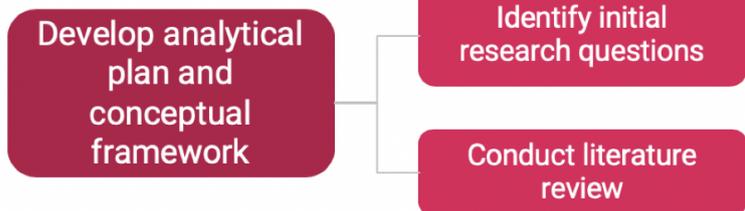# THE Four Stages of Analysis Made Easy with MAXQDA

Planning

Four Stages of Research

Stage 1

Identify the guiding questions that will shape the study

Develop analytical plan and conceptual framework
- Identify initial research questions
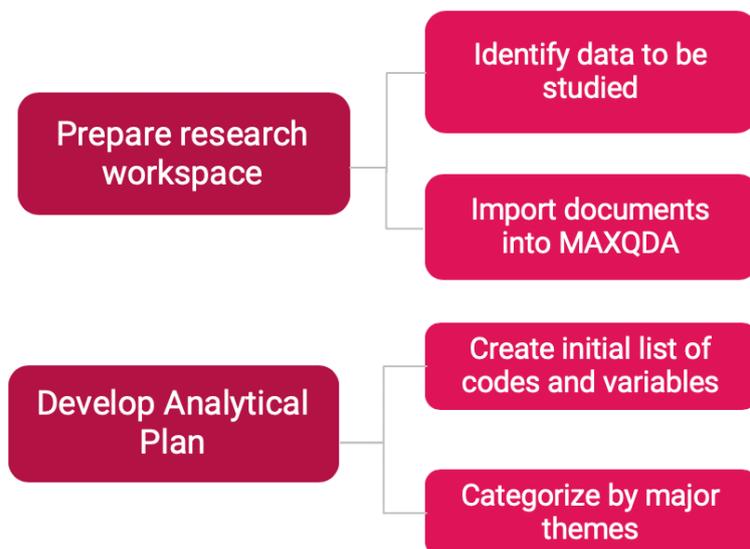- Conduct literature review

The **initial stage** of conducting research with MAXQDA is really no different from that of any other research project. You develop an analytical plan and conceptual framework for the research, by identifying initial research questions and conducting a literature review. This should provide an initial set of questions to create a conceptual framework for the project.

Creating as Workflow

Stage 2

Create the workspace and set up the process to evaluate the data

Prepare research workspace
- Identify data to be studied
- Import documents into MAXQDA

Develop Analytical Plan
- Create initial list of codes and variables
- Categorize by major themes

Once you identify your data, you can begin the process of creating a MAXQDA project and creating a workspace. This includes importing the documents into a project, deciding if you want to organize your documents into groups (which automatically creates a categorical document variable). You can also organize documents into sets, which enable further refinement of groups, but permit documents to be in multiple sets.

The next step is to develop an analytical plan for the actual content analysis. Create an initial list of document variables you want to use and develop a codebook of initial codes. The initial codebook is meant to provide a starting point. It will get refined and further developed as you begin to content analyze your data. Codes can be grouped into themes, and color-coded.
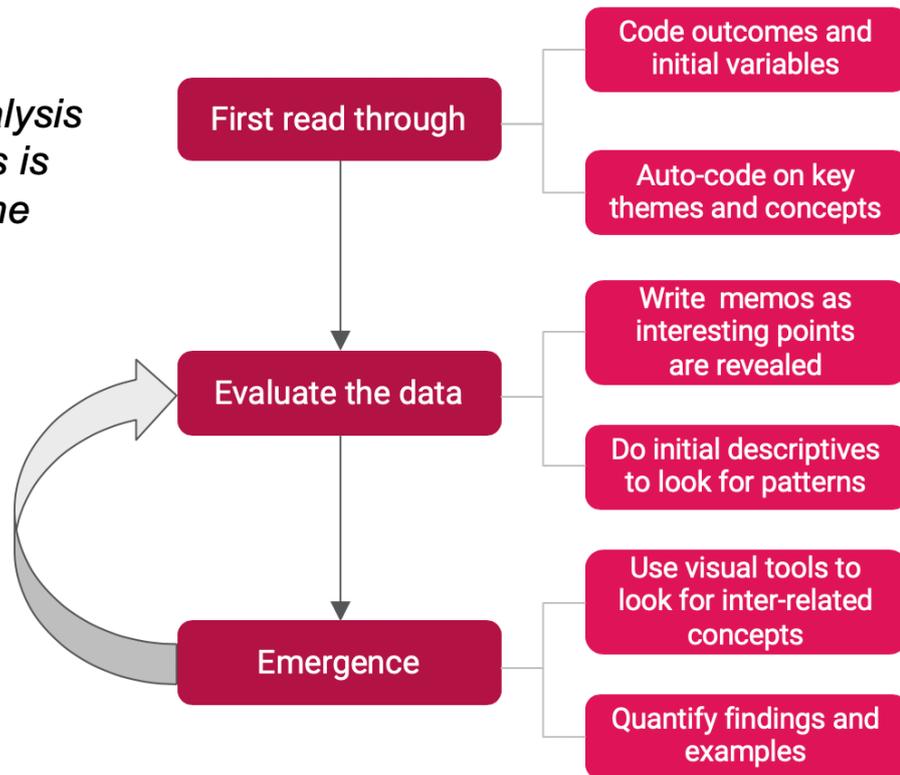

