

Scaling **up** thematic synthesis: A technology-based research methodology framework

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Search

Agenda

Problem

So much data, so many sources, making sense, keeping track [.. more](#)

Digital Research

Scholastic search engines, reference management software, digital analysis tools, multi-platform functionality, research communities [.. more](#)

Technology-Based Thematic Synthesis Framework

Integrating digital resources to organize, code, analyze and archive [.. more](#)

Thematic Synthesis

What it is, when it is useful, what it reveals [.. more](#)

The Scaling Up

Wrapping Up

Problem

So much data, so many sources, making sense, keeping track [more](#)

- The volume of accessible research makes collecting and comprehending cumulative knowledge a daunting task.
- Google Scholar© has facilitated scholarly literature searches on specific topics (Fink, 2013), however, there still exists no easy way to organize the hundreds or thousands of articles on a particular topic that are dispersed far and wide in open-access and pay-protected digital archives.

Digital Research

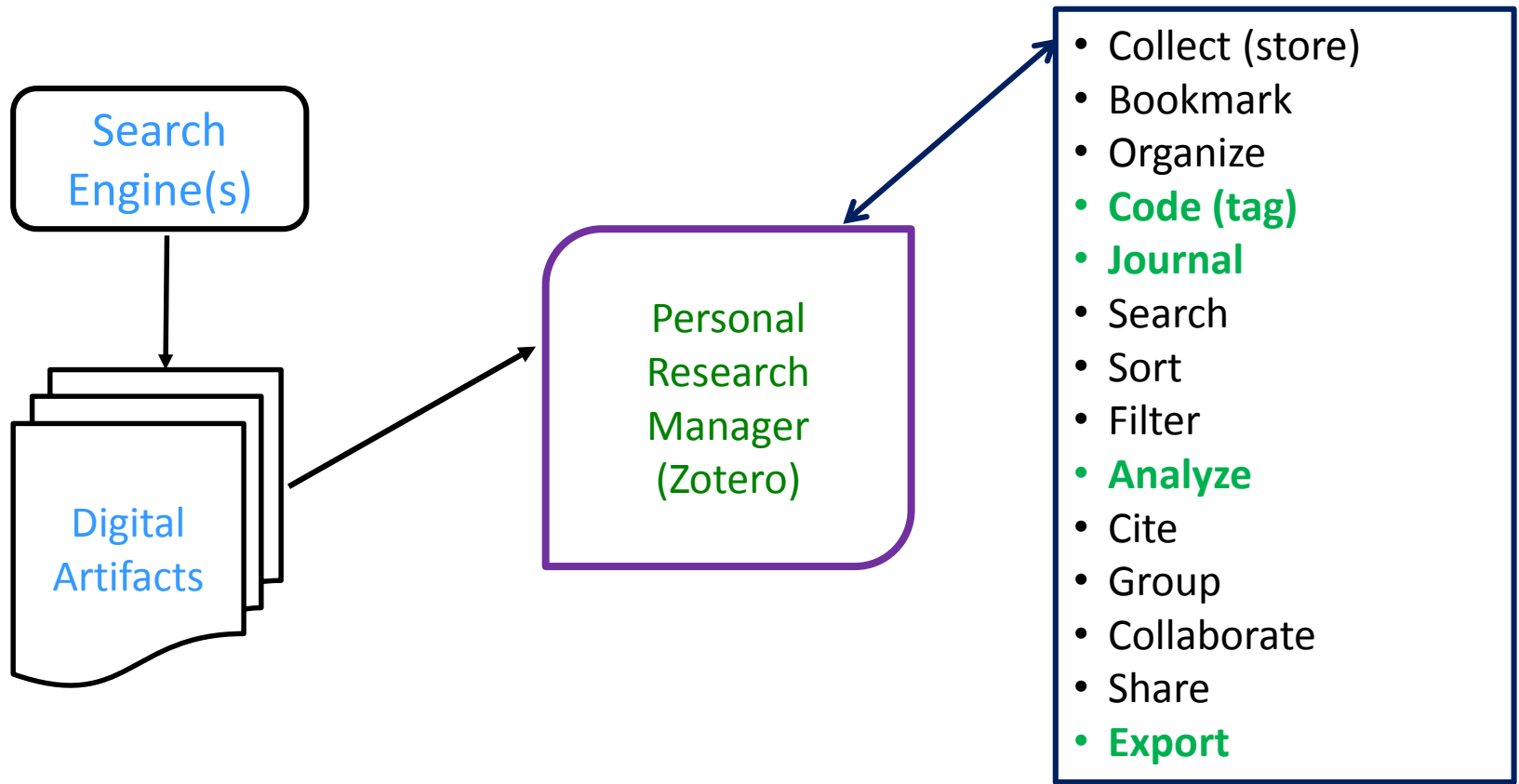
Scholastic search engines, reference management software, digital analysis tools, multi-platform functionality, research communities [.. more](#)



