Finding shared approaches in a diverse practice domain: A Q-Methodology study of knowledge mobilization practitioners and researchers

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Agenda

- Brief introductions
- What we do know [about KMb]
- What does it mean to "do" KMb?
- Q-Methodology
- Study design
- Findings
- Discussion

Brief Introductions

What we do know

A large number of terms describe the production, utility, and dissemination of research.

research utilization, knowledge mobilization (KMb), knowledge translation, knowledge transfer, knowledge exchange, implementation science, knowledge to action, etc.
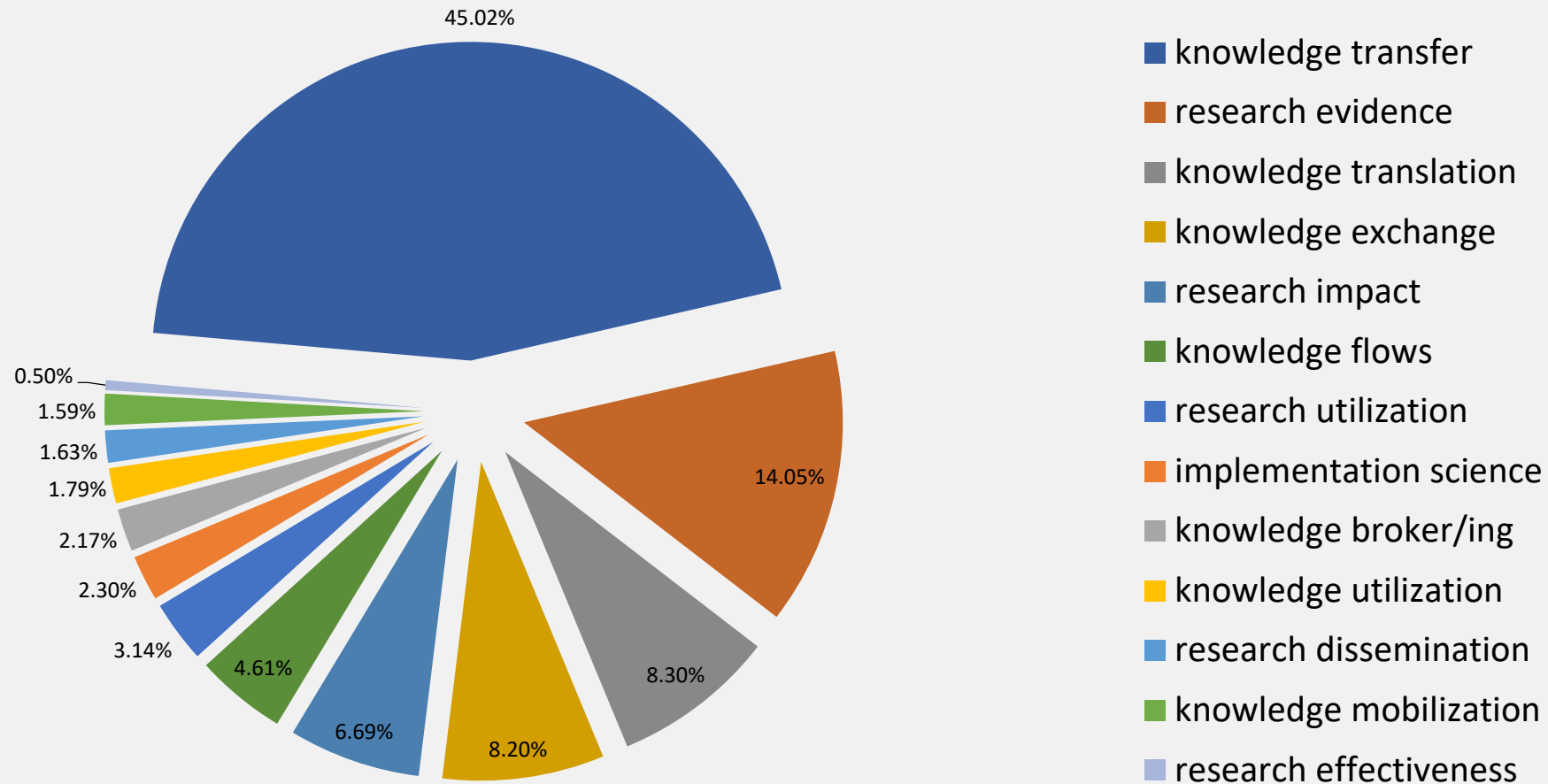
Estabrooks et al., 2008
Graham et al., 2006
Graham, Tetroe, & KT Theories Research Group, 2007
Ward, House, & Hamer, 2009

Documents in Google Scholar with the search term in title, 2000-2017 (N=20771)

Term	%
knowledge transfer	45.02%
research evidence	14.05%
knowledge translation	8.30%
knowledge exchange	8.20%
research impact	6.69%
knowledge flows	4.61%
research utilization	3.14%
implementation science	2.30%
knowledge broker/ing	2.17%
knowledge utilization	1.79%
research dissemination	1.63%
knowledge mobilization	1.59%
research effectiveness	0.50%

What we do know

Very little is known about
"disciplinary variations in research translation and uptake."

Cherney, Head, Boreham, Povey, & Ferguson, 2013, p. 782

Beyond the surface level of terminology, there is a **fractured understanding** of what it means to use, act upon, or uptake research.

i.e. how to *"do"* the work

Ambiguity
hybridity

Knight and Lightowler, 2010
Landry, Amara, & Lamari, 2001
Lomas, 2007
Mitton, Adair, McKenzie, Patten & Perry, 2007

What does it mean to "do" KMb?

"Knowledge brokers **produce, enable, and facilitate movement**, and they themselves are in movement. They move back and forth between different social worlds. Not only are they transferring knowledge in one direction only, they are engaged in the exchange of knowledge through moving between places."

