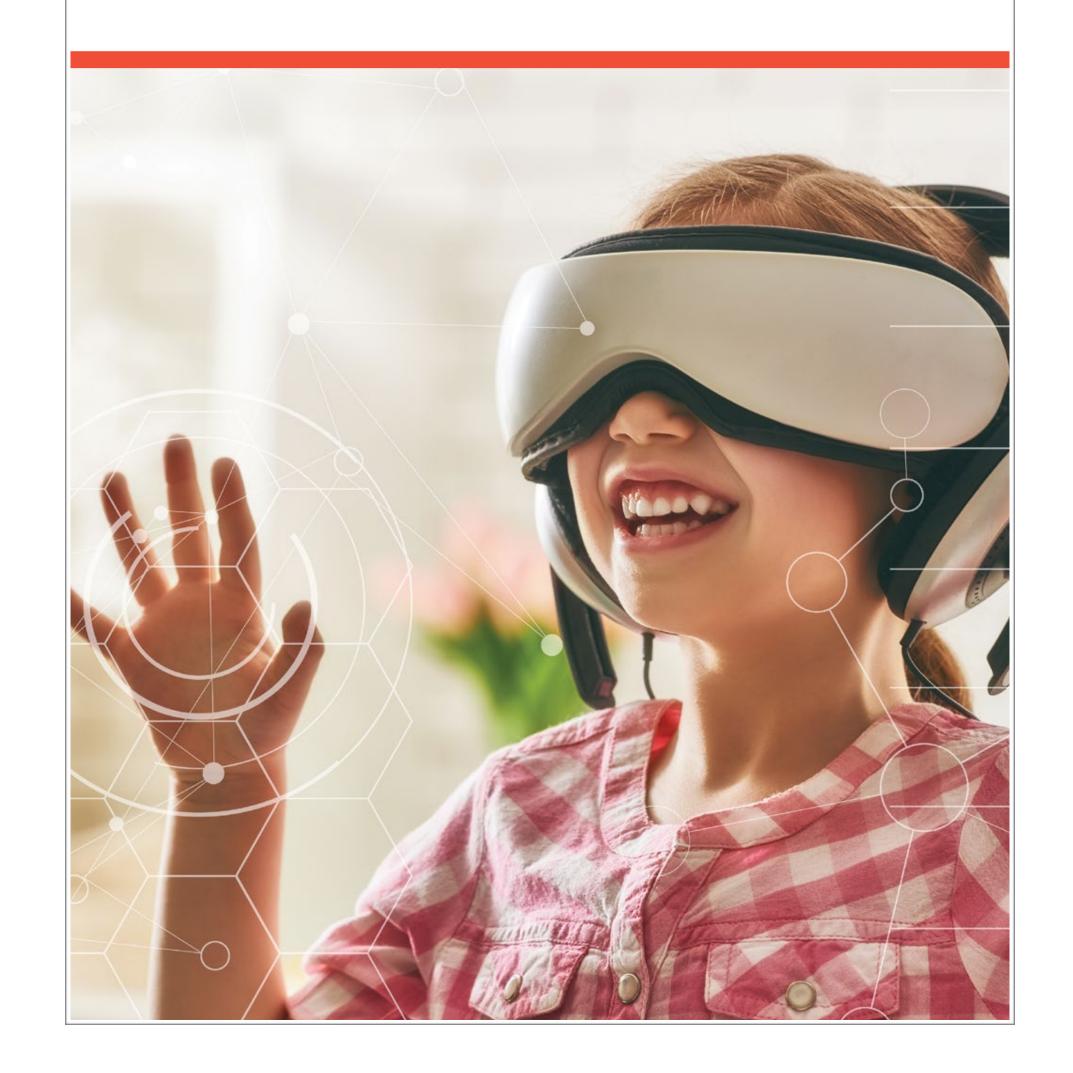
Ideas from the Horizon Report Process: Using a Modified Delphi Method for Decision Making

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NMC/CoSN Horizon Report > 2016 K-12 Edition





Key Trends Driving Ed Tech Adoption

Fast (1-2 yrs.)	Coding as a Literacy Students as Creators	
Mid-Range (3-5 yrs.)	Collaborative Learning Deeper Learning Approaches	
Long-Range (5+ yrs.)	Redesigning Learning Spaces Rethinking How Schools Work	