Collect Organize Cite Sync Collaborate

Grab your research with a single click.

Technology-Based Thematic Synthesis Framework



Thematic Synthesis

What it is, when it is useful, what it reveals.. [more](#)

- Thematic synthesis is a methodology that combines and adapts approaches from meta-ethnography and grounded theory. (Thomas & Harden, 2008)
- Two broad categories for undertaking a synthesis:
 - Synthesize primary research findings
 - Synthesize research in a field of study
- Used to establish a “new, integrated, and more complete interpretation of findings that offers greater understanding in depth and breadth than the findings from individual studies” (Bondas & Hall, 2007, p. 115).

Thematic Synthesis

Four primary reasons to conduct research synthesis:

- 1) evaluate new developments in a given field
- 2) verify existing theories or develop theory
- 3) synthesize knowledge from different lines or fields of research
- 4) infer generalizations about substantive issues from a set of studies directly bearing on those issues. (Jackson 1980)

The Scaling **Up**

Leveraging the strengths of diverse digital research tools through integration and coordination

Traditional

- Analog
- Place-based
- Restricted artifact types
- Not easily replicated or reused
- Not easily scaled or revised
- Not easily shared
- Stand alone

Scaled Up

- Digital
- Online
- Multiple artifact types
- Sole or multiple contributors
- Multiple devices and platforms
- Open-source
- Replicable, reusable, shareable
- Exportable
- Malleable
- Scalable

The Scaling **Up**

Making it work

- Clearly defined question (s)
- Clearly defined methodological procedures
- Flow Chart
- Pilot to calibrate
- Anticipate technology challenges (updates, connectivity)
- Chunk or batch artifact retrieval
- Iterative, inductive coding
- Methodical journaling
- Agreement on meta-tagging (coding)
- Frequent off-site or cloud-based backup

Wrapping Up

Results from a single primary study rarely provide definitive or generalizable answers to broad research questions. With care and sound methodology, a synthesis may yield valuable information that individual studies alone cannot. (Noblit & Hare, 1988; Sandelowski, 1997; Suri & Clarke, 2009),

The scaled up, technology-enhanced framework described in this presentation can be applied or adapted for many types of research. Once established, the personal research database provides an on-going, customizable, rich resource for literature reviews, academic papers, and presentations.

Discussion

Over to you [.. more](#)

Follow Up

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Thematic Synthesis Stages

Stage 1	Define and design study	Process Type	Performed by
	Step 1 Identify study parameters, questions	Human cognition	Researcher(s)
	Step 2 Digital searches	Computerized	Search Engine(s)
Stage 2	Acquire Artifacts		
	Step 3 Artifact acquisition	Computerized	Reference Software (Zotero)
	Step 4 Artifact characterisation	Computerized	Reference Software (Zotero)
	Step 5 Apply inclusion/exclusion criteria	Human cognition	Researcher(s)
Stage 3	Thematic Analysis and Coding		
	Step 6 Basic theme identification	Human cognition	Researcher and Zotero
	Step 7 Organizing theme identification	Human analysis	Researcher and Zotero
	Step 8 Global theme identification	Human analysis	Researcher and Zotero

Thematic Synthesis Flow Chart

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