Meyer, 2010, p. 123
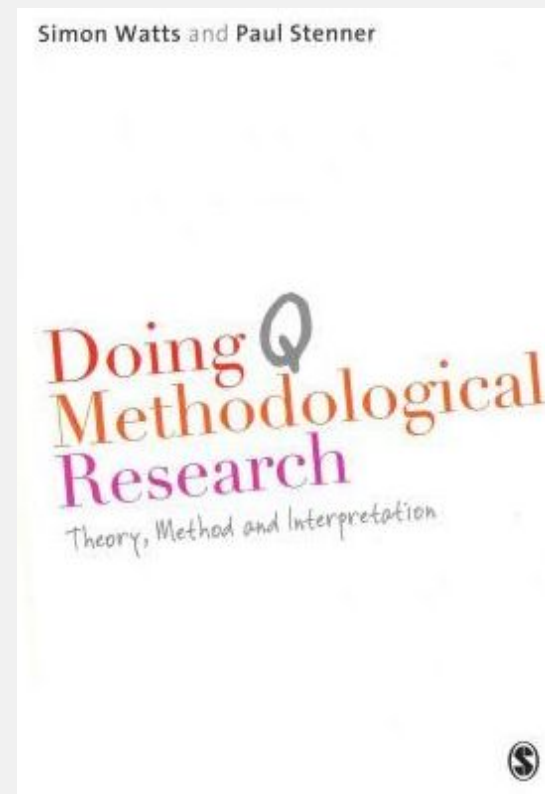
What does it mean to "do" KMb?

Phipps and Morton (2013)

Q-Methodology

A research method that **"systematically and holistically identi[fies] different types of people, or different types of mood, types of viewpoint and so on, across different life domains and contexts."**

(Watts & Stenner, 2012, p. 14)

What's on the cards?

Subjective statements (opinions) based on a Concourse

Study's Concourse development
- Interviews and focus groups with 20 experts across Canada and the UK

Using the Knowledge to Action (or another framework) is important.

I have to be receptive - If I am too enthusiastic, too intense, too driven, too passionate, it can put people off.

KMb works best when you have a team of people working together on a goal.

49 q-statements make up the "Q-sample"

Number	Q-Statement
1	KMb is less about theory and more about making things happen.
2	You need to find that 'trigger' that will motivate people to do something.
3	We need to build a culture that recognizes why using evidence is important.
4	One can be strategic by showing researchers other ways of operating beyond traditional dissemination.
5	Complex societal problems require everyone's skills - all hands on deck.
6	We're watchers and analyzers, but most of all we're do-ers.
7	It's about seeking to understand first before trying to be understood.
8	Wrapped around the rhetoric of KMb are some very clear social justice and ethical arguments.
9	KMb is much more a dialogue process, rather than didactic.
10	We need to understand our audience and speak to them, not at them.

Viewable online: goo.gl/YmRT66

Number	Q-Statement
11	KMb is about making the world a better place by making better decisions.
12	Respect, empathy, and humility are all essential when doing KMb.
13	KMb is marketing for academics; we take what they have to say and spread that message.
14	You need to be involved in a system in a practice sense or else you don't have the authority for KMb.
15	This is not a job for a backroom person.
16	The most effective people in KMb know how to build and establish relationships and networks.
17	Fundamentally, you need a skill in having conversations.
18	We move knowledge into action through powerful communications - words, images, films, all sorts of channels.
19	Writing skills are critical - friendly language, brief, concise, short.
20	KMb works best when you have a team of people working together on a goal.

Number	Q-Statement
21	We need system thinkers.
22	We need to spend more time studying the uptake and usefulness of our KMb products and networks.
23	The skills I use on an everyday basis I learned in high school.
24	To say that it's a mechanical job, no. Are parts of it mechanical? Absolutely.
25	You need to be a boundary spanner.
26	If we don't know what works, then we have to experiment!
27	You need to cultivate the ability to go into a situation and see what's going on.
28	If you wait for the perfect strategy for practice or policy change, you'll be waiting forever!
29	The skills you need really depends on the role you play in the system of KMb.
30	Sure, it's important to create KMb products, but you need to embed them in networked approaches.

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Number	Q-Statement
31	Two words: project management.
32	There's a whole unglamourous side to this work: it's secretarial, administrative, logistics.
33	Using the Knowledge to Action (or another framework) is important.
34	One must have a deep understanding and expertise in conducting research.
35	Evaluating effectiveness and impact is so important.
36	A lot of people try to bring about change but they don't understand the organization.
37	You have to be comfortable with ambiguity.
38	There is no one size fits all approach to KMb.
39	In terms of skills, the most important one is having that ability to morph.
40	KMb occurs in a space full of conflict and tension – It's not always happy go-lucky.

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Number	Q-Statement
41	I have to be receptive - If I am too enthusiastic, too intense, too driven, too passionate, it can put people off.
42	The general public is skeptical about research and researchers - KMb tries to mend this.
43	My training in KMb has been piecemeal – nothing was the right fit but I made it work for my needs.
44	There's a need for a professional body to bring KMb people together and sets industry standards.
45	Now that brokering is seen as a hot topic, people seem to think that anyone can get into this line of work.
46	Investing in events and networks for KMb is very expensive but are arguably the highest yield strategies.
47	Everyone in KMb is product-focused because that's much easier and cheaper to do.
48	Things change so much, you need to have the skills to reflect on what you're doing and what's missing.
49	People wrongly exclude technology transfer and commercialization from KMb - it is definitely part of KMb.

