Infusion of Human Centered Design as a powerful tool for workforce engagement, satisfaction and retention

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Presenters

Ruth Schwartz
State of Michigan

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CGI

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CGI
Agenda

1. What is Human Centered Design (HCD)?
2. Impact on Key Stakeholders
3. Case Studies: Solving Human Problems
4. Importance of Empathy & Experience
72% of our client executives identify overcoming internal resistance to embedding a digital-first culture as the top barrier to implementing digital transformation.

CGI Voice of Our Clients, 2018
Leverage a Digital Strategy and Transformation Approach focused on all three areas of transformation.

**Change organization**
- Evaluate your leadership
- Revise structure
- Adjust appetite to risk
- Modernize the culture and environment
- Enable the curious employees
- Make decisions based on insights
- Encourage innovation and collaboration

**HCD as a key change agent**
Laser focus on customer and employee experience

**Change the game**
- Optimize the customer experience across all touch points
- Make decisions based on insights
- Increase innovation and collaboration
- Create new market opportunities, products and services
- Explore new business models
- Think outside-in, partner more
- Be frugal, simplify
- Speed up and become agile

**Leverage new technology**
- Move to real time integrated operations
- Automate as much as possible
- Leverage new technology
- Take advantage of connectivity and cheaper economics
Your workforce is mandating transformation

Human-Centered Design transitions human problems into tangible outcomes

Draw inspiration from users

Create engaging experiences

Address critical business needs
## Changing the conversation

<table>
<thead>
<tr>
<th>Business problem</th>
<th>Human problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disparate systems &amp; connectivity</td>
<td>Users expect better experiences</td>
<td>Deliver user-centric experiences to address common pain points</td>
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<tr>
<td>Systems are siloed and critical views don’t exist</td>
<td>Internal users often lack visibility and real-time insights</td>
<td>Create role-based views (&quot;single pane of glass&quot;)</td>
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<tr>
<td>Lack of alignment</td>
<td>Agencies often siloed which leads to inconsistent experiences across many systems</td>
<td>Leverage HCD-driven design to align key stakeholders</td>
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<tr>
<td>Low adoption rates</td>
<td>Low user trust in new application rollouts</td>
<td>Consistently deliver cohesive experiences to drive engagement over time</td>
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</table>
There’s an Excel spreadsheet that multiple departments contribute to everyday, have been for decades. We found no one uses it. They all thought someone else was using it.

Learn
Connect with your customers and work to deeply understand their unmet needs and motivations, industry success models and market shifts. Focus on opportunities to solve key problems.

Dream
Generate ideas to address high value opportunities. Align stakeholders around a vision for the future and create an actionable plan for change.

Realize
Put your ideas into action build, test and adjust. Build incrementally toward the vision with smaller risks to drive traction.
User-centric experience design drives differentiation

Example overview of the process

**Discovery**
- Research
- User interviews
- Heuristic evaluation
- Competitive analysis
- Current state analysis

**Strategy**
- Personas
- Journey mapping
- Story boarding
- Findings & recommendations
- Project roadmap

**Design**
- Information architecture
- Interaction design
- Visual design
- Usability testing
- Content writing

**Implement**
- HTML/CSS support
- Configuration
- QA testing support
- Launch monitoring
- Configuration
- UX metrics

**Monitor**
- A/B testing
- Heat mapping
- Metrics analysis
- Design iterations
- Optimization

Example work items:

- Needs, motivations, goals, pains
- UX/UI, prototyping & validation

Change Management is essential for all

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How does Human Centered Design help your key stakeholders?

