

A person in a red jacket and black pants is climbing a large, textured ice wall. They are wearing a helmet and using ice axes and crampons. A blue rope is visible on the left side of the ice wall.

Qualitative Research

The QDA Way

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Agenda

- Facilitator Bio
- WBB Intro
- QDA Origin & History
- QDA Issues
- CAQDAS
- Working Session

Biography

Matthew Loxton is a Principal Analyst at [Whitney, Bradley, and Brown Inc.](#) focused on healthcare improvement, and serves on the board of directors of the [Blue Faery Liver Cancer Association](#). Matthew is a regular blogger for [Physician's Weekly](#), and hosts the weekly [#MEQAPI chat on healthcare improvement](#). Matthew also trains others in the use of MAXQDA. You can find his contact info in his [MAXQDA professional trainer profile](#).



WBB Healthcare



Mission and Value

- **Mission:** *To help our clients improve healthcare delivery and outcomes in a challenging social, medical, and business environment while providing best in class service.*
- *WBB Healthcare provides consulting and analytical services across three pillars: Strategic Management Analysis (SMA), Monitoring and Evaluation (M&E), and Quality Assurance and Process Improvement (QAPI).*

Quality Comes First

- **M&E:** *Providing a framework for measuring performance and achieved results. The M&E goal is to improve management of inputs, outcomes, and impacts in support of achieving operational and strategic goals. M&E includes Performance Management, Program Evaluations, Lessons Learned, Surveys, Decision Informatics, Knowledge Management, and Establishment of service level agreement (SLA).*
- **QAPI:** *Providing an overall framework for identification and selection of performance indicators and metrics, performing root cause analysis (RCA), and implementing continuous improvement. QAPI includes application of Process Modeling, Process Mining, Process Simulation, Health Systems Engineering, Design Thinking, ISO 9000, and Lean Six Sigma.*

WBB Quality Approach

- WBB uses mixed methods in the operational application of Healthcare Improvement, including Lean Six Sigma, ISO9000, Lessons Learned, Organizational Change Management, and Communities of practice (CoP).
- WBB M&E looks at the effectiveness of interventions, programs, and projects in achieving expected or unexpected performance goals, and QAPI is the engine to identify the root causes of barriers to excellence, and carry out continuous improvement and remedial interventions. MEQAPI is the integration of both, and forms part of the WBB vision of Health Systems Engineering.
- WBB applies MEQAPI to healthcare policy implementation, technology deployment, and clinical or administrative workflow optimization

Mixed Methods

Mixed Methods gives us the best combination of rigor and flexibility, and here are some examples of how each applies to our work in healthcare improvement

- **Ethnographic**
 - What is the participant's role,
 - What is their background & experience, which VISN & facility, etc.
- **Phenomenological**
 - Participant's lived experience with application, workflow, environment
 - Significant event or occurrence
 - Outcomes, good or bad
- **Nomothetic**
 - Pre-derived categories
 - What was effective, what was not effective, What is recommended for future players. What was expected, what occurred, why was there a difference.
 - Specific domains
 - Interview focused on health it, clinical workflow, process changes, policies
- **Grounded theory**
 - Data gives rise to additional categories
- **Historiography**
 - explores the historical causes and environmental conditional from which policies, phenomena, and lessons arose

Qual/Quant Integration

- WBB mixed-methods qualitative methodology
 - Open enough to avoid missing novel or unexpected issues or causes
 - Focused enough to prevent vague or over-generalized lessons and recommendations
 - Output pipes into:
 - Discovery Informatics
 - Process Improvement
 - Lean Six Sigma
 - Training & education
- Provides an integrated and seamless process for business support

QDA Origin & History

Anthro & Ethno

- Main start with European Colonialists interested in *“other cultures”*
- Developed techniques of Field Studies
- Methodologies to collect qualitative data
- Performed analysis and synthesis
- Wrote stories, papers, books
- Got money, acclaim, exotic diseases
- Techniques applied to Anthropology, Ethnology, Criminology, Sociology, Organizational Psychology, etc

Purpose of Qualitative Analysis

Qualitative creates foundations for Quantitative

- Storyline articulation
- Theory formation
- Role description
- Category creation
- Delineation of Goals, Objectives, and Indicators
- Narratives and meaning

“Without solid qualitative foundations, quantitative measurement is arbitrary, illusory, and meaningless”

Field Research

- Direct observation and engagement
 - Sound recordings
 - Notes
 - Images
 - Video
- Found artifacts: objects and texts
- *Anything you can lay your hands on*