Viewable online: goo.gl/YmRT66

Most Disagree   Most Agree

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

Trying it out

Webinar participants, you can access the q-sort here:
http://flashq.rcc.ryerson.ca/mbatac/survey.html

Q-survey: inclusion criteria

Individuals were asked to self-identify for participation
- KMb researcher
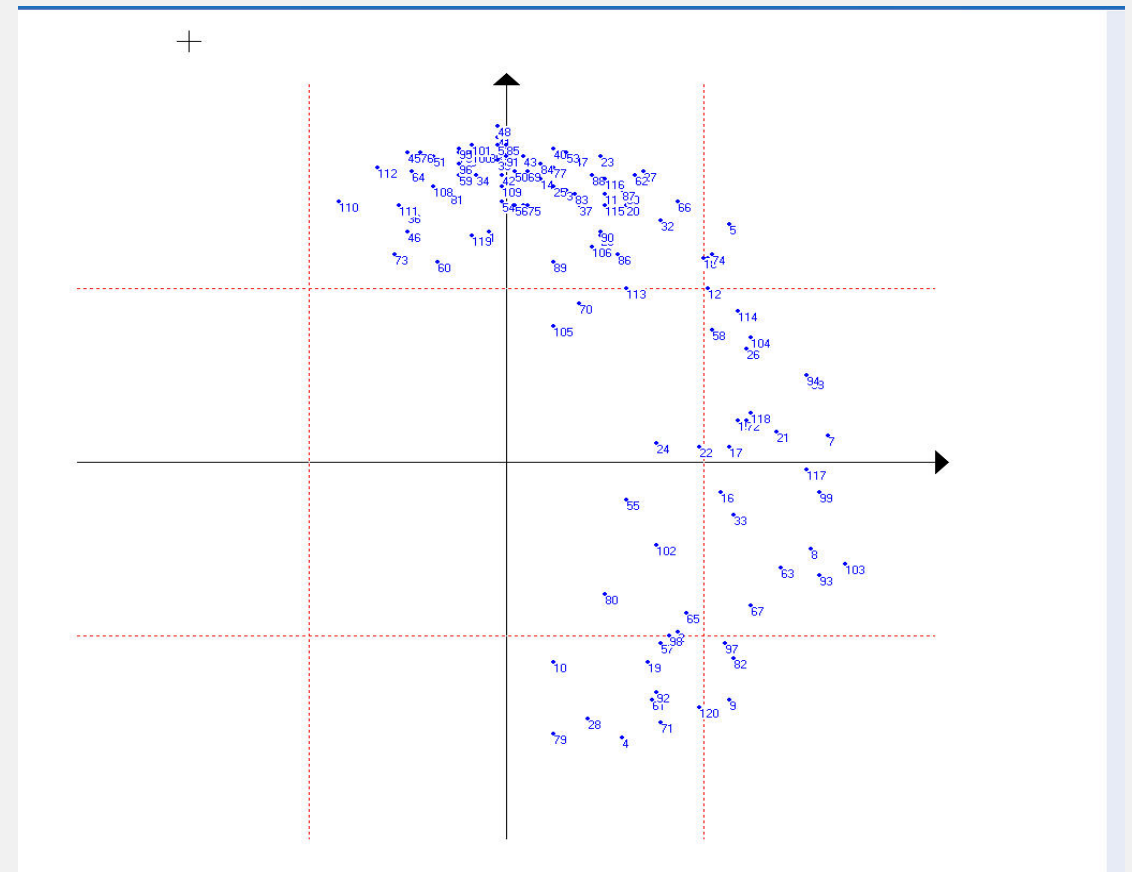- Knowledge broker
- Intermediary
- KMb practitioner

Analysis

PCQ for Windows

Four (4) distinct factors with loadings above 37%

- 64 of the 91 sorts (70%)

Of the 27 remaining sorts

- 14 did not load on any one viewpoint (nonsignificant)
- 13 sorts were confounded, or loaded on two viewpoints

Model sort (example)

-5 Most disagree	-4	-3	-2	-1	0	1	2	3	4	5 Most agree
1	13	15	29	8	6	5	11	2	3	16
23	14	24	32	18	7	9	19	4	21	22
47	42	39	34	20	26	12	27	10	30	35
	46	43	40	37	28	17	36	38	33	
			41	49	31	25	48			
					44					
					45					

Four distinct approaches to KMb
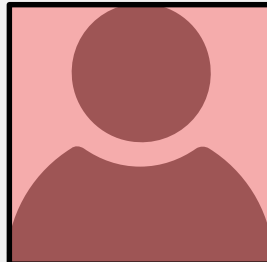
Theorists and Evaluators
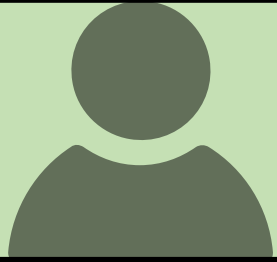
People-Persons
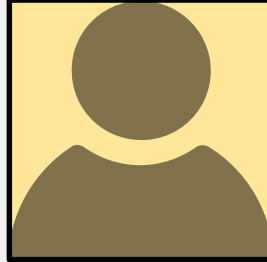
System Builders
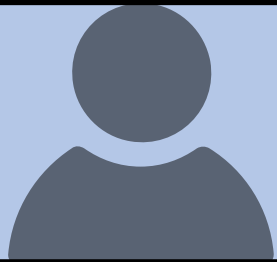
Translators and Communicators

Theorists and Evaluators

Theorists and Evaluators – Model sort

-5 Most disagree	-4	-3	-2	-1	0	1	2	3	4	5 Most agree
1	13	15	29	8	6	5	11	2	3	16
23	14	24	32	18	7	9	19	4	21	22
47	42	39	34	20	26	12	27	10	30	35
	46	43	40	37	28	17	36	38	33	
			41	49	31	25	48			
					44					
					45					

Theorists and Evaluators – Most agree

35. Evaluating effectiveness and impact is so important.

16. The most effective people in KMb know how to build and establish relationships and networks.

22. We need to spend more time studying the uptake and usefulness of our KMb products and networks.

33. Using the Knowledge to Action (or another framework) is important.

3. We need to build a culture that recognizes why using evidence is important

3	4	5 Most agree
2	3	16
4	21	22
10	30	35
38	33	

Theorists and Evaluators – Most disagree

-5 Most disagree	-4	-3
1	13	15
23	14	24
47	42	39
	46	43

23. The skills I use on an everyday basis I learned in high school.

1. KMb is less about theory and more about making things happen.

47. Everyone in KMb is product-focused because that is much easier and cheaper to do.

13. KMb is marketing for academics; we take what they have to say and spread that message.

Theorists and Evaluators

- Adopt a theory-informed and evidence-based approach to KMb

- Seek to know "what works" by using conceptual frameworks and assessment data

- Build the KMb knowledge base

Need for theories and frameworks

"The use of frameworks and theories allows us to design rigorous strategies and products that effectively address these factors for a higher likelihood of impact."