Case studies…
CASE STUDY

State of Michigan
Chart of Accounts
Standardization
How do we:

- Help *managers* speak a common language across financial management processes
- Keep key *stakeholders* from questioning inconsistent information
- Keep *analysts* confident in the data in a single source as opposed to leveraging multiple external solutions for reporting
- Ensure *employees’* knowledge, skills, and abilities are transferrable across departments throughout their career progression

**HUMAN PROBLEM**

**HUMAN IMPACT**

- *Lower employee morale* – inability to be responsive to some requests & potential impaired career progression
- *Decreased employee productivity* – time-consuming and costly to respond to changing environment
- *Key stakeholder frustration* with information
State of Michigan

WHERE WE WERE
Coding block and chart of accounts – the problem

During our ERP Implementation, the coding block & chart of accounts was a major focus

- Different ERP coding block
- Standardizing coding block usage was an explicit goal
- Required significant agency participation
- No one mapping of the old to new coding block – one (or many) for each agency
- The new chart of accounts, conversion mapping, changes to legacy systems, training, and other related areas represented significant work efforts and organizational change management efforts for the State

The then present-state had evolved over decades

- Legacy system implementation not approached with a standardization objective
- Legacy COA usage evolved over two decades of reorganizations and changing regulations
- Online elements to represent data-entry reduction tools had become COA elements
- Due to non-standardized COA elements and limitations of the system – broad use of Administrative Revolving Funds had grown over time, weakening budgetary control, projection, and reporting capabilities
Frequency of use for selected elements on R*STARS transactions

- **ACD1**: 33%
- **ACD2**: 28%
- **ACD3**: 25%
- **Grant**: 36%
- **Project**: 48%
- **MPC**: 12%
- **Agency Function**: 94%
- **Program**: 56%
- **Agency GL**: 97%
- **Index**: 97%
- **PCA**: 97%
- **RTI**: 20%

**Agencies Using**
- ACD1: 9
- ACD2: 5
- ACD3: 9
- Grant: 14
- Project: 19
- MPC: 17
- Agency Function: 26
- Program: 34
- Agency GL: 40
- Index: 36
- PCA: 40
- RTI: 37

**Mapping issue affects conversion, reporting, and interfaces.**

**Likely affected by COA standardization.**

**Coding reduction – change issue.**
## Diversity of meaning & use

<table>
<thead>
<tr>
<th>Selected Code</th>
<th>Agencies Using</th>
<th>Example Agency Uses</th>
<th>Expense Classification</th>
<th>Revenue Classification</th>
<th>Project/Grant Billing</th>
<th>Budget</th>
<th>External Reporting</th>
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Three largest agency users of selected elements

**Key Points**

1. Elements with lowest frequency use overall are heavily used by certain agencies.

   Certain of the lower use elements are used on all or nearly all transactions for particular agencies. They are also used in agency budgeting and billing processes.

   Some of these agencies use all or nearly all of the current coding block elements and will have the greatest challenge in coding block mapping, data conversion, and reporting.
Michigan agencies by transaction volume & extent of coding block usage

<table>
<thead>
<tr>
<th>Agency Transaction Volume</th>
<th>Use of Coding Block</th>
<th>Likely conversion issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 100K</td>
<td>No Use of Cost Accounting or Agency Objects</td>
<td>Highest level of coding block mapping, reporting, and training issues</td>
</tr>
<tr>
<td>500K</td>
<td>No Use of Cost Accounting Uses Agency Objects</td>
<td></td>
</tr>
<tr>
<td>800K</td>
<td>Uses Projects and/or Grants &amp; Agency Objects</td>
<td></td>
</tr>
<tr>
<td>1 Million</td>
<td>Uses only one ACD field &amp; Agency Objects</td>
<td></td>
</tr>
<tr>
<td>2 Million</td>
<td>Uses all or nearly all Elements</td>
<td></td>
</tr>
</tbody>
</table>

**Agencies in Shaded Area**
- 92% of all transactions
- 71% of all users
- 96% of all grant transactions
- 94% of all project transactions
- 82% of all defined cost accounting elements
- 67.2% of all fund codes
- 89.8% of all organization codes
- 98% of all ACD1 transactions
- 100% of all ACD2 transactions
- 99% of all ACD3 transactions
- 98% of all agency budget lines
- 48 of 63 agency systems to be replaced
- 157 out of 190 interfaces

