Improve UX Strategy v6.0

"Enhance our Customers' ability to do their jobs effectively"

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The UX Challenge



The user is always right

...but they never know what they need

- UIT does not have a great reputation for delivering satisfying, userfriendly products which delight our customers
- With the exception of a few RAD applications, designing for user experience hasn't been a high priority during application development/ enhancement process cycles
- UIT staff in general are not educated or experienced in User Centered Design methodology
- From a high level we know many business expectations for end-user experience but have no systematic process to meet these over time

UX Standard Definitions



UX: "User experience" encompasses all aspects of the end-user's interaction with the company, its services, and its products.

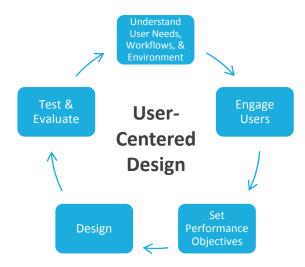


UI (or **GUI**): "User/Graphical

User Interface" is the mechanism by which users interact with various components of a computing system; it includes both hardware and software.

Usability: Assesses how easy a product is to use in the context of its environment.

design philosophy and process based primarily on user research/input, where the needs, wants and limitations of the end user are given extensive attention at each stage of development.



UTCS 4.0 Improve UX Strategy



- Establish small UIT "UX CoE" w/R&Rs by leveraging:
 - UIT UX ADL position (New Wayne Miller)
 UIT UI/UX CoP
 - UTCS 4.0 UX Manager (Craig Wilson)EMIT UCD Group (New)
- Define and communicate to UIT groups:
 - Improve UX Strategy
 - UX CoE membership and R&Rs
 - User Centered Design
 - Technical End-User UX Vision
 - UX Vision Implementation Process
- Promote UX and User Centered Design across UIT
 - Train select UIT staff in UCD methods
 - Lead UIT groups to engage in UX Vision Implementation Process
 - Institutionalize UCD methods in future UIT application development
- Implement high-value UX improvements over time

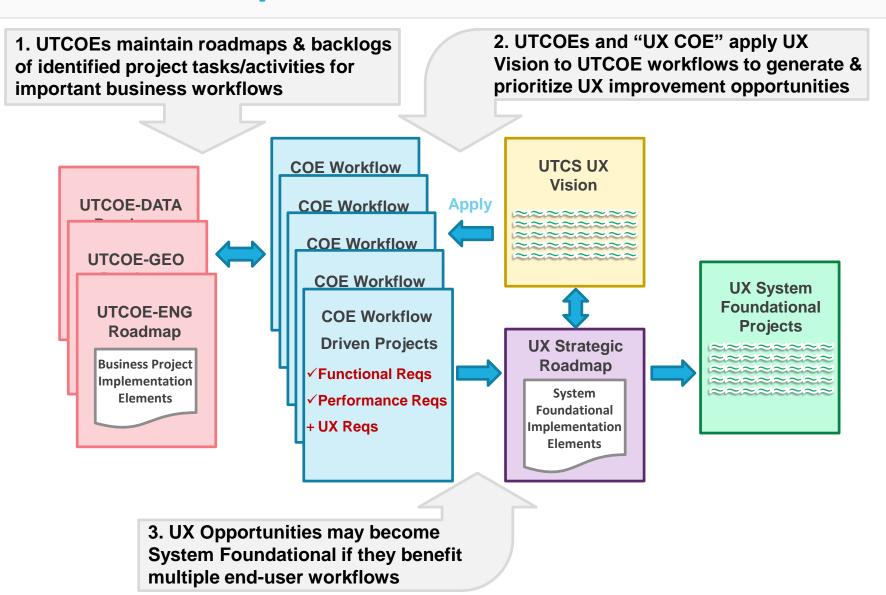
UX Opportunity Outlook



- Opportunities exist to improve UTCS end-user experience based on three business drivers:
 - Availability
 - The right tools and capabilities are available promptly
 - Learnability
 - Novice users become proficient in workflow execution quickly & easily
 - Efficacy
 - Technical application designs are well matched to workflows they support
- Opportunities fall into two categories:
 - System Foundational
 - Will benefit multiple end-user workflows/applications
 - Workflow Specific
 - Requires applying the UX Vision to end-user workflows/applications