(Canadian male, 27, working as a health research consultant)

"Theory should always be an explicit guide as it is important for understanding why and how we do things rather than acting without any consideration of what lessons have come before and how best to maximise the impact of any action taken."

(Scottish female, 33, working on quality and safety of healthcare)
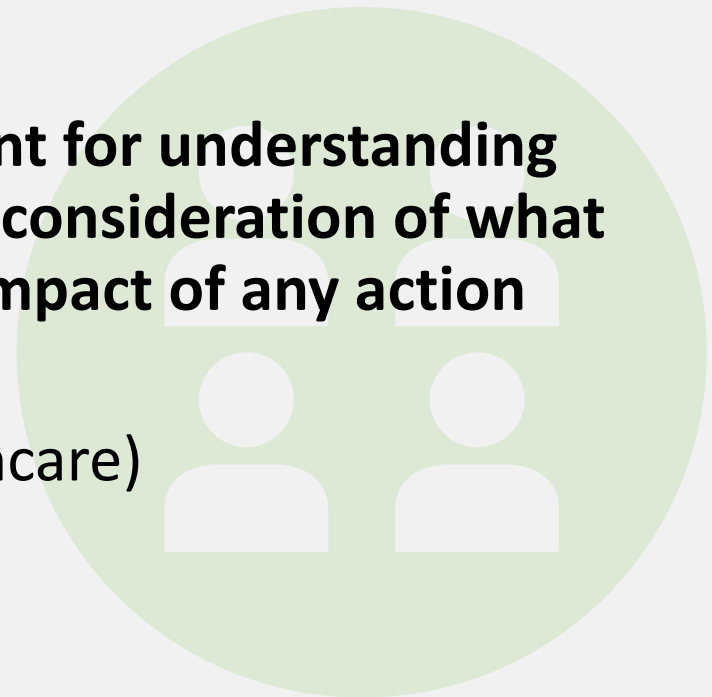
Evaluation & accountability

"The only way to ensure that we are meeting our goals and achieving our intended outcomes is to evaluate our effort. This should also be done rigourously through the use of frameworks and theories. **In fact, I believe that a proper framework will ensure that teams are not only thinking about how they will mobilize knowledge, but how they will evaluate how well they mobilize it and to what extent that approach had impact."**

(British male, 37, working as a project manager in a research institution engaged in international development)
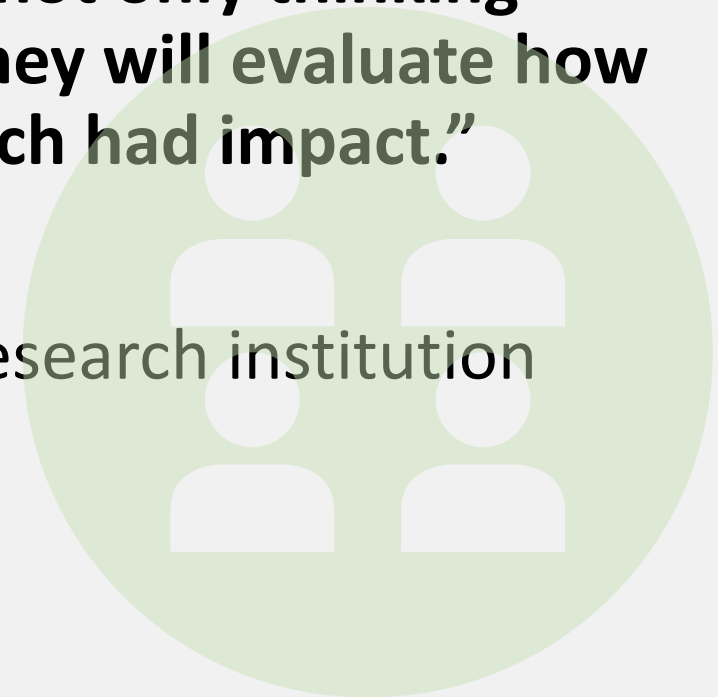
Evaluation & accountability

"Funders **want increasingly ambitious impact-stories** and **demand more sophisticated approaches for delivering these**. Researching usefulness of KMb products and services is as much about responding to this demand as it is about managing expectations of their investment."

(British male, 37, working as a project manager in a research institution engaged in international development).

Build a culture for evidence use

Theorists and Evaluators strongly agree that "we need to build a culture that recognizes why using evidence is important" (3, +4).

"If evidence isn't valued, then who are we 'working for' and what is the point? Part of the need for KT/KMb is that different parts of the system value evidence in different ways and to different degrees** - greater common understanding and an evidence-friendly culture take half of the 'work' out of our jobs/roles."

(Canadian male, 43, working in knowledge translation in an academic healthcare setting).

System Thinking

"Coherence and consistency are required, and it is only possible when the boundaries of a system are clearly defined."

(Canadian male, 47, coordinator of an academic research centre in education)

"KMb personnel often get bogged down in the small details and forget the big picture - evaluation and impact of ourselves."

(Canadian female, 26, coordinator of a university-based KMb funding program)

KMb requires advanced skills

Skills required are different from research in practice (14, -4) or marketing (13, -4), and also more complex that skills learned in secondary school (23, -5).

