

# Vendor User Centered Design in *Context*

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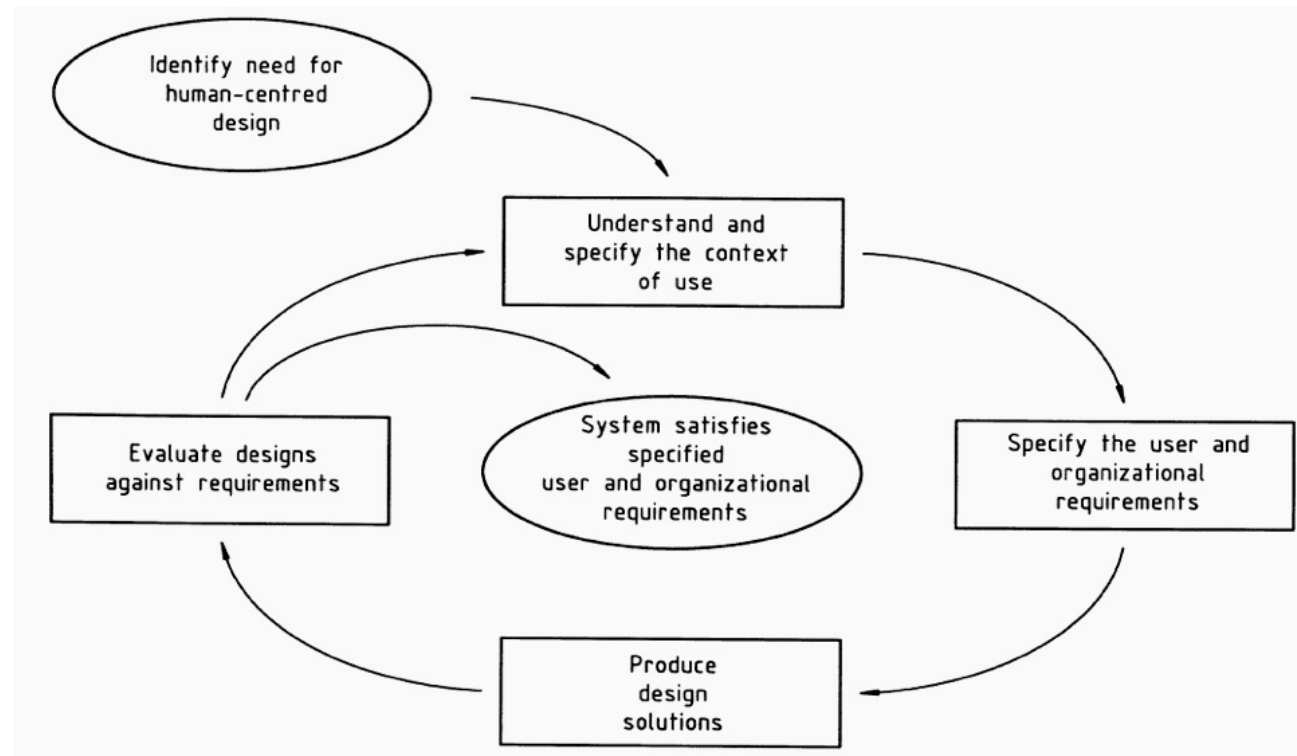
*National Center for Human Factors in Healthcare*

MedStar Health, Washington DC



# Usability and User Centered Design

- ▶ **Usability:** Extent to which a product can be used by specified users to achieve specified goals with **effectiveness, efficiency** and **satisfaction** in a specified context of use
- ▶ **UCD**



# Two Bins of Usability

## User Interface Design

Displays and Controls

Screen Design

Clicks & Drags

## Cognitive Task Support

“Workflow Design”

Data Visualization

Functionality

# Understanding Vendor UCD

<b>Vendor Demographic Summary</b>			
<b>Vendor</b>	<b>Est. Revenue</b>	<b>Employees</b>	<b>UX Team Size</b>
Vendor 1	\$1 billion +	6000+	15
Vendor 2	\$1 billion +	6000+	30+
Vendor 3	\$1 billion +	6000+	NA
Vendor 4	\$300 million +	200+	30+
Vendor 5	\$100 million +	500+	NA
Vendor 6	\$100 million +	2000+	30+
Vendor 7	\$20 million +	500+	1-5
Vendor 8	\$20 million +	250+	1-5
Vendor 9	\$20 million +	150+	NA
Vendor 10	\$10 million +	50+	NA
Vendor 11	\$300,000 +	10+	NA
<b>Range</b>	<b>\$300,00 - \$1 billion</b>	<b>10-6000+</b>	<b>0-30+</b>

# Categories of Vendor UCD

## No True UCD

- Focused on customer requests
- Responding to user feedback is UCD
- No formalized method for incorporating and testing user needs throughout design and development

## Basic UCD

- Understand UCD and its importance
- Striving to implement UCD processes
- UCD is not fully integrated yet

## Well Developed UCD

- Rigorous UCD processes in place
- Efficient testing methods
- Extensive infrastructure

# Vendor Challenges

## No True UCD

- Management “buy in”
- Understanding of Process
- Prioritization

## Basic UCD

- Resources
- Participant access
- Use case development

## Well Developed UCD

- Detailed work flow analysis
- Safety data



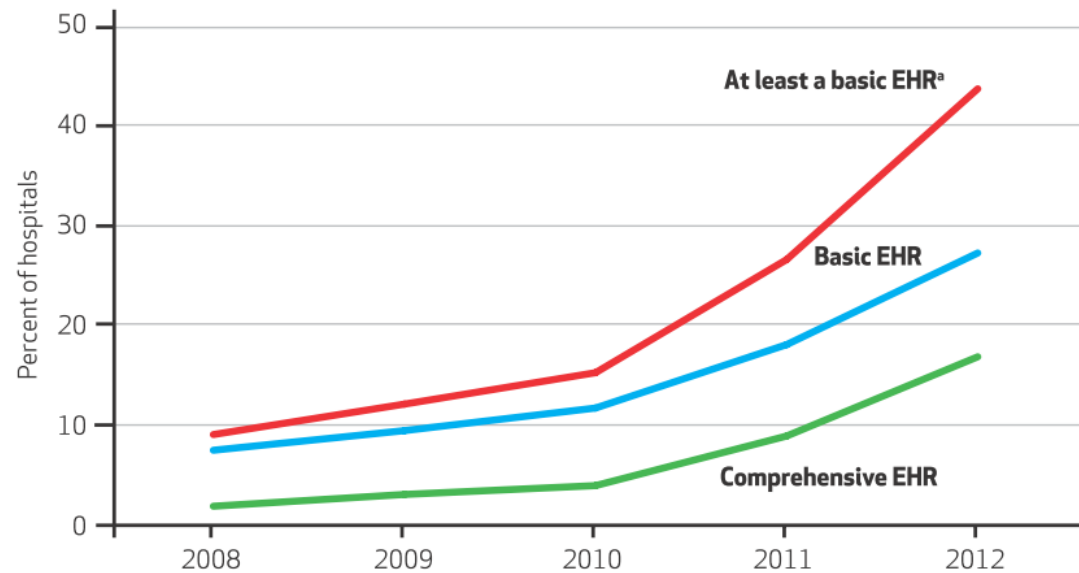
# Shared Responsibility



# A Bright Future

- ▶ Greater vendor investment in usability
- ▶ Greater provider engagement
- ▶ Increased collaboration

Hospitals' Adoption Of Electronic Health Record (EHR) Systems, 2008-12



# Thank you!

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