UX Vision Implementation Process





Improve UX Roadmap: Availability



Busn Driver	Theme	Epic	2014				2015		2016
			1Q	2Q	3Q	4Q	1H	2H	
	Accelerated processes to equip user	Deploy UTCS Interim App Store							
		Investigate & define best method to access SCCM apps via the App Store							
		Investigate AppV Deployment Technology and Process							
		Add remaining Click Once and targeted SCCM apps to the App Store							
		Convert AppV deployable apps as appropriate & add to App Store							
		Design future App Store, including AppV, Petrel, ArcGIS, etc.							
Availability		Automate the Approval Process for requests made via the App Store							
		Develop and Deploy Expanded UTCS App Store							
		Work w/UIT 2.0 to complete optimization of Delivery Process for Tech							
		Set Adds, Exceptions, etc.							
		Identify high-value apps for enhancing Mobile UX experience in							
		conjunction w/Windows mobile device pilot							
		Investigate the need for HTML based applications for BYOD devices							
		Participate in pilot of windows 8.1 mobile device platform to capture							
	Capabilities matched to	learnings & insights related to this UX Theme							
	user work environment	Work w/UTCoEs to investigate and identify important business use cases	·						
		for mobile devices							

Improve UX Roadmap: Learnability



Busn Driver	Theme	Epic	2014				2015		2016
			1Q	2Q	3Q	4Q	1H	2H	
		Define "UX CoE" membership and R&Rs (Wayne + Craig, others?)							
		Investigate UX CoE resource succession plan & ensure adequate							
		Establish UX CoE working relationship w/EMIT UCD Group (Nick Swann)							
		Validate UX CoE relationship to UI/UX CoP; Clarify R&Rs							
		Provide UCD training for UTCoEs, App Developers, PMs & select others							
>		UX CoE provide UI/UX design and consulting to project teams							
<u> </u>	engagement in	Work w/Projects group and amend EMCAPS to require usability testing							
ab		prior to CTP & production releases							
Ľ		Develop/deploy Style Guide via RAPID for more consistent application							
Learnability		development process							
		Develop/deploy User Controls via RAPID for personal user themes							
		Promotion of User Centered Design (e.g. broad implementation)							
		Develop/implement process to capture feedback from business users							
		regarding UX improvements over time							
		Work w/UTCoEs to apply UX Vision to selected workflow/application							
		projects to generate UX Improvement opportunities							

Improve UX Roadmap: Efficacy



Busn Driver	Theme	Epic	2014				2015		2016
			1Q	2Q	3Q	4Q	1H	2H	
Efficacy	Reduced work effort & Improved ergonomics for all devices under all working conditions	Leverage Gestures Investigation results (Chris Tysor); determine how							
		the results impact 4.0, subject to any related SDLT decisions							
		Ensure applications to be upgraded are evaluated for ergonomic							
		improvements within associated workflows							
		Investigate & leverage EMEC "Dragon" Petrel voice command work for							
		use w/other important ergo-intensive apps; work w/UTCoEs to							
		* UX CoE provide UI/UX design and consulting to project teams							
		* Conduct Field Studies on important workflows/applications to identify							
		UX improvement opportunities; schedule to proceed P&B each year							
	Optimized data organization and use within workflows	* Work w/UTCoEs to apply UX Vision to selected workflow/application							
		projects to generate UX Improvement opportunities							
		Ensure data quality validation processes are implemented so confidence							
		exists in quality of technical analysis (refer to Data Goal Roadmap).							
	Enhanced workflow- based collaboration	Facilitate the designating of a primary collaboration tool within the							
		environment, including associated training & processes, to support real							
		time collaboration between various 'groups of interest' (i.e. Yammer?).							
		Facilitate training for use of existing collaboration tools & processes in							
		the environment (e.g. Yammer, SP Discussion Boards, One Note).							
		Ensure scope for workflow/application related projects/SWIs includes							
		investigation for implementing collaboration tools & processes							
		(including real time) between and within technical disciplines; leverage							
		existing collaboration tools where possible.							

