MAKING PROJECT DECISIONS VISIBLE: Online Dispute Resolution Project Design, Structured Decision-making, and Visual Information Tools

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The authors presented on this topic during the International ODR Forum 2019 in Williamsburg, Virginia. The goal of this presentation was to share practices and ideas that have worked well in the design phase of an Online Dispute Resolution (ODR) pilot project for the State Courts of Colorado.

Introduction

Court employees working on multiple projects are often overwhelmed and under-resourced. To ensure engaged participation by all relevant experts, stakeholders and decisionmakers, it is important to have empathy for their experience of cognitive overload and information noise. Attention of the right people at the right time is the key to success in court projects, especially projects proposing a large system change such as online dispute resolution (ODR). Project management is optimized by cognitive attention management and contextual engagement of stakeholders.

Engaging internal stakeholders should be thoughtfully done as better attention management of court personnel’s limited cognitive capacity and time will maximizes the planning group’s “gestalt” of the value, if any, of proposed new major projects. Visual facilitation can also increase stakeholder engagement to bring clarity to project design decisions. Although the up-front decision to use visual facilitation tools may take resources due to the engagement of a visual facilitator, this will pay off in project planning.

Structured decision-making combined with visual information support provides a balanced framework for maximum engagement early-on. Many of these tools are simple but profound when applied thoughtfully.

Are we there yet? How Visual Props Support Cognitive Attention Management:

Innovation projects such as this ODR pilot have a lot in common with way-finding through a foreign city. We need orientation about where we are and where we are going. Project roadmaps are common tools to assist in orientation as they are more than metaphors. A project roadmap literally can provide an overview, direction and way-finding. It supports both informational and emotional needs, while keeping working attention available for the task at hand.

Visuals also support the interdisciplinary nature of ODR projects. Experts from various backgrounds contribute in the language of their own expertise. To keep people on track and make the maximum use of their expertise and time, it is helpful to reduce “translation” noise
and effort among members of an inter-disciplinary stakeholder team. When the project manager creates a visual work culture, it becomes natural for experts to contribute in similar ways. If needed, the group can set an expectation on how expert documentation will be shared with the group.

Another benefit of a visual framework is making mental models visible and explicit instead of assuming that everyone has the same model in mind, a visual framework externalizes the concepts. Incorrect assumptions or unrealistic expectations for the group or individuals can be revealed and addressed in an early stage so that late-stage project derailment due to mis-communication can be avoided. This visual approach has been extremely helpful for the ODR Working Group for efficient and effective collaborative decisions as it has created a common language and way of working within the group.

*The Benefits of Decision-Making with Visual Support:*

The following list summarizes the benefits of using visual tools when working with a group:

- **Context:** Easier to understand environment, find current position on roadmap, decide on direction
Creativity: Can incorporate design thinking, creative problem-solving and better explore process simplification

Cognitive energy: Externalizing thought process to counter tunneling bias and allow development of multiple scenarios.

Engagement: Participants join pattern finding and identify missing elements.

The first step is to structure the decisions through methods of thinking and decision architecture. Thinking architecture offers a systematic procedure to split up a complex problem into a sequence of cognitively easier thinking steps that can result in making better choices. Decision framing is one of the methods. It is not always obvious whether there is a decision to make, an issue to discuss, or a process step to naturally follow. Decision-framing makes the sequence of decisions explicit. The options to decide on can be influenced by the way they are structured. A common example is: opt-in or opt-out. These general principles of decision architecture are useful to keep in mind when setting up a structured decision-making process.

The second step is to visualize the decision-making process including the decisions to make and the scenarios to choose from. Without specific interventions, humans have a natural bias to find short-cuts or easy routes to decisions. Cognitive tunneling bias makes people often only focus on the first option among many. “The limits of working memory generally allow the development of one to four hypotheses, only one of which is likely to receive a thorough analysis. (...) the mind tends to fixate on a single, and early developed option” (Kendler, 2004). The take home lesson for meeting leaders is clear: if you want to influence the outcome of the decision-making process: start with your preferred option.