Qualitative Artifacts

- Texts ← *This is the main source*
 - Transcriptions
 - Line or paragraph numbers
 - Source reference
 - Etc
 - Existing documents, reports, studies, etc.
- Codes
- Memos

Done with the aid of:

- Colored pencils
- Code table
- Mosquito netting, bug spray, water purifier

Analytic Field Research

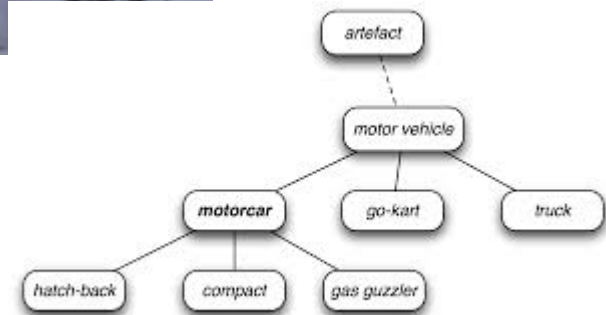
- Turn everything into a text
- Read the text (several times)
- Mark up sections with codes
 - identifier of the meaning and significance of the section
- Write memos
 - Personal notes, origin of docs, commentary on codes
- Enter into code table
- Seek clarification
- Rinse, repeat, report

Coding: Idiographic vs Nomothetic

- Create codes from the text (Grounded theory)
“Self-drawing picture”



- Apply codes from a corpus
“Impose structure”



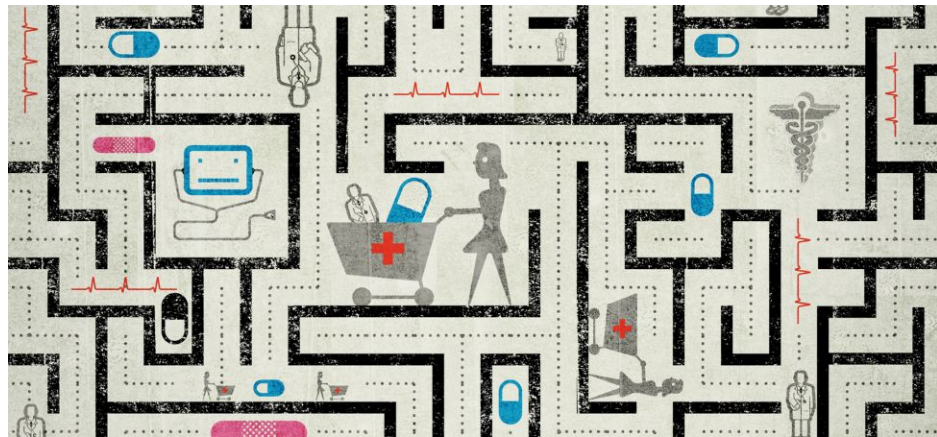
QDA Issues

Issues with Qualitative Research

- Manpower Intensive
- Hard to collaborate
- Low Inter-rater reliability
- Hard to replicate
- Data easily lost
- Slow
- Expensive

Computerize!

- MS Word
 - Insert Comments
 - Use Highlighter
- Excel table
 - Codes
 - Where used
 - Segments
- Macros, VBA, ETL



Example

to provide value to other VA organizations, as well. The LL program methodology is intended to provide the foundation for Continuous Process Improvement (CPI) within PE as well as within OIT's development and procurement of IT products.)

The knowledge that is captured via the KM methodology is distilled into valuable lessons learned and best practices that can be used to support evidence-based decision making throughout the VHA enterprise.

The Lessons Learned program is designed to contribute to increased effectiveness of VHA services and IT products by providing decision makers with valuable knowledge from previous and on-going development and procurement efforts. This knowledge will support evidence-based decision making at all levels of VHA by providing guidance for future IT investments.

As the KM methodology is integrated into PE's and VHA's daily operations, and as the sharing and reuse of lessons learned becomes institutionalized, the VHA will find itself on the path to becoming a "Learning Organization." A Learning Organization is one where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole (reality) together¹.

Comment [mhl5]: why not position this as a test-bed for the use of KM in other parts of the VA? Eg. Clinical settings

Comment [mhl6]: does this imply that the metrics will be those currently used to determine VHA services and IT product effectiveness? We should try to avoid adding many new metrics if possible.

