

Our Famous Punching Bag – Usability Issues

- **Flat Style Reduces Discoverability**

Where can you click? Everything looks flat, and in fact

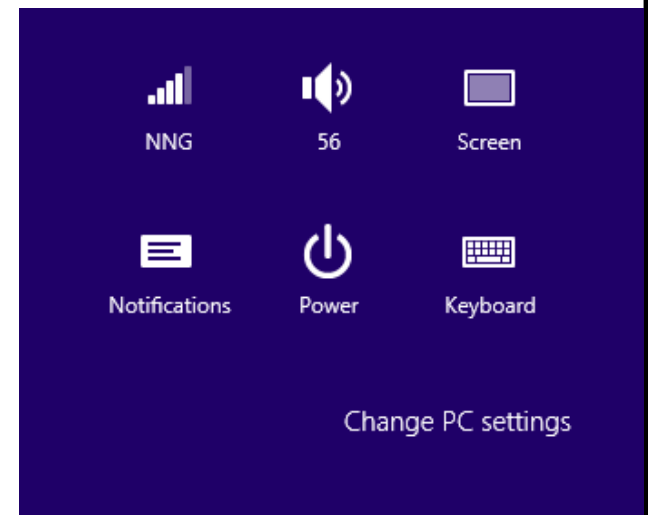
"Change PC settings" looks more like the label for the icon group than a clickable command.

- **Low Information Density**

- Amount of Info projected on a window is drastically reduced.

- **Overly Live Tiles Backfire**

✓ Misuse for all apps results in apps being not recognised!



MORE ON USABILITY

Some of the key factors affecting Usability are

- Format of Input
- Feedback
- Visibility
- Affordance – added by Donal Norman/
- **Affordance** of an object --sort of operations/manipulations that can be done on or to it.
- Examples such as A door affords opening
- **Visibility** – mapping between control and its effect. Eg. Cars have good designed controls – steering wheel has only one functionality – good feedback – easy to understand
- **Really bad ones follow.....**

MORE ON USABILITY

- ❖ Mobile Phones and VCR's score poor on visibility front
- ❖ There is little visual mapping between control and user goals
- ❖ Also controls have multiple functions...
- ❖ Who can miss out the **Set Top Box Remotes!!**
- ❖ **Elders have simply lost the charm of watching TV...**
- ❖ And to make things worse.....multiple designs with functionalities being supported not in a consistent manner...
- ❖ One more interesting case – How many of us read the **product manuals** given with products such as phones, washing machines, etc.
- ❖ **Golden Theory in Design –Blame the Design, Not the User**



❖ **It is the Duty of Machines and Those Who Design them to Understand People –Don Norman**

❖ **Bad UX and UI Makes Users Blame Themselves**

❖ User hate uncertainty, and do anything to escape it, as quickly as possible— even if it means lying to themselves.

❖ Design isn't about pushing pixels. It's about advocacy.

❖ it's not about the user understanding technology, but about the technology (and those who create it) understanding them

❖ **Design is a CONFIDENCE GAME**

❖ Plenty of Success and Failure Stories! – what better example than Google Search Engine for Usability . Many who visit sites via google even when they know the exact url! That sums up Google's Popularity and Usability

Disciplines Contributing to HCI

- ❖ **Computer Science** – technology, software design, UIMS, etc.
- ❖ **Cognitive Psychology** – information processing capabilities, limitations, etc.
- ❖ **Social Psychology** – Social + Organizational structure
- ❖ **Ergonomic and Human Factors** – Hardware Design, Display Readability, etc.
- ❖ **Linguistics** – Natural Language Processing
- ❖ **Artificial Intelligence** – intelligent Software
- ❖ **Engineering & Design** – Graphic Design, etc.
- ❖

Some of the Issues / Factors in HCI

Issues in HCI:-

(5)

<p>Organisation Factors</p> <p>Training, job design, politics, roles, work Organisation</p>	<p>Environmental Factors</p> <p>Noise, heating, lighting, ventilation</p>
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<p>Health and Safety Factors</p>	<p>The User</p> <p>Cognitive Process capabilities, motivation, satisfaction, experience, personality</p>	<p>Comfort factors</p> <p>Seating / Equipment layout</p>
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User Interface

Input devices, o/p devices, dialogue structures, use of colour, icons, commands, navigation, graphics, natural language, user support

Task Factors

Easy, complex, novel, task allocation, monitoring skills

Constraints

Cost, time scales, budgets, staff, equipment, delays

System functionality

Hardware / Software / Application

Productivity Factors

Increase o/p, Increase dity, Decrease costs.
decrease errors, increase innovating