Important Ed Tech Developments

Adoption: 1 yr. or less	Makerspaces Online Learning	
Adoption: 2-3 yrs.	Robotics Virtual Reality	
Adoption: 4-5 yrs.	Artificial Intelligence Wearable Technology	

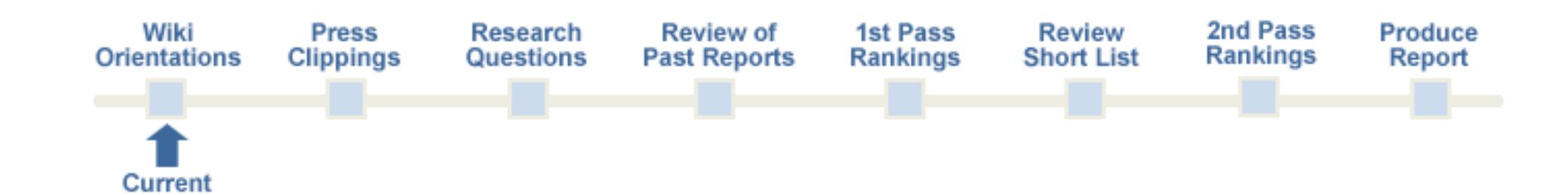
Significant Challenges Impeding Ed Tech Adoption

Solvable understand and know how to solve	Difficult understand but solutions are elusive	Wicked complex to define, much less address
Authentic Learning Opportunities Rethinking the Roles of Teachers	Advancing Digital Equity Scaling Teaching Innovations	Achievement Gap Personalizing Learning

The Process

The Steps

Focus



Adapting the Process

Select Team

Make sure to have a good mix of technologists, faculty, leaders in the group.

Generate Research
Database

Ask group members to submit links to materials of interest, with brief commentary.

Present Research Question(s)

e.g. "What technologies should schools be actively looking for ways to apply?" Review Research Materials

Ask group to expand database, commentary, with question(s) in mind.

Generate Answer Set

Ask group members to submit answers to question(s).

First Pass Rankings

Create Short List

Second Pass Rankings

Produce Report

For a set of N answers: give each member sqrt(N) tokens; each distributes tokens between chosen answers.

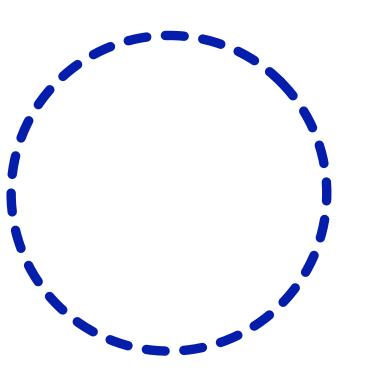
Pick top sqrt(N) answers with most total tokens – this is the short list.

If M answers are desired:
give each member M
tokens; each distributes
tokens between chosen
short list answers.