"Of course there are skills I've learned in high school that are applicable to what I do as a KMb professional. However, I strongly believe that critical thinking, effective forms of communication, plain language writing, research synthesis and a firm grasp of theory are all skills I have learned through higher education and are equally, if not more, important that the skills from gained in high school."

(Canadian male, 27, working as a KMb consultant).

"KT is a complex process that requires a robust and deep understanding of research, policy and practice."

(Canadian female, 29, working in knowledge translation in healthcare)

"The skills I use on an everyday basis I learned in my PhD and Postdoc -- and on the ground, working to problem solve with knowledge users."

(Canadian male, 43, working in knowledge translation in an academic healthcare setting).

Theorists and Evaluators' approach to KMb

- Emphasizes use of evidence informed by theory and evaluation
- Must be accountable to funders
- Sensitive to the views of players
- Responsive to the needs of audiences or end-users

People-Persons

People-Persons – Model sort

-5 Most disagree	-4	-3	-2	-1	0	1	2	3	4	5 Most agree
13	21	15	24	1	4	3	8	2	9	7
14	34	42	31	25	5	6	18	17	16	10
23	46	44	33	30	11	26	19	28	27	12
	47	45	41	32	20	37	35	38	36	
			43	49	22	39	48			
					29					
					40					

People-Persons – Most agree

12. Respect, empathy, and humility are all essential when doing KMb.

7. It's about seeking to understand first before trying to be understood.

10. We need to understand our audience and speak to them, not at them.

16. The most effective people in KMb know how to build and establish relationships and networks.

3	4	5 Most agree
2	9	7
17	16	10
28	27	12
38	36	

People-Persons – Most disagree

-5 Most disagree	-4	-3
13	21	15
14	34	42
23	46	44
	47	45

34. One must have a deep understanding and expertise in conducting research.

13. KMb is marketing for academics; we take what they have to say and spread that message.

14. You need to be involved in a system in a practice sense or else you don't have the authority for KMb.

23. The skills I use on an everyday basis I learned in high school.

People-Persons

- Believe that KMb requires an in-depth understanding of the individuals, groups, and communities that would benefit from research utilization and are affected by practice and policy changes
- Want to understand the world from the end-user's perspective

Use soft skills to understand

Respect, empathy, and humility are important skills (12, +5) to have

"It's about seeking to understand first before trying to be understood" (7, +5)

"We need to understand our audience and speak to them, not at them" (10, +5)

You're working with people, and any time you do that, respect, empathy, and humility are needed. **Otherwise, people won't respect or listen to what you have to say and won't be engaged in the process.**
(Canadian female, 39, nurse clinician)

You can't have a true understanding of another person/group and their situation without respect and empathy. And humility is realising that your role is really one of facilitation rather than anything "grandiose," **you are facilitating people's access to vital information**.

(New Zealander female, 35, working as a research fellow in the area of health and community-based research)

Relationships are key

People need to trust each other in order for KMb to be effective. Trust can only be built through relationships.

(Canadian female, 27, working in grant development for a research institute)

Work as part of a team. The relationship to practice depends on what you're working on and why. There needs to be a whole system approach. That includes practitioners, but also policy makers, managers, etc.

(Scottish male, 31, working in Knowledge Management and Health)

Understanding the context

In order to change a system effectively, you first have to understand how the system works.

(Canadian female, 34, working as a director at a university)

Look [and] learn what is going on before trying to adjust existing patterns.

(British male, 68, working as a private consultant in community development and agroforestry)

It's so important to understand what's going on. See the bigger picture and understand all the drivers, pressures and priorities at play. Otherwise anything you work towards is out of context…. It's important to take time to understand the programme of work, the people involved, the context and the relationships. Knowing how they've collectively arrived where they are, what their priorities are and what their reality is are all really important.

Become part of the team. Don't march in with your size 12 boots on and take over. Respect what's happened to date and start to work with them as a collective. The people you work with are your greatest asset. They have the networks, they have the contextual knowledge - your job is to start working with them to get KMb embedded as a process, not an activity…

I don't think it's necessarily the role of the KMb person to get in there and do things for or to a team. My experience is that it's about understanding one another and embedding KMb in their processes, agreeing [to] action plans and executing them together. That's a much more sustainable approach. Everyone walks away with the skills, knowledge and confidence to put that all in to practice in their next project…

(Scottish male, 39, working in the area of knowledge management and health).

While they believe that KMb requires a skillset developed far beyond high school (23, -5), People-persons do not see practice involvement (14, -5) or research expertise (34, -4) as critical to engaging in KMb.

People-persons caution against being too product-focused (47, -4). They are skeptical about costly KMb efforts (46, -4) unless they directly engage with stakeholders and end-users

Uptake and trust of these products requires trust-building exercises/relationships, ongoing dialogue, and iterative design to meet the growing and differentiating need for information. (Canadian male, 60, working as a manager in an institutional research unit)

To me 'systems thinkers' are those that write the academic papers I read. We really need system thinkers 'plus', those who think systematically while interacting and communicating across all levels in organizations to actually facilitate and manage change.

(Canadian male, 60, working as a manager in an institutional research unit)

People-Persons' approach to KMb

- Promote a human-centric approach to KMb that puts people first
- Believe in the importance of reading people, situations, and contexts
- Seek to identify personal, organizational, and system-level triggers

System Builders

System Builders – Model sort

-5 Most disagree	-4	-3	-2	-1	0	1	2	3	4	5 Most agree
13	15	1	6	2	8	3	7	20	9	10
23	34	11	18	4	17	5	28	22	21	29
44	45	14	31	16	19	12	37	25	32	38
	47	42	36	39	24	30	40	27	35	
			41	49	26	43	46			
					33					
					48					