Comment [mhl7]: #Purpose

Comment [mhl8]: #Domain

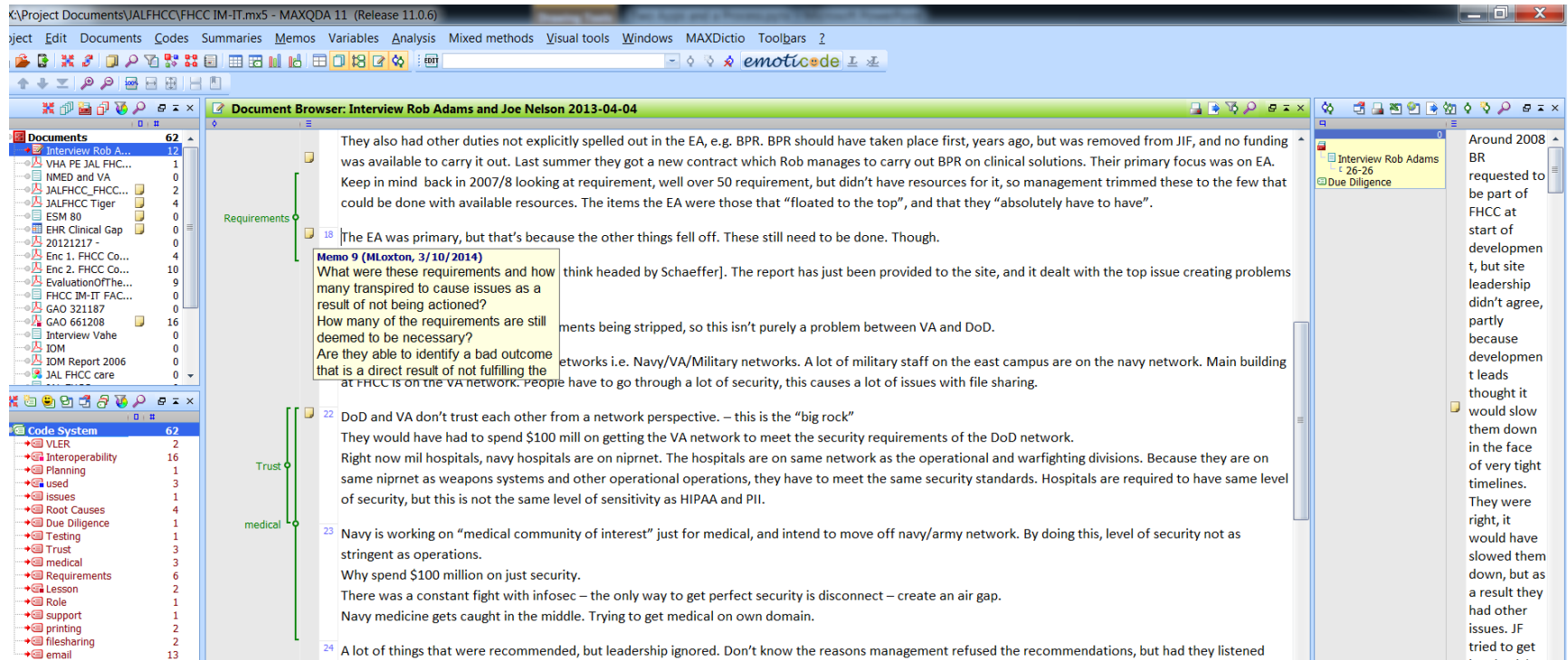
Comment [mhl9]: How do VHA executives feel about this, and is there an active senior sponsor for it?

Comment [mhl10]: Is this reflective of the aspirational emotions of the key VHA staff we work

- Highlighting & comments don't work well together
- Have to write macros to do the extraction
- Fragile and complex