As a participant, you could ask the meeting facilitator to change the order of the agenda to start with your preferred option. Visual frameworks can counter this effect, for example by providing a roadmap that includes all scenarios. While one option is discussed, notes can be displayed in connection with this particular option, while it remains visible to all participants that multiple options are on the table. Attention can be directed easily between different options. Options can be compared and contrasted. “There is tremendous benefit to externalizing the cognitive task through the use of visual artifacts. When present in the context of a decision environment, displays of related information, and their visual structure, have a noticeable [positive] effect on the decision making process” (Kendler, 2004). Project cartography can be broken down into the following activities:

1. Show the landscope (general roadmap and challenges – the business context);
2. Pick the destination (project goal);
3. Identify possible routes;
4. Highlight the cross-roads for the different routes (defined by criteria such as budget, time, etc).
**Case Study: Colorado State Courts Online Dispute Resolution Working Group**

To provide some context, this is how Colorado’s online dispute resolution journey started:

- **2017:** NCSC national survey 80% of respondents wanted online access to local courts, including an ability to ask for court staff guidance rather than having to make in-person trips to a physical courthouse;
- **January 2019:** Pew Trusts launched its court modernization social initiative: To encourage state courts to adopt online dispute resolution and portals;
- **January 2019:** Colorado State Court Administration signed a Letter of Intent with Pew Trusts and the National Center for State Courts to explore ODR;
- **March 2019:** The State of Colorado Judicial ITS Governance Committee approved the ODR Pilot Charter;
- **April 2019:** Colorado Office of Dispute Resolution assembled a governance group “Online Dispute Resolution Working Group” to meet regularly to explore planning an ODR pilot in Colorado;
- The task of this Working Group is to design a pilot ODR project with the potential to expand implementation throughout all Colorado State courts.
- The goal is to start the ODR pilot project in 2020 within a small number of test courts.

The following internal courts stakeholders are participating on the ODR Working Group:
The project manager worked with a staff member who was also trained in visual facilitation; together we worked with the following main ideas on cognitive attention management:

- Keep it simply simple (“KISS”) - participate in only small bits of the entire group of diverse stakeholders;
- Use remote video conference to make meeting participation and recordation easy - those who are unable to attend can watch recorded meetings to stay current with the discussion;
- Limit meetings to one hour, one decision/topic;
- Set up online discussion forums for documents, dialogue and links to recorded meetings so that it is easy and fast for all to know where you are in the process;
- Make smart use of people’s working attention: Provide "just in time" concise information prior to each meeting, selected for only the decision to make. Post the information on the online discussion boards.
- The project manager should take an active lead as the information curator by sifting through relevant information with an eye to synthesizing the information needed for a particular decision. The project manager then can share bite-size portions of information rather than sharing long, text heavy documents. This can be balanced for reference and transparency, by keeping a layered information system that provide access to all docs in the online discussion board.
- Provide a simple and clear visual framework at the beginning of each meeting to provide overview, while clarifying what decision is the subject of the current meeting.

These ideas were incorporated in the project design with the following practical tools and philosophy:

- Limit meetings to online meetings and online project documentation location.
- Commit to short meetings: one hour, one decision
- Create small subgroups of 2-4 people to make recommendations to the larger group when needed (e.g., process simplification, draft requests for information, etc.)
- Use structured decision-making practices
- Orient participants by using visual tools

The following two visual tools provide examples of how the project manager worked with the visual facilitator to track the ODR Working Group decision-making milestones over the course of the planning phase and to develop a visual decision-making matrix. The goals of the visual
tools are to generate options for decisions in a non-biased way and then to apply mutually agreed upon criteria with which to evaluate those options.

Fig. 1. One meeting one decision the decisions milestones are illustrated with completed decisions in dark blue and future decisions in light blue.
Fig. 2. This shows a risk benefit analysis which invites stakeholders to develop their own scoring sheets based on standardized criteria. Visuals will allow a quick understanding of the decision-criteria and avoid biases which often lead to arbitrary decisions.

**Summary**

This presentation provided a case study in how one state used visual tools to assist in planning an ODR pilot project. The need to present information visually as well as to create a common roadmap are simple, yet powerful planning tools for multi-disciplinary stakeholder planning teams. Visual facilitators can ease cognitive overload and minimize decision biases so that better team decisions will result.
About the Authors:

Sharon Sturges, J.D., M.P.A., is the Director, Colorado Office of Dispute Resolution, Court Services Division, State Court Administrator’s Office. Prior to joining the State Court Administrator’s Office in 2015, Sharon engaged in private practice for over fifteen years litigating and mediating domestic relations matters. She has split her career between the law and non-profit management. While living in Alaska early in her career, Sharon served as the executive director for a community mediation center in Anchorage, where she focused on restorative justice practices and community mediation. In 2014, Ms. Sturges completed her master’s degree in public administration from the University of Colorado, Denver. Ms. Sturges is interested in increasing access to justice for self-represented litigants through better use of technology. For more information contact her at sharon.sturges@judicial.state.co.us

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References:

Eppler M.J. and Pfister R. (2010), Drawing Conclusions, Supporting Decision Making through Collaborative Graphic Annotations

Huang P. (2015), Empowering People to Choose Wisely by Democratizing Mindfulness and Thinking Tools