^{*} Note: Applies to entire Efficacy Business Driver

UX "As Is"



- Current UX landscape:
 - Existing Efforts/Resources
 - UI/UX CoP (Jacqui Mullings Chair)
 - UX/Usability efforts driven by URC/UTC Apps Group
 - UTCS 4.0 added UI UX Manager and Design consultant (Craig Wilson)
 - Primary Focus
 - URC/RAD Applications
 - Usability Lab Testing
 - Some ergonomics initiatives
 - Developer training Cooper Goal Directed Design Process
 - New in 2014
 - UX ADL (Wayne Miller)
 - EMIT UCD [User Centered Design] Group (Nick Swann)
 - UTDD Gestures Investigation (Chris Tysor)
 - UTCS 4.0 Improve UX Strategy

The UTCS UX Vision

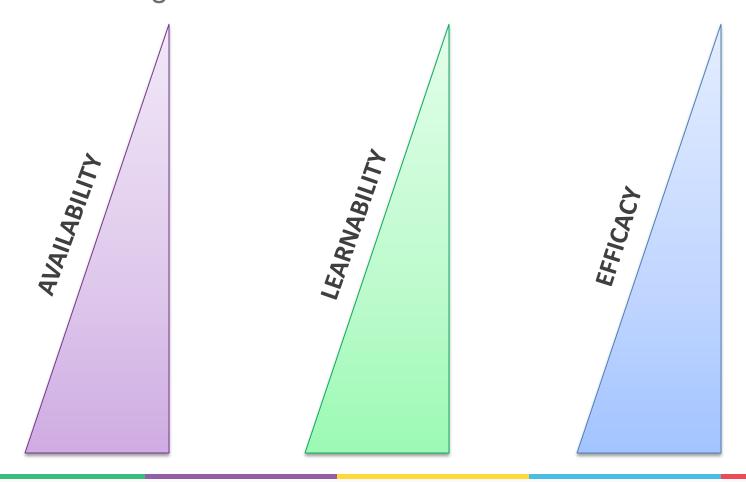


- The UX Vision is a high-level vision of user experience from the perspective of a generic Upstream technical end-user
- The UX Vision
 - Is a picture of an "ideal" future state of UTCS user experience
 - Includes many improvements over what exists today; but this does not mean they are all necessary or high value
 - Is meant to be applied to important business workflows and associated applications to generate UX improvement opportunities; then assess the value of the opportunities and their priority for taking action

The UTCS UX Vision



• The Vision is based on the three business drivers, each containing Themes and Subthemes:



UTCS UX Vision: Availability



The right tools and capabilities are available promptly

Accelerated processes to equip user (e.g. hardware, software, data access)

- On demand availability of hardware/software/data
- Streamlined approvals

Capabilities matched to user work environment (e.g. tools, system framework and functionality)

- Tools fit for purpose: desktop, laptop, tablet, smartphone, other
- Associated infrastructure/connectivity/support in place

UTCS UX Vision: Learnability



Novice users become proficient in workflow execution quickly and easily

Application adapts to user preferences

- Allows workflows to be saved
- Settings default to last used

Common look and feel

- Style and functionality consistent between applications
- Ability to share content between applications
- Style and functionality fit for purpose between different device platforms

Excellent self-help capabilities are available

- Link to SharePoint site (or other) home for app/workflow information
- Link to available user guides
- Link to available CBTs
- Link to available training courses