System Builders – Most agree

38. There is no one size fits all approach to KMb.

29. The skills you need really depends on the role you play in the system of KMb.

10. We need to understand our audience and speak to them, not bat them.

21. We need system thinkers.

32. There is a whole unglamourous side to this work: it is secretarial, administrative, logistics.

3	4	5 Most agree
20	9	10
22	21	29
25	32	38
27	35	

System Builders – Most disagree

-5 Most disagree	-4	-3
13	15	1
23	34	11
44	45	14
	47	42

15. This is not a job for a backroom person.

34. One must have a deep understanding and expertise in conducting research.

23. The skills I use on an everyday basis I learned in high school.

13. KMb is marketing for academics; we take what they have to say and spread that message.

System Builders

- Recognize the need for various skills to support diverse needs and different purposes in KMb

- Put forward a team-based approach

They build the team

They are the "backroom persons" who strategically plan KMb efforts

System Builders

Most strongly agree that

"There is no one-size-fits-all approach to KMb" (38, +5)

"The skills you need really depends on the role you play in the system of KMb" (29, +5)

A single one-sized framework, model or process cannot respond or be flexible to local context, to complex systems and situations or to external conditions. **We need to adapt and learn.**

(Canadian female, 60, working in knowledge exchange and health promotions)

I have found that **there is a tendency to assume that all people in this line of work are the same and do the same job**, and I just haven't found that to be the case. The skills you need will greatly depend on what sector you work in, what your specific job is and who you are working with.

(Canadian female, 39, working in knowledge mobilization at a university)

There are many skills and many needs in KMb. there's **no singular approach** and we need a **big mix of skills.**

(British female, 35, supporting research impact at a university)

A team-based approach

Without a team, one cannot cultivate the skills and expertise needed to see KMb through to implementation. It is the multitude of skills and perspectives that people bring to teamwork, is what can make KMb successful (e.g. project management, organization, writing skills, boundary spanning, networking etc)... One needs all types of people to create change -- those who can put their heads down and work, but who may not be the best networkers, and those who are fantastic networkers and excel at that -- they can move their contacts to the backroom person who can manage what might happen next.

(Canadian female, 31, working in knowledge translation in healthcare)

Strategically plan with the team

"We need to understand our audience and speak to them, not at them" (10,+5)

Working with, in co-design, co-production is key - understanding 'audience' who may be our peers and colleagues is primary in mobilizing knowledge that is meaningful and useful

(Canadian female, 60, working in knowledge exchange and health promotions)

KMb is a process involving practitioners and researchers as well as KMb people and all need to know and understand what's going on and the perspective of the others. in some ways it doesn't even make sense to talk of an audience.

(UK male, 40, working as an implementation lead in health and social care)

Backroom persons (15, -4)

As someone who is much more of a backroom person, and yet is and has been successful in a KMb career, I disagree with this statement. It is why I strongly believe that teamwork and collaboration is integral to KMb. One needs all types of people to create change -- those who can put their heads down and work, but who may not be the best networkers, and those who are fantastic networkers and excel at that -- they can move their contacts to the backroom person who can manage what might happen next.

(Canadian female, 31, working in knowledge translation in healthcare)
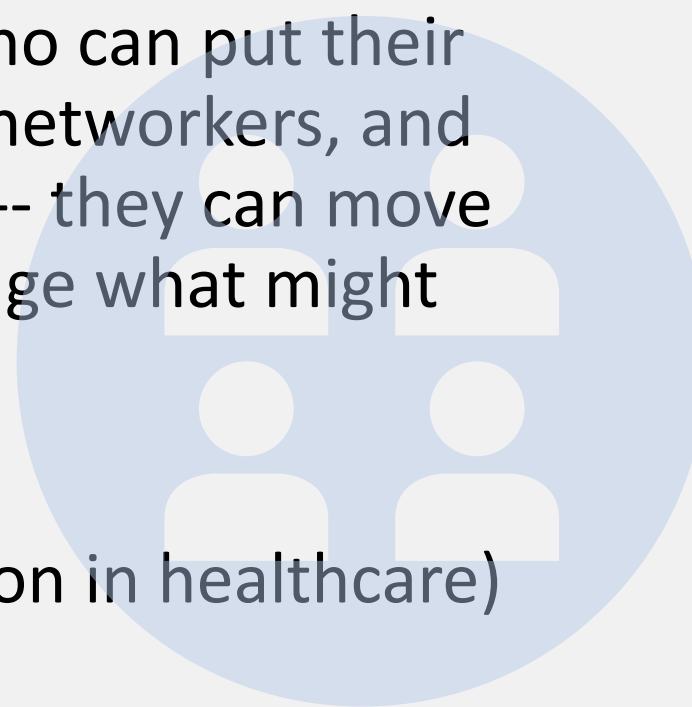
No need for research or practice expertise

I can drive a car without understanding the engineering and design of the car - I want the benefits.

(Canadian male, 50, working in knowledge mobilization within a non-governmental organization)

You don't need to be in the practice of KMb, you just need to be open to learning about how KMb works and how it potentially will impact your org[anization].

(Canadian female, 34, working in learning and development for the government)
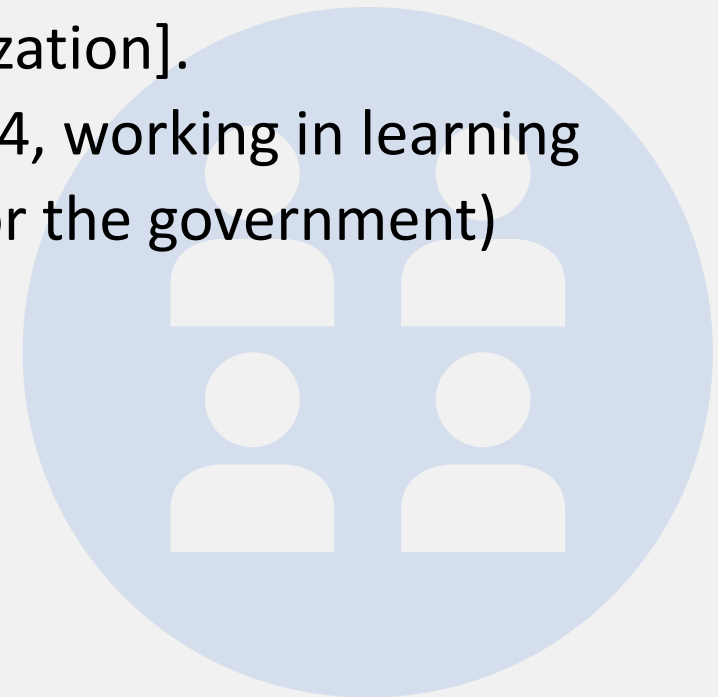
System Builders are System Thinkers

They help others see the system.