CAQDAS

CAQDAS

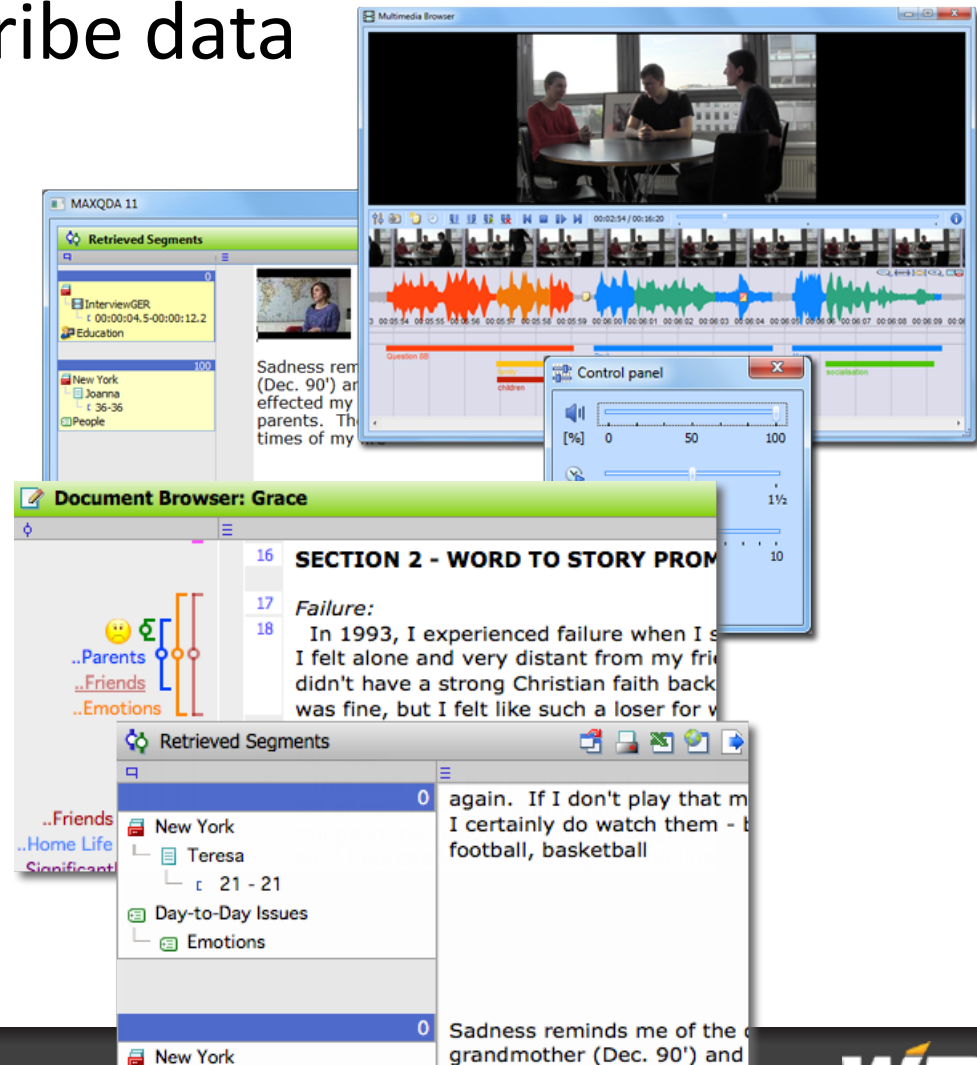


- Coding structures, tables, reports, graphics, clouds, matrix
- Sources include pdf, word, excel, audio, video –(no ppt)
- Memos, code memos, text memos, file memos, just memos
- Mobile app integration
- Inbuilt Logbook!