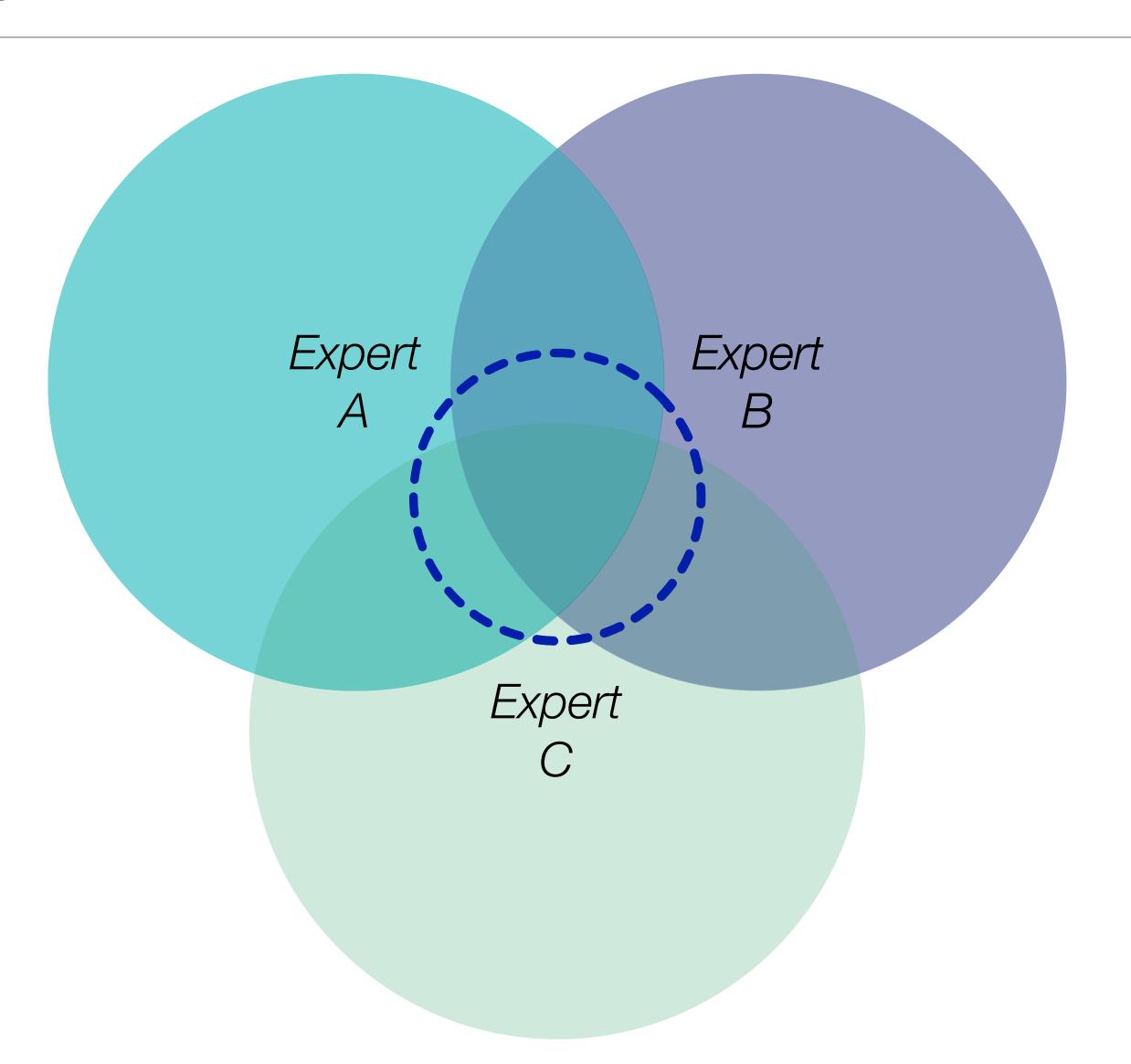
Writing team integrates top M answers with research materials to produce report.