Document variables become important for doing mixed methods analysis.

Stage 3 - Thematic Analysis of Cases: The Art of Data Analysis

Stage 3

Thematic analysis of cases. This is the heart of the research.

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First read through ──────── Code outcomes and
                            initial variables

                            Auto-code on key
                            themes and concepts

Evaluate the data ───────── Write memos as
                            interesting points
                            are revealed

                            Do initial descriptives
                            to look for patterns

Emergence ───────────────── Use visual tools to
                            look for inter-related
                            concepts

                            Quantify findings and
                            examples
```

With your project organized, you are ready to begin the third stage of research – conducting a content analysis of your documents and doing a thematic analysis of cases. The first step is to read each document carefully and do a thorough content analysis. Code data using your initial codebook, but don't hesitate to add additional codes as you need. If you come across a concept that you didn't originally code, you can create the code, and then use MAXQDA's auto-code features to search for words that match your new code. Don't think of content analysis as a linear process. You will often want to go back to your data, as you identify new concepts you didn't originally expect to find.

Memo taking is essential. If you are reading more than a handful of documents, you will forget where you found an interesting finding. Use memos as a sort of digital notebook. Memos can be tied to documents (in the document browser), added in the document itself, or linked to specific codes. You can also create free memos. Your memos can be easily searched later.

Once you have coded your documents, you begin the process of analysis. This is where MAXQDA might seem overwhelming, because there are so many ways of approaching it. Think of this as the deep dive into the data. The way a researcher uses MAXQDA is

inherently a product of individual choices. The software includes numerous options, and it isn't as easy as just saying, do A, B, C, and D in this order. Much will depend on the nature of the project.

Tools to draw on...
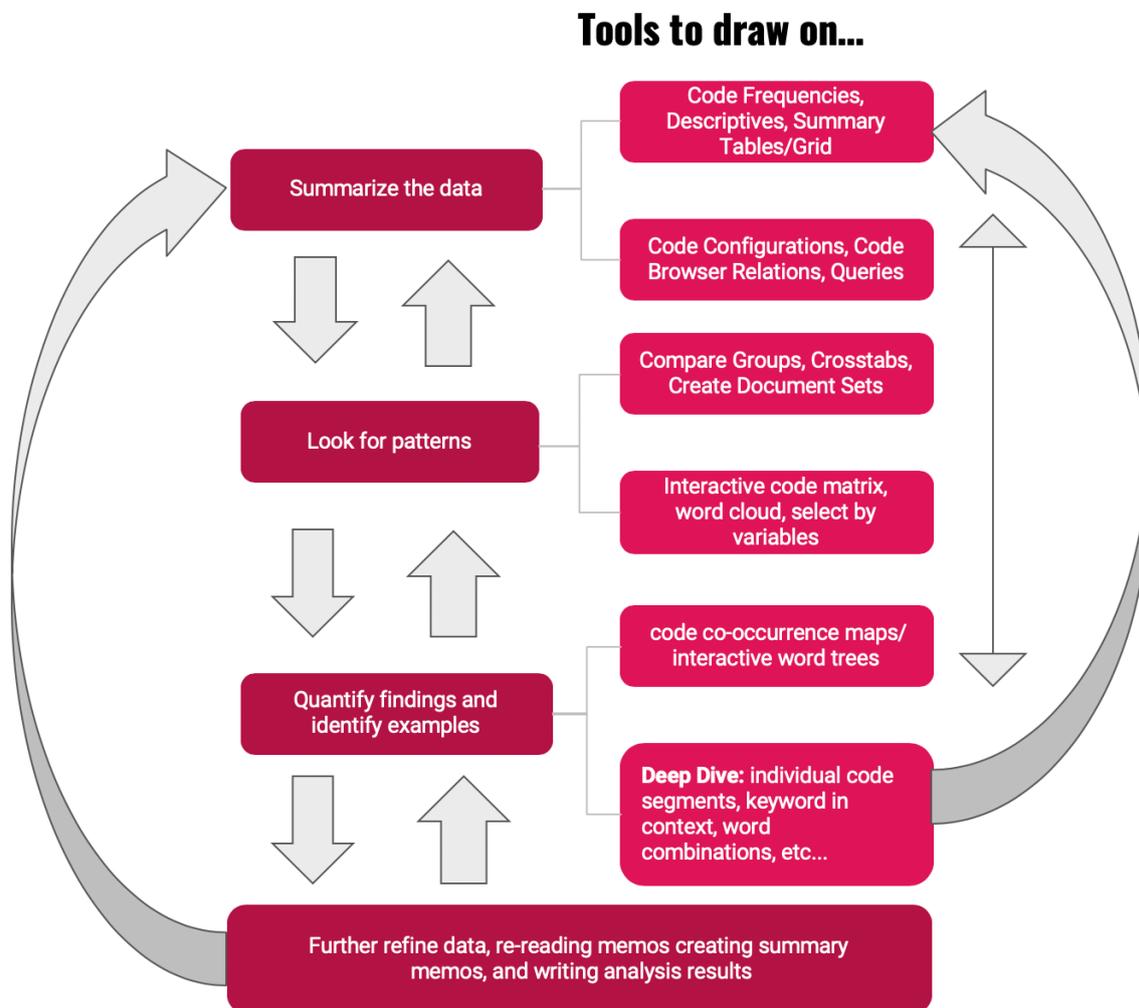