Researchers

For me, doing KMb also means working with researchers to expose them to the importance of partnering with research users, understanding how they can best use community knowledge to inform their work, not only share research but find new ways to do research so it is more relevant, more useful, more impactful.

(Canadian female, 29, working in knowledge mobilization at a university)

System Builders are System Thinkers

They help others see the system.

Non-academic stakeholders

When interest groups, especially those who have perhaps not recognised what others know or have to offer, start to appreciate that they may all share a common problem, cooperation among them may occur… pooling and deployment of more resources than before, focused towards addressing various interlinked aspects of the joint problem.

(British male, 63, working as a freelance consultant in agriculture)

System Builders' approach to KMb

- Flexible team-based approach to KMb
- Acknowledge the need for various roles
- Build effective, collaborative teams
- Importance of KMb operations and strategy

Translators and Communicators

Translators and Communicators – Model sort

-5 Most disagree	-4	-3	-2	-1	0	1	2	3	4	5 Most agree
13	8	24	7	5	1	2	4	10	3	16
14	44	36	33	15	9	17	6	11	19	18
23	45	39	40	25	12	28	22	20	29	38
	47	42	41	31	21	32	30	27	35	
			49	34	26	37	48			
					43					
					46					

Translators and Communicators – Most agree

16. The most effective people in KMb know how to build and establish relationships and networks.

18. We move knowledge into action through powerful communications - words, images, films, all sorts of channels.

38. There is no one size fits all approach to KMb.

19. Writing skills are critical - friendly language, brief, concise, short.

3	4	5 Most agree
10	3	16
11	19	18
20	29	38
27	35	

Translators and Communicators – Most disagree

-5 Most disagree	-4	-3
13	8	24
14	44	36
23	45	39
	47	42

15. This is not a job for a backroom person.

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13. KMb is marketing for academics; we take what they have to say and spread that message.

Translators and Communicators

- Believe communication is fundamental to KMb practice

- Emphasize communication and writing skills

This focus on communication practice distinguishes Translators and Communicators from other KMb viewpoints.

Both in communicating with stakeholders and developing products-writing skills are key.

(Canadian female, 30, working as a senior analyst in a government agency)

Words, images, and films are extraordinary in conveying messages.

(West African Male, 55, working as executive in public-sector research)

I believe the essential reason for doing KMb is moving knowledge into action - this is done through various means.

(Canadian female, 30, working as a knowledge broker in health care)

This is probably the most central component of KT.

(Canadian male, 30, university-based knowledge broker and researcher)

Communication as dialogue

The transfer of information flows much more quickly and effectively through dialogue than any other means. To bring the right people together allows for change to happen efficiently.

(Canadian female, 31, working as a knowledge broker in a health field)

KMb is not so much a trade-it is not a recipe or a step by step process that can be followed. Although there are processes and theories, KMb comes down to makings things happen by bringing all the right people together to achieve a goal-this requires building relationships.

(Canadian female, 30, analyst in a public health care agency)

Respectful relationships underlie the communication and shared learning that leads to effective KMb.

(Canadian male, 60, working in KMb in education)

Two-prong approach

They want to understand others

- they are receptive listeners who analyze the contexts in which they are placed

They want to be understood

- carefully craft messages
- create communication products that are easily understood by target audience

They have an appreciation for conducting and synthesizing research, yet their role is to help translate such research into messages that affect real-life decisions and behaviours.

"KMb is about making the world a better place by making better decisions" (11, +3).

I see knowledge into action (or mobilisation) is about making it easier to do the right thing at the right time to benefit those in need. If we make sure that is the focus then it can be a powerful driver for improvement and change.

(Scottish female, 43, working at an academic library)

KMb closes the gap between what is "known" from research and what is "done" in practice. Therefore, when we engage in knowledge mobilization and transfer practices we are helping our community and world make better informed decisions whether or not they are academics or non-academics.

(Canadian female, 28, working in the post-secondary sector)
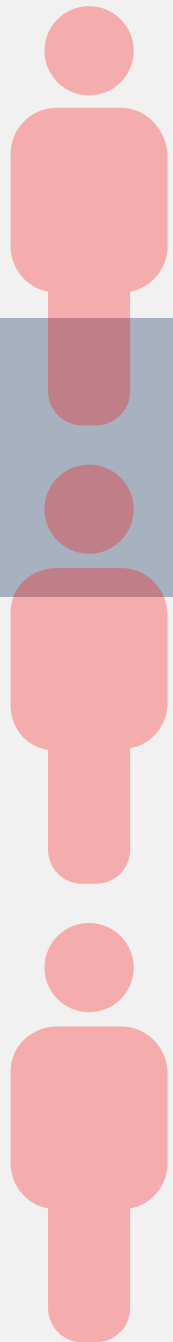
Value in impact > social justice

They insist that KMb creates value by improving decision-making (11, +4): they strongly disagree that "Wrapped around the rhetoric of KMb are some very clear social justice and ethical arguments" (8, -4).