Informing Decision Making: the Delphi Method

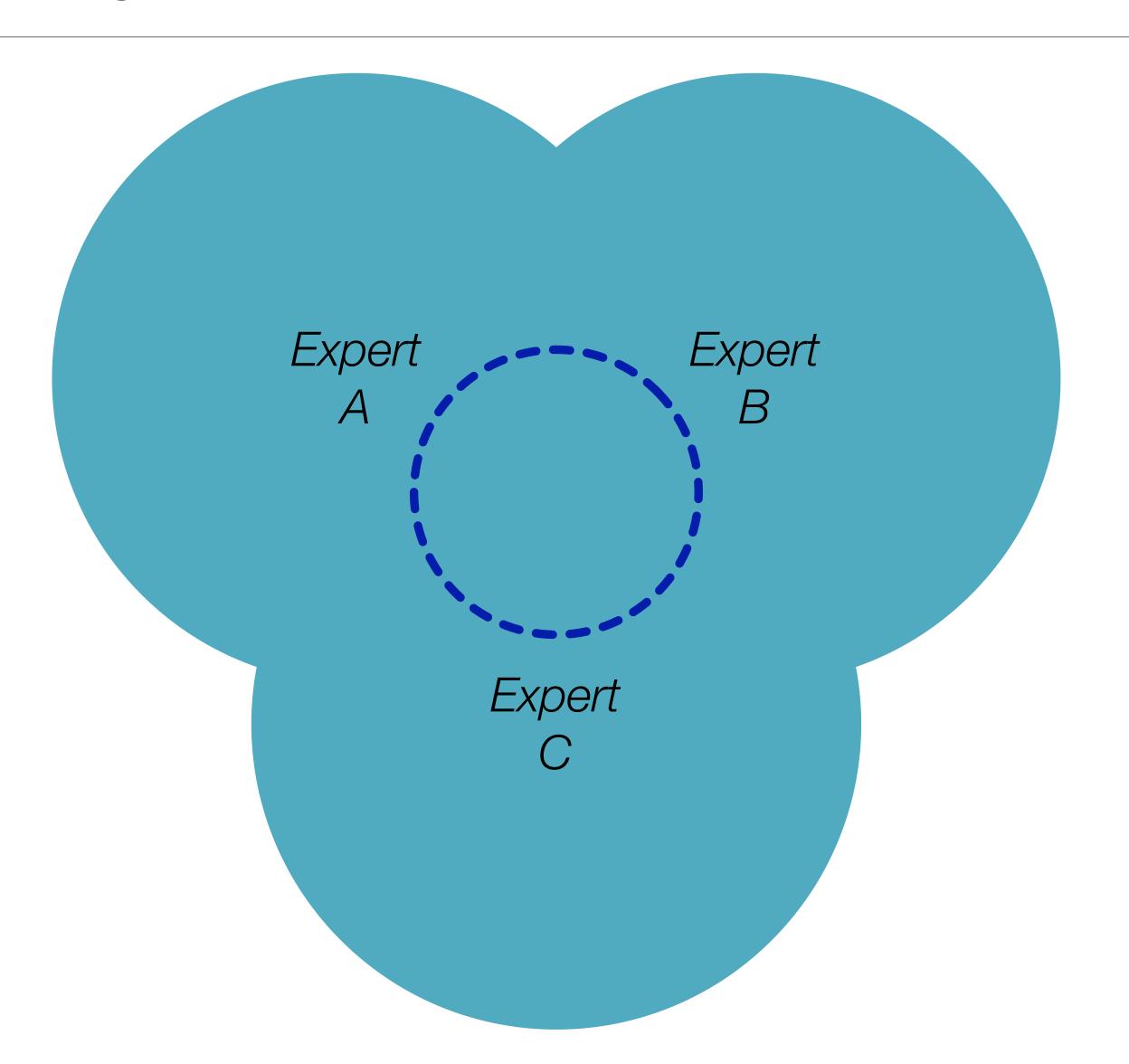
Wanted: the Relevant Information Space



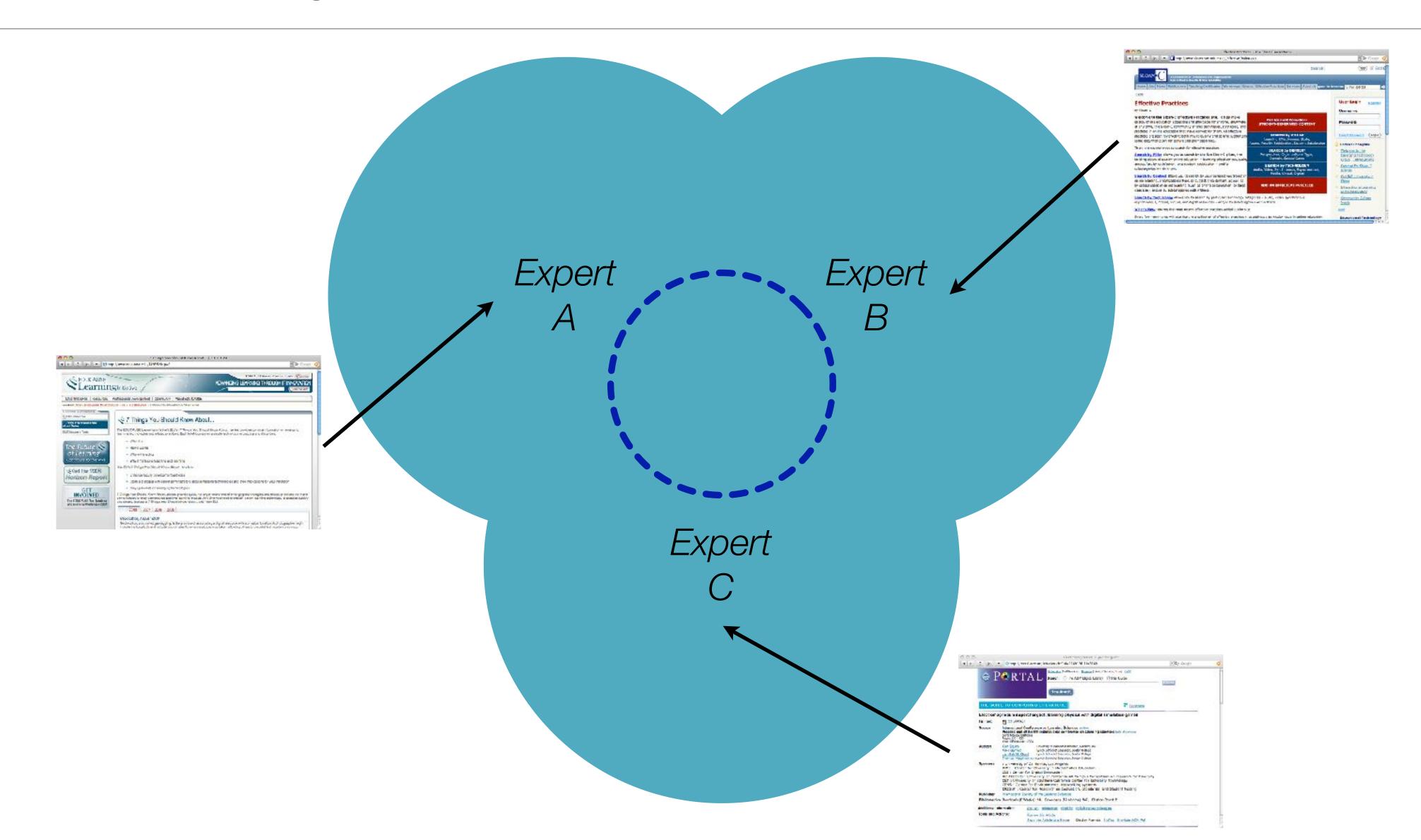
Stage 1: Bringing In the Experts



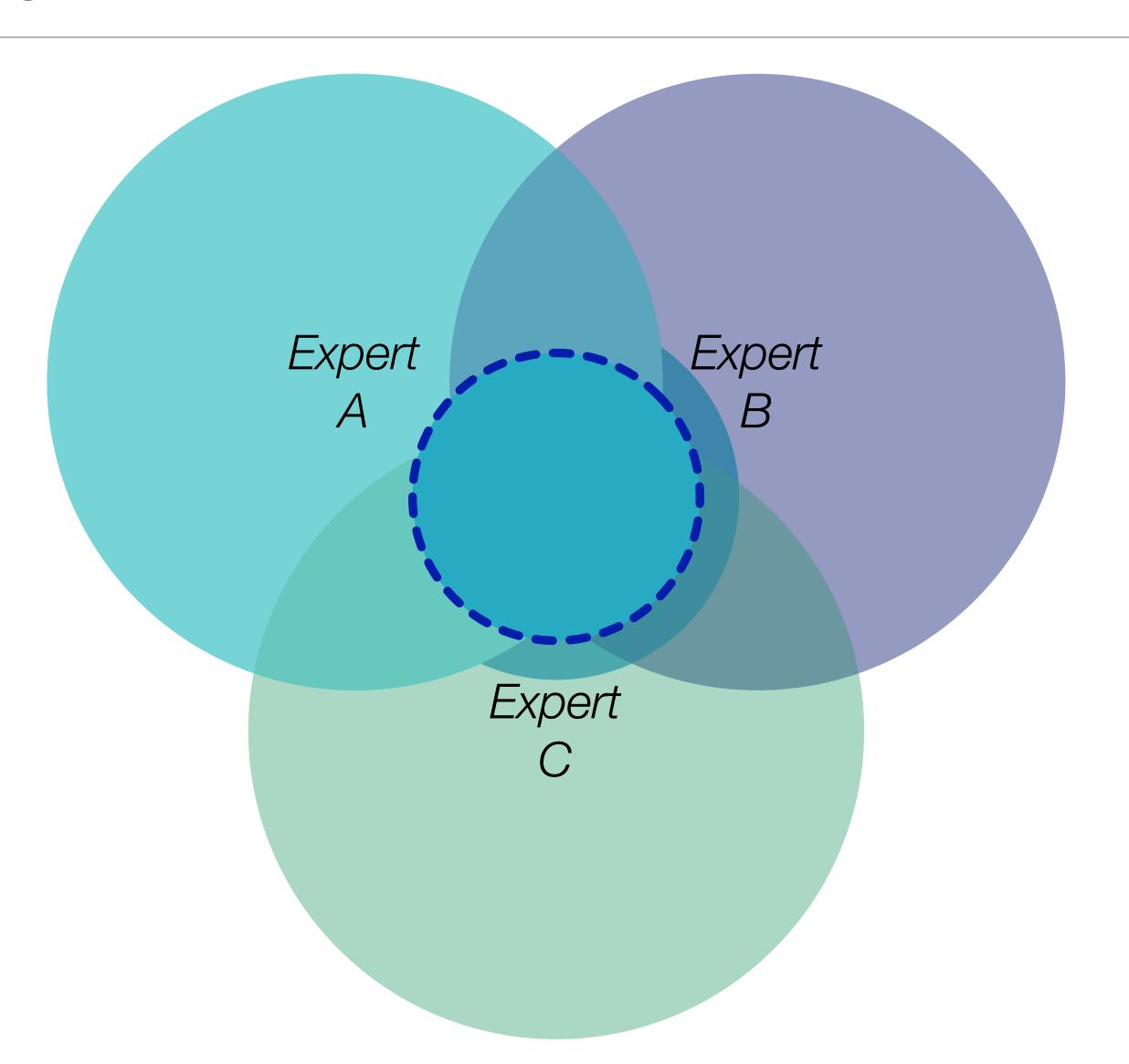
Stage 2: Aggregating the Replies



Stage 3: Informing the Process

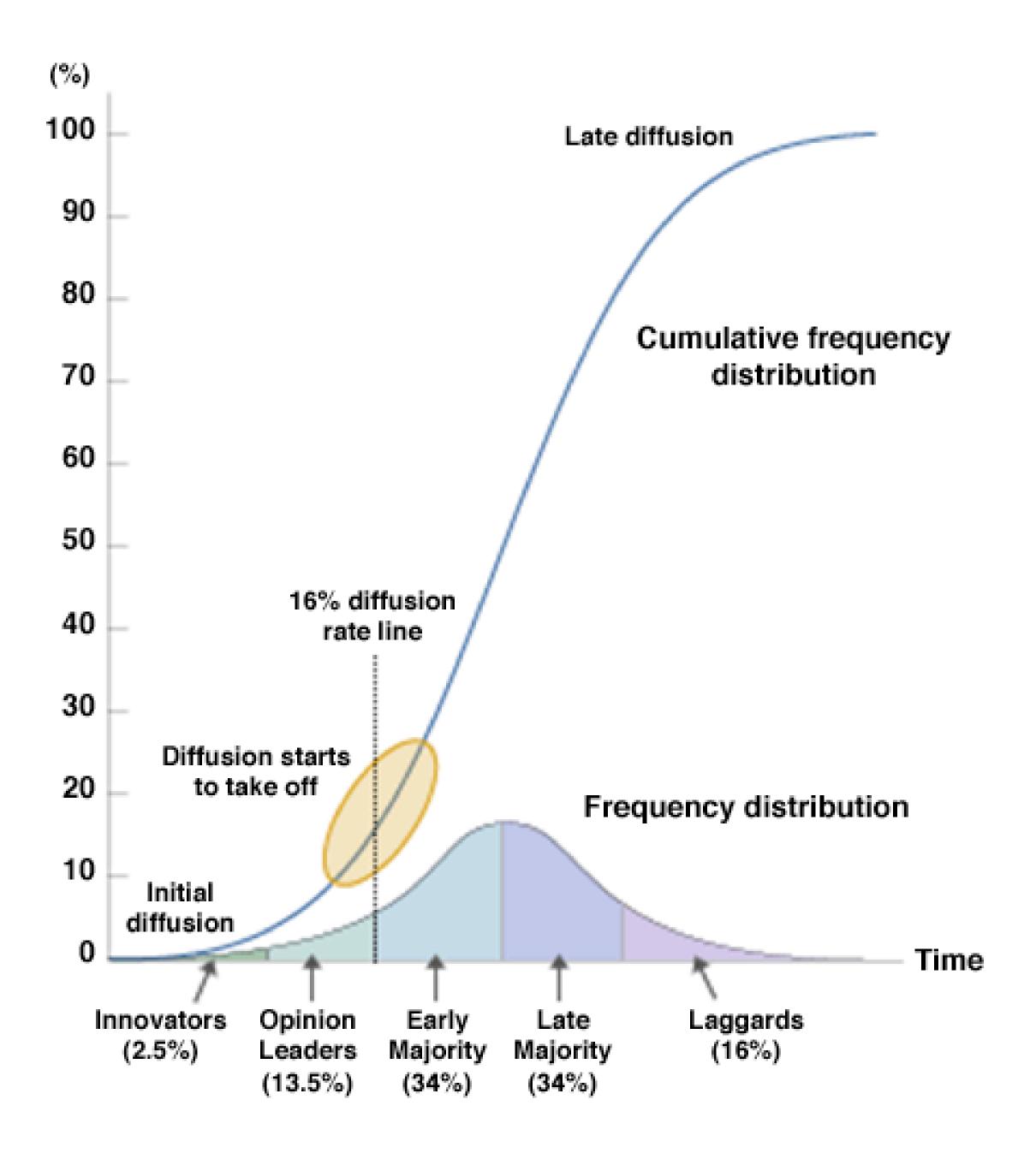