UTCS UX Vision: Learnability



Novice users become proficient in workflow execution quickly and easily

Enhanced user communications

- Link to SMEs
- Ability to provide feedback to support (expanded use of RAPID component)
- Quick response back from support
- User awareness of coming changes, including benefits and implications

Enhanced user engagement in development

- Direct participation to provide requirements
- User involvement to "test drive" early versions in appropriate environments
- Continual user involvement throughout development process

UTCS UX Vision: Efficacy



Technical application designs are well matched to workflows they support

Reduced work effort within workflows

- Intuitive workflow-based [apps + data] system design
- Holistic application design minimizing unnecessary steps
- Optimal use of automation
- Value added user customization

Improved ergonomics for all devices under all working conditions

- Optimal use of voice, touch, gestures, etc.
- Minimal mouse clicks, keyboarding, etc.

Optimized data organization and use within workflows

- Seamless data/application interoperability
- Easy access to required data
- Data sets to be reused where possible
- Intuitive sharing of data sets with other users
- Trustworthy data quality
- Data source is understood
- Data pedigree is known

Enhanced workflow-based collaboration

- Fit for purpose collaboration tools
- Inter- and intra-discipline knowledge exchange
- Real-time, always current collaboration

Example Workflow Selection Criteria



Example criteria to aid CoEs in selecting workflow candidates for UX improvements

- 1. Opportunity to influence
 - Maturity of application in lifecycle
 - Timing and scope of other CoE project tasks
- 2. Capability to influence
 - Vendor vs in-house application
- 3. Business value
 - Importance of workflow / impact to business
 - Depth and breadth of use
- 4. Strategic value
 - Importance to strategic plan/vision

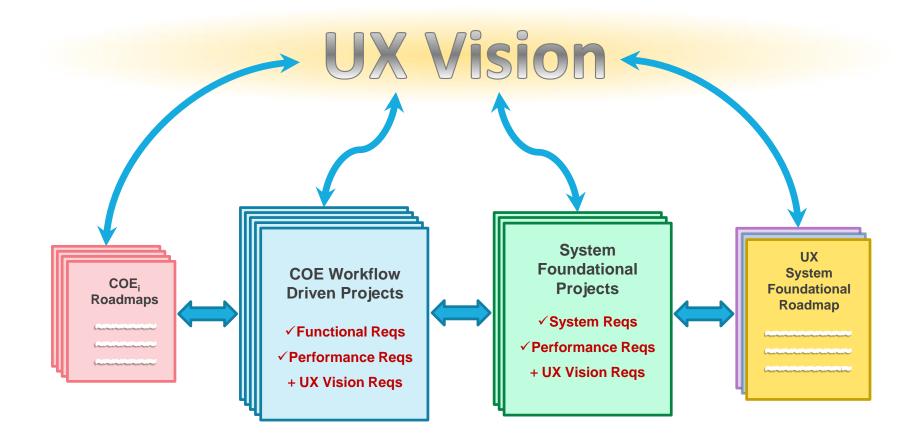
Objectives for CoE Engagement



- 1. Test/refine ability to insert & apply UX Vision into ongoing project
 - What works, what doesn't?
 - Capture & utilize lessons learned
- 2. Test/refine ability to insert & apply UX Vision into a planned project
 - Learn/refine selection criteria for an ordered/phased UX Improvement Roadmap
- 3. Quantify the value that UX Vision brings to CoE Workflows/Applications
 - Discover which metrics should be base-lined
 - Discover which UX Vision elements give the most "bang for the buck"
- 4. Iteratively refine the UX Vision and UX Improvement Roadmap
 - Agilely adjust the Vision based on success of proposed UX behaviors
 - Discover details of Roadmap use
 - Schedule, resourcing, and budget impacts
 - UX staffing profile (including skill sets)

UX Opportunity Generation Process





UX ADL/4.0 engage COEs to generate
UX Improvement Opportunities & Update Vision