Translators and Communicators' approach to KMb

- Emphasize effective communication practices
- Effort involving diverse skillsets, relationship building, and attention to evidence-based evaluation of impact.
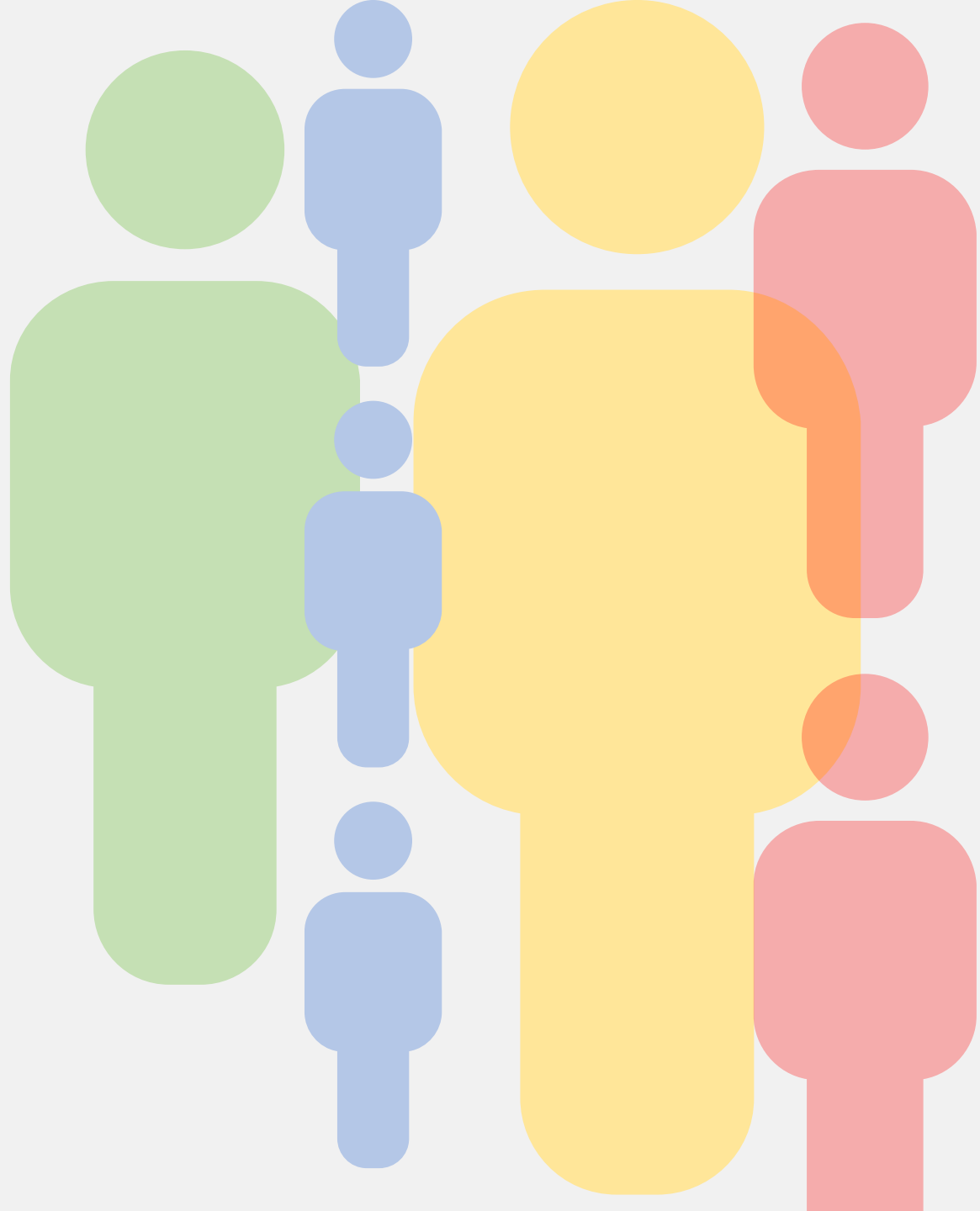
Discussion and Questions

How do these resonate with you?

Theorists and Evaluators
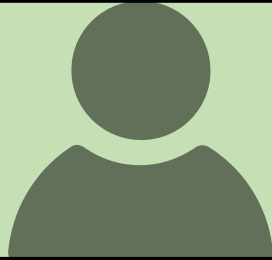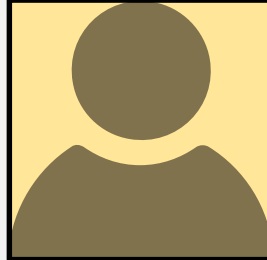
People-Persons
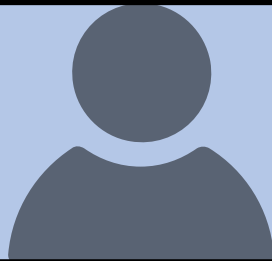
System Builders

Translators and Communicators
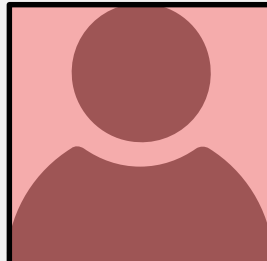
What other viewpoints might there be?

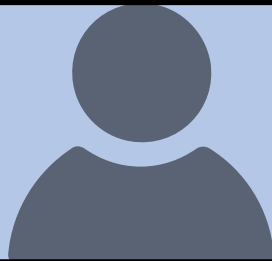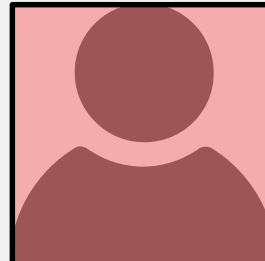Theorists and Evaluators
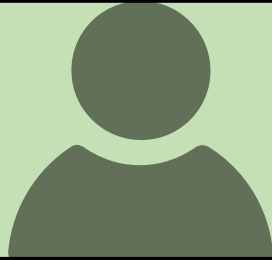
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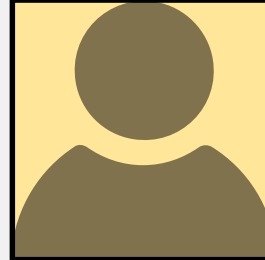
System Builders

Translators and Communicators

Thank you

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