Using the analytical tools built into MAXQDA, you can identify patterns and themes and to begin to make sense of the over-all dataset. One way to start is to use the **code frequencies** tool to I determine the overall breakdown of codes in my data. How many cases involved particular concepts? (See tutorial on https://4stagesofresearch.com).

My next step is to further refine that. The MAXQDA Stats package includes the ability to run both frequencies and descriptive statistics.

Another tool is to go back to the I code-book and identify the core concepts. Once coding is done, select individual codes, and transform codes into variables. Then use MAXQDA's analytical tools to look first at the **descriptive statistics**. This is often an emergent process, and it certainly differs from project to project, but try to look at the data in multiple ways, and look for unexpected patterns, and then take advantage of more of the advanced tools, such as word trees and word clouds.

Stage 4 – Writing

Stage 4 | Writing, analysis, final product

Draw on the descriptive statistics, the coded segments, memos, and visual tools. This is not necessarily a linear process.

Stage 3 and 4 of the research processes often meld together, from coding to a thematic analysis of data, to writing results. This, too, is a much more fluid process with MAXQDA, as the researcher doesn't just finish the analysis and then switch to a word processor. Instead, the nature of the note-taking and exploring data encourage the researcher to go back to the project, looking at memos and coded segments to pick the best examples to write about, while also drawing on descriptive statistics of codes and variables. In the end, MAXQDA makes it easy to tell a story using qualitative examples. In qualitative and mixed-methods research, story-telling brings empirical data to life. MAXQDA uses the tag-line "The Art of Data Analysis." This is a perfect metaphor to approach much qualitative research. Artists have different methods to approach their craft. MAXQDA provides a palette, it is up to the researcher (dare-we-say artist?) to develop a work flow that accomplishes the goals of each project.

For more information

Dr. Michael Gizzi is a professor of Criminal Justice at Illinois State University. He is a professional trainer for MAXQDA.   There are detailed tutorials and further examples on his website: https://4stagesofresearch.com

You can contact him at mgizzi@ilstu.edu, mgizzi@gmail.com, or by phone at 01-309-831-6840.   Also available on iMessage or WhatsApp.