**Agency Objects**
- No Use of Cost Accounting or Agency Objects
- No Use of Cost Accounting Uses Agency Objects
- Uses Projects and/or Grants & Agency Objects
- Uses only one ACD field & Agency Objects
- Uses all or nearly all Elements

**Likely conversion issues**
- 92% of all transactions
- 71% of all users
- 96% of all grant transactions
- 94% of all project transactions
- 82% of all defined cost accounting elements
- 67.2% of all fund codes
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- 99% of all ACD3 transactions
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- 48 of 63 agency systems to be replaced
- 157 out of 190 interfaces

**Highest level of coding block mapping, reporting, and training issues**
- Treasury
- State
- State Police
- DTMB Consolidated
- State Building Authority
- DTMB - Capital Outlay
- Attorney General
- DTMB - IT
- DTMB - M&B
- Education
- Corrections
- Human Services
- Transportation
- Community Health
- Natural Resources
- Environmental Quality
- Military & Vet Affairs
- LARA
- State Police
- State
- DTMB Consolidated
- State Building Authority
- DTMB - Capital Outlay
- Attorney General
- DTMB - IT
- DTMB - M&B
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- Transportation
- Community Health
- Natural Resources
- Environmental Quality
- Military & Vet Affairs
- Education
- Corrections
- State
- State Police
- DTMB Consolidated
- DTMB - Capital Outlay
- DTMB - IT
- DTMB - M&B
- Attorney General
- LARA
State of Michigan

WHY WE STANDARDIZED
Standardization to address the human problem

- A uniform use of COA codes statewide
- Increased accuracy & effectiveness of the COA
- Standardized flexibility among departmental use, maintaining centralized data integrity
- Improved access to summary level data while providing drill down capability to detail level data
- Improved transparency
- Increased ability to leverage shared services
- Increased career mobility & growth opportunities for financial professionals between & across departments
Standardization example

Agency Code 3
Grant
Index
Multipurpose
Organization
Program
Project
PCA

Kent County
Dist. 6, Genesee County, M-57
Region 1 – Livingston Cty Plus #230
Wayne County
McLeish Building
MCB Hannah
STD-Facility #0-003781
MSP Bay City State Police Post

Location
State of Michigan

WHAT WE DID
Standardization strategy

- Conducted **working sessions** specifically focused on use of COA codes statewide & underlying intent
- Included **stakeholders across functions & agencies**
- Identified **best use of all elements** – focused not only on today but also tomorrow
- **Strong executive support** for standardization – from governor down, all focused on common goal

### Core functions of chart of account elements

**Reporting**
- CAFR
- SEFA
- State Transparency Portal
- State Expense Budget
- State Revenue Budget
- Statewide Spending Plan
- Agency Spending Plans
- Agency Budgets
- Project & Grant Budgets
- CMS 64
- FED 269
- Agency – Specific Reports

**Budgeting**
- Central App Security
- Departmental Security
- Inter-Agency Cost Allocations
- Labor Cost Distributions
- Intra-Agency Cost Allocations

**Securing & Approving**
- Statewide Cash Pool (for investments)

**Pooling / Allocating**
- Valid/Invalid Combo Tables
- Requirements Tables
- Inferences (Accounting Templates/Profile)
- Department-based COA’s (Object/Rev)
Standardization results

- **Consistent, standardized, & comprehensive** use of COA elements statewide
- **Elimination of the use of** Administrative Revolving Funds
- **COA elements used for their intended purposes enabling the powerful, automation capabilities of the ERP solution**
- **Flexibility** to address unique business & organizational needs
**SOLUTION**

- Intimately engaged and aligned agencies on a transformed and standardized Chart of Accounts and processes
- Leverage best practices of COTS product
- Executed on wide-ranging change management plan that facilitated adoption

**BENEFITS**

- Increased efficiencies
  - Centralized end user support
  - Responsive to changing environment
  - Ability to stay current with technology
  - Standardized reporting – increasing productivity
- Improved career progression and reduced training time for our financial management workforce
CASE STUDY

Wake County, NC
Business Process Transformation
HUMAN PROBLEM

- Business processes were not being reviewed regularly
- The whole process was not being evaluated with upgrades
- Communication break downs between departments added to inefficiencies
- Training and knowledge transfer was being done by exiting employees passing forward bad habits

HUMAN IMPACT

- User frustration with the system was being propagated
- Inefficient processes continued and slowed down users
- Project burnout as employees would put time and effort into a system upgrade but not sense things would/did change
57% of public sector innovators “not often” or “never” co-create innovations with other government agencies.