Kendler J. (2004), Visual artifacts as decision analysis and support tools

Visual tools, models and templates


Practical tools to trigger and support social innovation https://diytoolkit.org/

Diagrammer.com – free PowerPoint templates by Duarte design
ODR PROJECT DESIGN, STRUCTURED DECISION-MAKING, AND VISUAL TOOLS
3 TRUTHS OF OUR PROCESS

• “Cognitive overload” Court employees are overwhelmed and under-resourced but have multiple projects and information noise;

• Keep it simply simple ("KISS") - participate in only small bits of larger group;

• Roadmap, "just in time" concise information prior to each meeting for decisions, and visual tools to orient group on the roadmap.
COLORADO’S ONLINE DISPUTE RESOLUTION JOURNEY

• 2017: NCSC national survey 80% of respondents wanted online access to local courts, including ability to ask for court staff guidance rather than in-person trip to courthouse;

• January 2019: Pew Trusts launched social initiative: To encourage state courts to adopt online dispute resolution;

• May 2019: Colorado Office of Dispute Resolution assembles small team “Online Dispute Resolution Working Group”
TOOLS

• SHORT MEETINGS: ONE HOUR, ONE DECISION
• STRUCTURED DECISION-MAKING
• ONLINE MEETINGS
• VISUAL TOOLS
SHORT MEETINGS: ONE HOUR, ONE DECISION
STRUCTURED DECISION-MAKING
IT IS THE PROCESS, NOT THE STRUCTURE
PROJECT STAKEHOLDERS

ODR Project

- IT
- Public Consumer
- Data Unit
- Court Operations
- Judicial Officer
- Court Executive
STAY SMALL AND STRUCTURED

1. Use small groups 2-4: Who are the subject matter experts for the next decision?

2. How can we best provide recommendations to full group?

3. Allow questions get buy in from full group.
PROJECT TIMELINE

5/19
Project working group meets

6/19-8/19
Case Class selection/Goals and Measures

9/11/19
Process Simplification Subgroup meets

9/24/19
Process Simplification Subgroup Reports, Pilot Site Criteria Discussion, and RFP subgroup created

10/9/19, 10/23/19 - RFP Subgroup meets finalizes RFP

11/4/19
In person meeting with external stakeholders

12/10/19
Stakeholder comments considered and RFP finalized, 30 days response

1/10/20
Review committee assembled and RFP responses evaluated

1/1/20
Vendor contract awarded
VISUAL TOOLS
WE NEED ORIENTATION WHEN FACED WITH A "FOREIGN LAND"
SUPPORT INTERDISCIPLINARY WORK: MAKE MENTAL MODELS VISIBLE/EXPLICIT
WHY VISUAL TOOLS? WHAT’S DIFFERENT?

- Context: Easier to understand environment, find current position on roadmap, decide on direction
- Creativity: Can incorporate design thinking, creative problem-solving and better explore process simplification
WHY VISUAL TOOLS? WHAT’S DIFFERENT?

• Cognitive energy: Externalizing thought process to counter tunneling bias and allow development of multiple scenarios.

• Engagement: Participants join pattern finding and identify missing elements.
COGNITIVE CAPACITY
SCAFFOLDING WITH VISUALS TO OPTIMIZE

• Thinking and Decision architecture boosts working memory, decision makers, and decision environments.

~ Peter Huang
COGNITIVE CAPACITY
SCAFFOLDING WITH VISUALS TO OPTIMIZE

“The limits of working memory generally allow the development of one to four hypotheses, ONLY ONE of which is likely to receive a thorough analysis. (...) the mind tends to fixate on a single, and EARLY DEVELOPED option”

“There is tremendous benefit to externalizing the cognitive task through the use of visual artifacts”.

“When present in the context of a decision environment, displays of related information, and their visual structure, have a noticeable effect on the decision making process”

~Jonathan Kendler
PROJECT CARTOGRAPHY

• 1. Show the LandScope
• 2. Pick the Destination
• 3. Develop the Routes
• 4. Mark the Crossroads (defined by criteria, for example: time, money,
ODR PILOT – Colorado Judicial Decision-making milestones:

- Build or Buy
- Case Class
- Goals & Measures
- Process simplification
- Integration with current system
- Engage stakeholders
- Pilot Sites
- Pilot Details
- Marketing

Decision-making milestones.
OUR DECISION MILESTONE FOR TODAY

In sub group
- Process mapping
- Process simplification
OUR DECISION MILESTONE FOR TODAY
GENERATE OPTIONS

EVALUATE OPTIONS

?  

YES
VISUAL SYSTEM TO SCORE OPTIONS  
BUILD OR BUY FOR A PILOT? (1-4)

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STAKEHOLDER RISK BENEFIT ANALYSIS
WHAT’S THE TAKE-AWAY?

ALIGN VISUAL FRAMEWORK WITH STRUCTURED DECISIONS
QUESTIONS?

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