taken, and then using *Who What Where Which Why When* questions between calls.

Equipment: Logbook, pens, stopwatch, ruler (useful for annotating timelines).

N.B. : Observe surroundings, ergonomics & human elements NOT JUST USER INTERFACE ARTEFACTS.

N.B. : MUST reassure agents you aren't testing them, there to help them – "don't hold back".

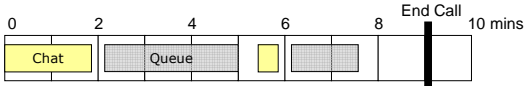
N.B. : Candid chats in the canteen are important.

**Business Pain:**

- AHT High
- Agent Churn High.
- The Good News:
  - Agents were good at being the customer's champion.
  - Agents were patient, understanding, conscientious.
  - Agents did care about their performance (AHT).
  - Agents were making legitimate Sales Through Service approaches.
- Bad News:
  - Agents were *too* good at being the customer's champion ?
    - Agents were very honourable in holding in queues *with* customers.
  - Agents were *over* conscientious ?
    - Agents were slow and precise when it comes to handwritten communication.
  - Agents readily blamed other parts of the enterprise.
    - Teams blaming each other.
    - Very cynical when told other systems are down.
  - Agents relied on pen & paper, offline systems, rarely used Copy & Paste
  - Poor UI Design Issues

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## Case Study 1 : Power Utility

- **Writing Narratives Slows Down Agents.**
  - Typing manually slows down agents (5s to 65s observed). Insufficient storage (30 char limit, no word wrap). Inconsistencies between agents.
  - **AHT goes up. Frustrated Agent**
  - ☞ Use templates. Add word-wrap. Make cursor start in 1<sup>st</sup> Narrative Field.
- **Transferring & Holding Calls.**

  - **AHT goes up. Disaffected Customers.**
- **Inefficient Use of Agent Time**
  - Agents do hand-written correspondence, compliments slip in their best handwriting (50s). Agents hunt for items around the office to send.
  - **AHT goes up.**
  - ☞ Allocate to new Back Office staff.
- **Too Much Use of Pen & Paper (notepads) as agents lack confidence in system reliability. Little Copy & Pasting (when available).**
  - **AHT goes up. Transcription & Data Entry Errors. Security Issues.**
  - ☞ Promote C & P in training. Change label fields to text fields to allow copying from GT-X.
- **Account-Centric Operation.**
  - **AHT goes up. Agents re-enter data.**
- **Mouse usage is entirely promoted over keyboard.**
  - **AHT goes up.**

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## Case Study 1 : Knowledge

- **Insufficient Training, Inconsistence Knowledge, no Knowledge Management.**
  - Agents resort to physical aide-memoirs, calendars, calculators. Agents update their own crib-sheets e.g. "(Quantum) British Gas 0845 xxx xxxx".
    - Experienced agents are obvious by their workstations – sprinkled with post-its.
    - Inconsistent Knowledge.
  - Agents are unaware of sales campaigns etc.
  - Help sheets can arrive days after they start in the job, if at all.
  - **Poor CRM.**
  - ☞ add simple data (Date) & Payment Calculators in GT-X. Point agents at intranet-borne information.
  - ☞ Investigate Knowledge Management solutions for email-based dissemination.
- **Inadequate Training**
  - Agents didn't know about electricity (3-phase supplies), meters (MPAN formatting).
  - Some didn't know they could click on column headers to sort datasets.
  - One agent was seen to double-click throughout.
  - **Inconsistent CRM.**
  - ☞ More (consistent) training and 'refresher' sessions.
  - ☞ Investigate Knowledge Management and intranet-based information.

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- No word-wrap in narrative screens – agents type into the ether after 30 chars!
- Poor 'at a glance' static customer information.
- Data in labels cannot be copied to clipboard.
- GT-X Inconsistent with mainframe (e.g. postcode wildcards).
- \$ signs for currencies !!
- Grey fonts used on some valid fields, not read only.
- Some screens don't support keyboard shortcuts.
- Insufficient column widths.
- Interface uses some serif fonts – slower to read.
- Presentational inconsistencies – labels & message boxes.

- **Too Many Disparate Systems**

Agents have a high cognitive load due to operating a number of separate systems with different user interfaces and metaphors. Agents spend much time pasting information around and in wasteful duplications (e.g. typing in call narratives on both the host and GT-X).

**Business Pain : Longer AHT, Expensive Training, Cognitive Load, Data Entry/Conversion Errors**

- **Poor Client Desktop Management**

Agents minimise all applications after usage. *For example, one agent was observed with 34(!) windows open.* No less than two GT-X sessions were ever observed on any agent's desktop. Two agents accused the GT-X client of being slow, when it was in fact the load of other applications running (notably Outlook Express polling for email).

**Business Pain : Slower Desktop, Longer AHT, Licensing Costs**

- **Inconsistent and Slow Narration of Call Progress**

The process of agents having to write narratives to describe the outcome is a slow one. To alleviate this, an agent will try to use acronyms and abbreviations to shorten it, resulting in inconsistencies between agents.

**Business Pain : Longer AHT, Inconsistencies**

- **Reliance on Paper & Ad-Hoc Workflow Management**

Agents receive and generate hand-written pro-formas from other parts of the enterprise (e.g. requests for an Experian credit check). The use of paper is not only slow, inaccurate, environmentally unfriendly, but hard to audit and manage as it flows around the enterprise.

**Business Pain : Longer AHT, Frustrated Agent**

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## Case Study 2 : Banking Contact Centre

- **Poor Basic Windows-Usage Training**  
Agents misunderstood some core, rudimentary artefacts inherited from the underlying Windows operating system. *The training regime takes this for granted.*

The training team has taught agents to use the mouse as much as possible *although much slower in many areas.* Only one agent was observed using a right-click to bring up a context menu.

**Business Pain : Inconsistencies Between Agents**

👉 While allowing for user taste w.r.t. different input modes is good practice, this should be accompanied with some business rationale as to which to use in which contexts.

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## UI Design Issues

Generally, during requirements capture :

- An enterprise wants a 'single view' of their customer
  - Cram as many fields on to one page as possible
- Little thought given to grouping, chunking, ordering
- Little thought given to keyboard input and shortcuts
- Little thought given to font size, colour contrast, red/green issues

**Product Tooling :**

- Inconsistencies creep in
  - Different tools built over time
  - Different development teams
  - Different software libraries
- Lack of Transparency
  - Little Chunking
- 📌 **Style Guides**

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**Summary & Morals :**

- More Training – Don't Take IT Literacy for Granted
- Automate Annotation - Templates
- Promote Both Mouse & Keyboard Usage
- Promote Copy & Paste
- Amend Business & Telephony Processes for less Call Transfers
- Involve Usability Expertise in the Req. Capture & UI Design Phases
- Involve Usability Expertise in Product Build – Involve Naïve users.



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