Stage 4: Selecting the Relevant Information Space



Things to Keep In Mind

- · Change some, but not all, of your expert panel members each year:
 - Too much change leads to unstable recommendations, too little change leads to groupthink-like phenomena.
- · Make sure you have a broad range of expertise and backgrounds in your expert panel:
 - · Not everyone should be a technologist, or a teacher, or a student, or an administrator.
- Make sure your panel has innovators, opinion leaders, and early majority members (cf. Rogers) on it:
 - Panels that only feature innovators tend to produce recommendations that are not representative of the needs of the institution as a whole.



Bibliography

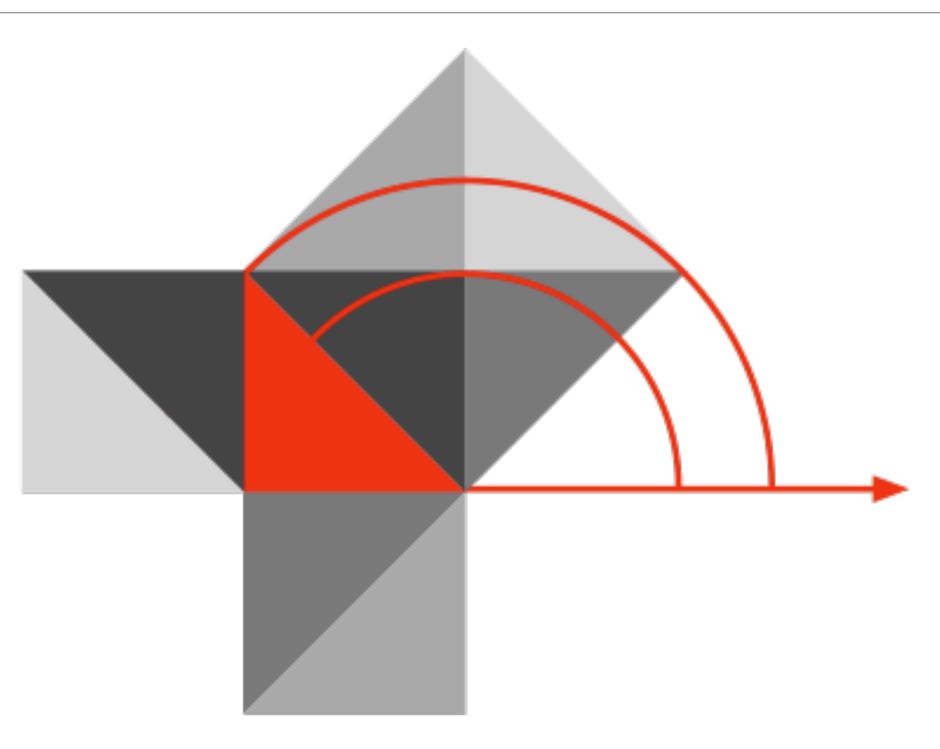
The Delphi Method:

• Harold A. Linstone and Murray Turoff (Eds.) The Delphi Method: Techniques and Applications.

Diffusion of Innovations:

- Everett M. Rogers. Diffusion of Innovations, 5th Edition. New York:Free Press, 2003.
- Geoffrey A. Moore. Crossing the Chasm, Revised Edition. New York: Harper Perennial, 1999.

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