- MaxQDA, MaxApp

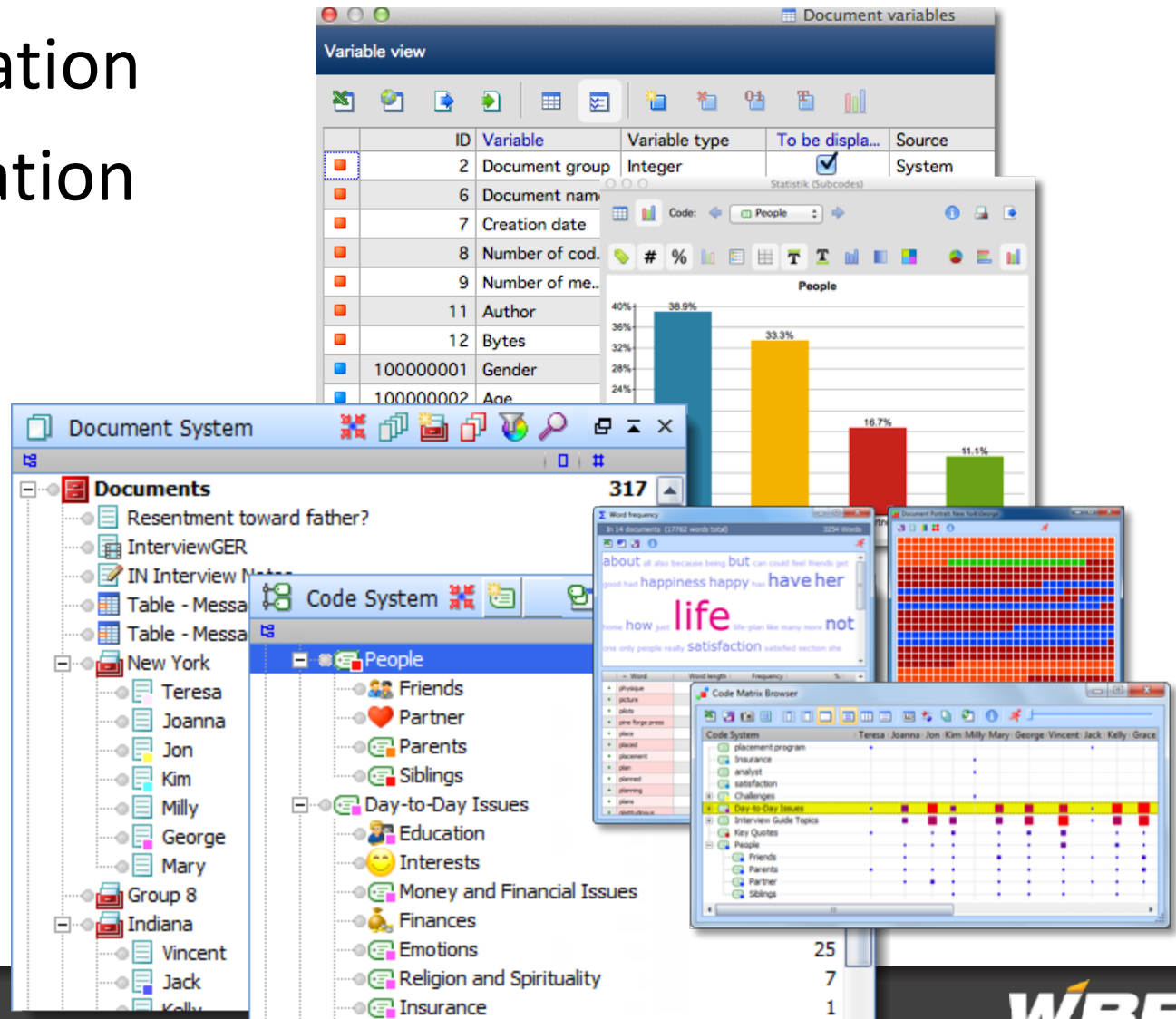
Retrieval and Coding

- Retrieve & Transcribe data
 - Documents
 - Audio
 - Images
 - Video
- Coding
 - Grounded
 - Applied
 - Mixed Methods



Transformation

- Categorization
- Quantification
- Depiction



Mobility and Fieldwork

- Collect Data
 - Images
 - Audio
 - Video
 - Memos
- Initial Analysis
- Transfer to QDA



MAXQDA Data Architecture

- Documents
 - Each respondent or participant as a document
 - Groups captured with Focus Group functionality
 - Surveys imported as a document per respondent
- Codes
 - Emergent or Imposed
- Variables
 - Describe attributes of the document or of the particulars of the person represented by the document
- Memos
 - Can be added at project, document, code, or text levels

Working Session

- **Tour:** using Pre-loaded “2018 AM MOC Data_example”
- **Watch:** Import and auto-code “2018 GU Impact data_example”
- **Do:** ASCO Team Import and auto-code “Ongoing Learning Journal_example”

2018 AM MOC (Tour)

- Describe import
 - Code system
 - Document
- Documents
 - Group vs Set
- Code System
 - Hierarchy
 - Memo
 - Code count
 - Code Sets
- Document Browser

2018 AM MOC - 2

- Rename Document Group
- Use Creative Coding to organize codes
- Browse coded segments

2018 GU Impact (Watch)

- Construct Code System in Excel
- Import Code System
- Import document from Excel
- Organize Code System
- Organize Document Groups
- MaxDictio Word Frequency
 - Identify potential codes
- Analysis – Lexical Search and autocode
- Update logbook

Ongoing Learning (Do)

- Construct Code System in Excel
- Import Code System
- Import document from Excel
- Organize Code System
- Organize Document Groups
- MaxDictio Word Frequency
 - Identify potential codes
- Analysis – Lexical Search and autocode
- Update logbook

Next steps

- Refining code system
- Exhausting data
- Analysis
- Reporting