“States increasingly recognize the value of engaging other members of their ecosystem to spur ideas and co-create innovations and should look to a broad array of partners to spur innovative ideas. Expanding their ecosystem and creating new partnerships could generate a completely novel approach to solving a government problem.”

NASCIO
The Future State CIO

Personas help to understand the human impact

**VALERIE, SALES REPRESENTATIVE**

Valerie works for a local auto parts company in the sales department. She has been with the company for five years and her boss trusts her with responding to business solicitations, although she usually looks over Valerie’s pricing quotes. Valerie doesn’t consider herself particularly “tech savvy”, although she is starting to enjoy using Facebook in her free time.

**A Day at Work**
Valerie has many responsibilities in her company and navigates many different supplier and vendor self-service systems. She only uses the local government VSS a few times a year to check for open solicitations, respond when the seasonal parts she supplies are needed and to update any vendor information.

**Motivators**
- To win more work from local government.
- To maintain a good relationship with the government.
- To become self-sufficient on VSS and to need less help from her boss and from the government’s Procurement Office.

**Work Style: Follow the Directions**
“[I know if I miss something, we could lose the bid. I usually get someone to check it over before I hit submit, just to double and triple check all my T’s are crossed and the I’s are dotted].”

**Wow Factor**
“I know this isn’t Facebook or anything, but I wish it was as easy to know what to do and where to do it without asking for help.”

“**We are a local business and I know we can deliver the best quality for a good price to the government. We should be able to win the bid, but we can’t afford to make one mistake in the VSS.”**

**Criticiality of System**
“[I can’t figure out how VSS works, we could lose business and if business goes down I could lose my job].”

**System Usage**
- Primary: Checking for solicitations, responding to solicitations
- Secondary: Updating vendor address information

**Pain Points**

**Direct**
- “I have to use so many different sites, they all look so different and they have different names for the same thing. Things are never where I expect them to be”
- “I only go in to the system a few times a year, I always forget where things are”
- Valerie gets confused when it comes to moving in and out of the system, for example when she has to download or upload attachments.
- She tries to use the VSS ‘cheat sheet’ which the Procurement Office created for vendors, but she usually ends up calling the office for help anyway

**Indirect**
- Valerie worries about the Procurement Buyer at the government office retiring and if the next person will be as patient with her questions.
- She always prints out the entire solicitation response to check it over before submitting.

Motivation:  50%
Frequency of Use:  30%
Frustration:  20%
HCD supports envisioning an optimized future state of business processes
SOLUTION

- Holistic review of business processes (including in and out of the system).
- Identification of pain points and their downstream impacts
- Incorporation of short term updates and plan for larger policy or technical changes
- Improved communication and training plans

BENEFITS

- Increased engagement as employees feel ‘heard’ and able to contribute to change
- Improved process efficiencies and reporting
Listen — Understand — Act

“Digital empathy is a strategic choice to combine information and technology to listen, understand and act in a way that improves a customer’s situation.”

Gartner

Digital empathy can be added to products and services to: (1) make a customer’s life better, and (2) increase growth because companies that show high empathy have 50% higher earnings.

Products without digital empathy are passive, reactive and fragmented.

91% of CEOs say empathy is directly linked to financial performance.

38% of customers say the employees they interact with understand their needs.

Empathy is a key to transformation

Empathy helps understand what people are feeling and what they want to do.
Thank You.

Questions?
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References: In order of appearance

