

VUI Design Principles

Darla Tucker
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Discussion Topics

- What is good design?
- Elements of good design
- The responsibilities of the designer
- The final test – do they like it?

What is good design?



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What is good design?

- It is creating a product that appeals to the target audience or end user
- It enables the user to readily accomplish their goal or task
- It is transparent and easy to use
- It's about adding subtleties to the end product that don't distract from its primary purpose
- It brands the product and makes it memorable
 - In a good way 😊
- It is something to be proud of

What's involved in good design?

- It's gathering complete and comprehensive requirements
- Researching and understanding the domain of the industry the product serves
- It's meeting the company's needs without sacrificing the needs of the end user
- Researching and understanding the end user
 - Creating the product with them in mind
- Following a proven implementation methodology

Sample Implementation Methodology

DESIGN PHASE

Requirements Gathering
Requirements Analysis
Functional Requirements Document
Creation & Approval
Sample Call – Conversations
Voice Talent Selection
Full Design Specification
VUI
Business Logic
Data Interaction
Customer Specification Sign-off
Development
Testing
Usability Testing
Tuning
Post-Production Tuning

Elements of good design



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Elements of good design

- Meets end users needs
- Intuitive to use
- Keep it simple
- Honest
- Smart and responsive
- Accommodating - helpful
- Subtle brand reinforcement

Meets the end users needs

- Know what they want to do
- Design with the end user in mind
 - Create representative end users for each population group
 - WOZ with a design buddy to ensure the VUI meets the needs
- Encourage the customer to always keep that in mind
 - Ask for information using caller lingo not business lingo
 - “What’s the contact number associated with your account?”*
 - “Tell me your phone number, area code first or enter it now.”*
- Meeting this element is the best step towards creating a successful application

Group Discussion

- What are some ways to find out who the end user is?
- How can you find out what callers really want to do when they call?
- Creating User Profiles
 - Reference hand-out
- Interactive role play
 - Reference hand-out

Discussion

- How to blend customer needs with end user needs
 - Know how to choose your battles
 - When to push to gain acceptance of your design
 - And when not to

Intuitive to use

- End users shouldn't have to hesitate after hearing a prompt because they are wondering what to do
 - Prompts should enable the caller to know what to say and when
- Voice recording, pauses / prosody can help deliver the message quickly and easily

Discussion

- Identify which prompts are problematic
 - Reference hand-out
- What can be done to improve them?

Keep it simple

- Cognitive load plays a huge factor in application success
- The majority of callers are not power users
 - Reprompts and error messages try to be helpful
 - Often they end up irritating
- Choose Clarity or Natural and keep it simple!

“What’s the expiration date?”

“Say or enter the expiration date, month and year”

Discussion

- Of the two sample scripts which one seems to keep it simple?
 - Reference hand-out
- What can be done to simplify the one that appears verbose?

Honest

- **Honesty can go too far**
 - We're Sorry
 - I'm sorry – I didn't get that / I'm sorry I didn't hear you
 - I'm sorry – I still didn't get that / I'm sorry I still didn't hear you
 - I'm sorry, I'm sorry, I'm sorry, I'm sorry....
 - Use care when creating the persona and writing the prompts
 - Honesty is useful in the situation where the caller has given us their information, but we for some reason can validate all or part of it
 - In these cases inform the caller about what specifically you need them to do over
 - The IVR should always take responsibility for a mistake
 - Never let the caller feel bad about what they said or done

Smart and Responsive

- End users have a perception of the system even after a single use
- Make systems smart by writing prompts that are helpful, clear and to the point
 - Don't use the same wording over and over
 - Make prompts, error messages and timeout messages unique
 - Use speech specialists to help you create smart grammars
 - Its okay to limit prompting to one or two times total
 - Send the end user to a representative instead of continually prompting over and over again
 - Use your n-best list and limit confirmation

Discussion

- Review the sample dialog prompt, reprompt, timeout, error and help message
 - Reference hand-out
- Can they be improved?

Accommodating - Helpful

- Upfront instruction is often too much too early
 - Examples:
 - “Just speak your answers naturally”
 - “Interrupt me at anytime”
 - What the caller doesn’t know is its only at specific times
(not really *ALL THE TIME*)
 - Use education when its appropriate
 - Such as how to say a zip code in Canada
 - Or where to find your account number on a rarely seen bill

Discussion

- Are help prompts really helpful?

Subtle brand reinforcement

- **Brand Reinforcement**

- Identifying Brand Upfront
 - Appropriate Voice and Verbiage
 - Focus on Customer DELIGHT
- Customers may not intend on the application being an extension of their brand, but it is
 - Every time the caller is annoyed by a chatty, stupid, or unresponsive speech application it reflects poorly on the customer's business
- Collaborate with the customer care team, IT and Marketing to get this right

Strong Brand Statements

VOLVO



= Safety

Apple Computer



= Easy to use,
Good Design

FedEx



= Absolutely,
positively,
has to be there...

Summary

- Strive to make every initial prompt clear and successful?
 - Reprompts are safety nets
 - Initial prompts contain every element a caller needs to:
 - Know what they're being asked to provide, and
 - How to provide it

Example...

- Traditional prompt example:

Initial “What’s the height?”

Retry1 “Tell me the approximate height, in inches”

Retry 2 “Please tell me the height, rounding to the nearest inch”

- Or consider this:

Initial “Rounding to the nearest inch, tell me the height of the package”

Retry 1 “Please say or enter the height, rounding to the nearest inch.”

Retry 2 “Using the keypad, and rounding to the nearest inch, please enter the height”

Responsibilities of a good designer



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Responsibilities of the Designer

- Provide the customer with the product they purchased
- Protect the needs of the end user
- Understand the industry and the end users
- Get a second opinion
 - Two heads are often better than one
- Listen to advice
- Don't take it personally
- Attend usability testing and watch users interact with the application
 - Fix all rough spots
- Listen to live production calls
 - No matter what precautions you took to get to this point with your good design – the true test is the end users

TOP 5 DESIGN MUST!

- 1) Allow callers access to your agents/operator/ reps
 - A request for “help” should actually transfer to a “live person”
- 2) Automate what caller’s **want!**
- 3) Keep it simple
 - Make prompts clear
 - Avoid complex and rarely utilized functionality
 - Strive for short and sweet
- 4) Only tell the caller what they’ve asked for
 - Limit pushed information
- 5) Limit confirmation
 - Rarely if ever use implicit confirmation

Avoid frustration

- Callers want to have choices
 - They'll use the automated system if they don't feel frustrated by the interface
 - And if it's by their choice - not forced on them
- Change a few key things in the application
- Don't hide access to Agents
- Watch your Customer Satisfaction climb!!
- “Good Design” is not the only factor

The final test – do they like it?



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Does the end user like it?

- Listen to live production calls
- Note anywhere callers have issues
- Fix them!

Discussion

- What were some of the problems the caller encountered?
 - How can they be fixed?

Summary

- No application is ever perfect
 - There is always room for improvement
- Usability testing is an excellent way to validate design ideas
- Its not the “end all, be all”
- Listen to production calls – lots of them
 - You’ll be surprised at what you hear 😊

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Thank You