# The K12 Horizon Report In Context

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# Patterns

# The 2012 K12 Horizon Report

**Mobile Devices and Apps**

Time-to-Adoption: One Year or Less

**Tablet Computing**

**Personal Learning Environments**

Time-to-Adoption: Two to Three Years

**Game-Based Learning**

**Natural User Interfaces**

Time-to-Adoption: Four to Five Years

**Augmented Reality**

# The 2011 K12 Horizon Report

**Mobiles**

Time-to-Adoption:
One Year or Less

**Open Content**

Time-to-Adoption:
Two to Three Years

**Personal Learning Environments**

Time-to-Adoption:
Four to Five Years

**Cloud Computing**

**Game-Based Learning**

**Learning Analytics**

# The 2010 K12 Horizon Report

**Collaborative Environments**

Time-to-Adoption: One Year or Less

**Mobiles**

Time-to-Adoption: Two to Three Years

**Flexible Displays**

Time-to-Adoption: Four to Five Years

**Cloud Computing**

**Game-Based Learning**

**Augmented Reality**

# The 2009 K12 Horizon Report

**Collaborative Environments**

Time-to-Adoption: One Year or Less

**Mobiles**

Time-to-Adoption: Two to Three Years

**The Personal Web**

Time-to-Adoption: Four to Five Years

**Online Communication Tools**

**Cloud Computing**

**Smart Objects**

# Metatrends (Since 2004)

- Evolution of a ubiquitous platform
- Shifting content production to users
- Computing in three dimensions
- Games as pedagogical platforms
- Connecting people through the network
- Communication between humans and machines
- Collective sharing & generation of knowledge

| Social | Mobility | Visualization | Storytelling | Gaming |
| --- | --- | --- | --- | --- |
| 200,000 years | 70,000 years | 40,000 years | 17,000 years | 8,000 years |







# Context

# Key Trends (2012)

- Education paradigms are shifting to include online learning, hybrid learning and collaborative models.
- The abundance of resources and relationships made easily accessible via the Internet is increasingly challenging us to revisit our roles as educators.
- As the cost of technology drops and school districts revise and open up their access policies, it is becoming increasingly common for students to bring their own mobile devices.
- People expect to be able to work, learn, and study whenever and wherever they want.
- Technology continues to profoundly affect the way we work, collaborate, communicate, and succeed.
- There is a new emphasis in the classroom on more challenge-based, active learning.

# Significant Challenges (2012)

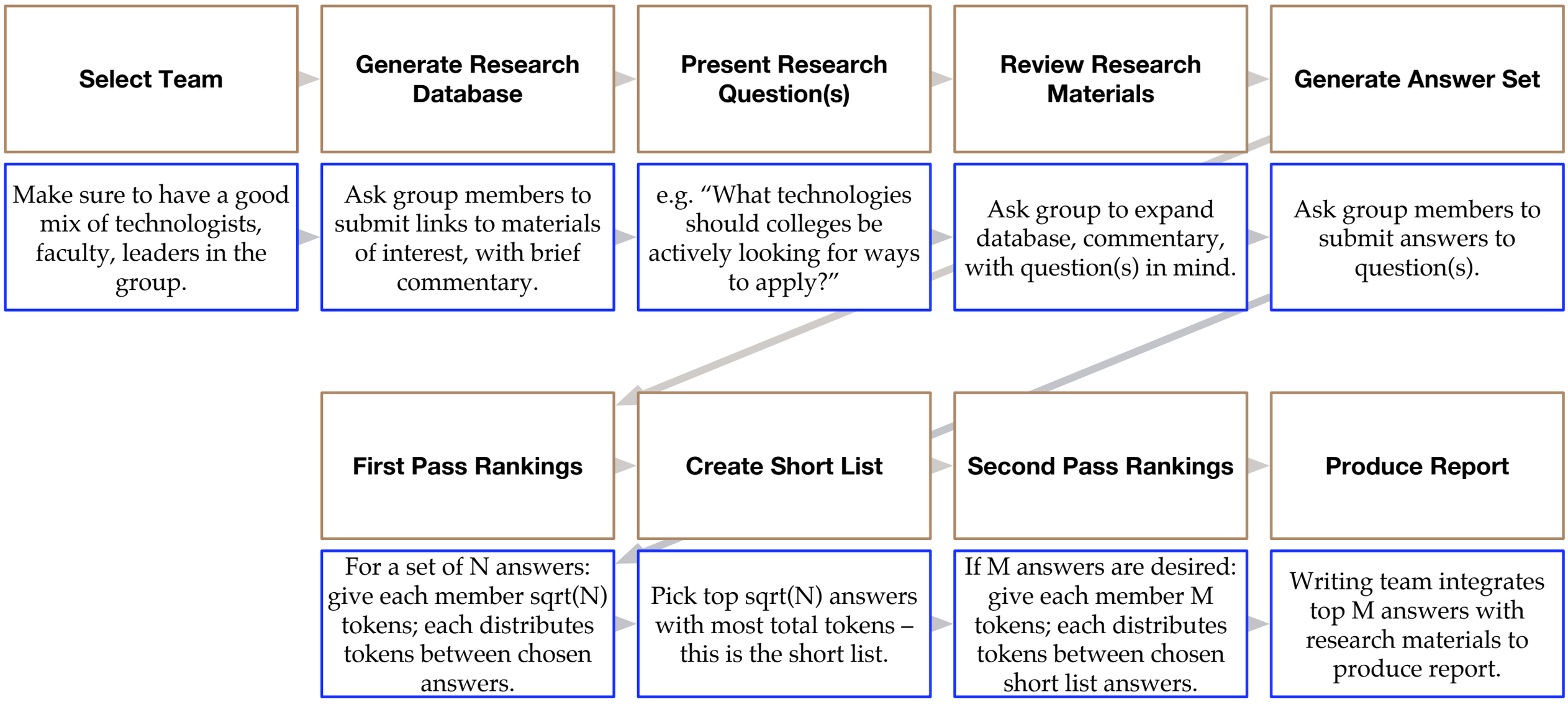
- Digital media literacy continues its rise in importance as a key skill in every discipline and profession, especially teaching.
- K-12 must address the increased blending of formal and informal learning.
- The demand for personalized learning is not adequately supported by current technology or practices.
- Institutional barriers present formidable challenges to moving forward in a constructive way with emerging technologies.
- Learning that incorporates real life experiences is not occurring enough and is undervalued when it does take place.
- Many activities related to learning and education take place outside the walls of the classroom and thus are not part of traditional learning metrics.

# The Process

# The Steps


Wiki Orientations
Press Clippings
Research Questions
Review of Past Reports
1st Pass Rankings
Review Short List
2nd Pass Rankings
Produce Report

# Adapting the Process



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- **Horizon Report Wiki:**
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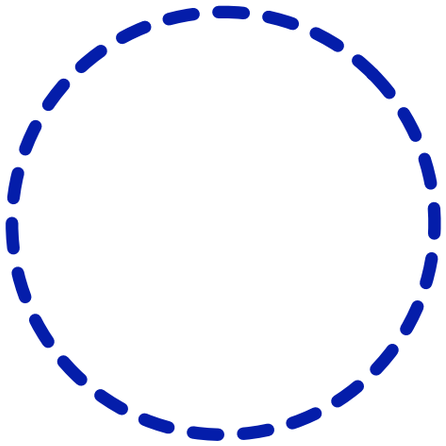
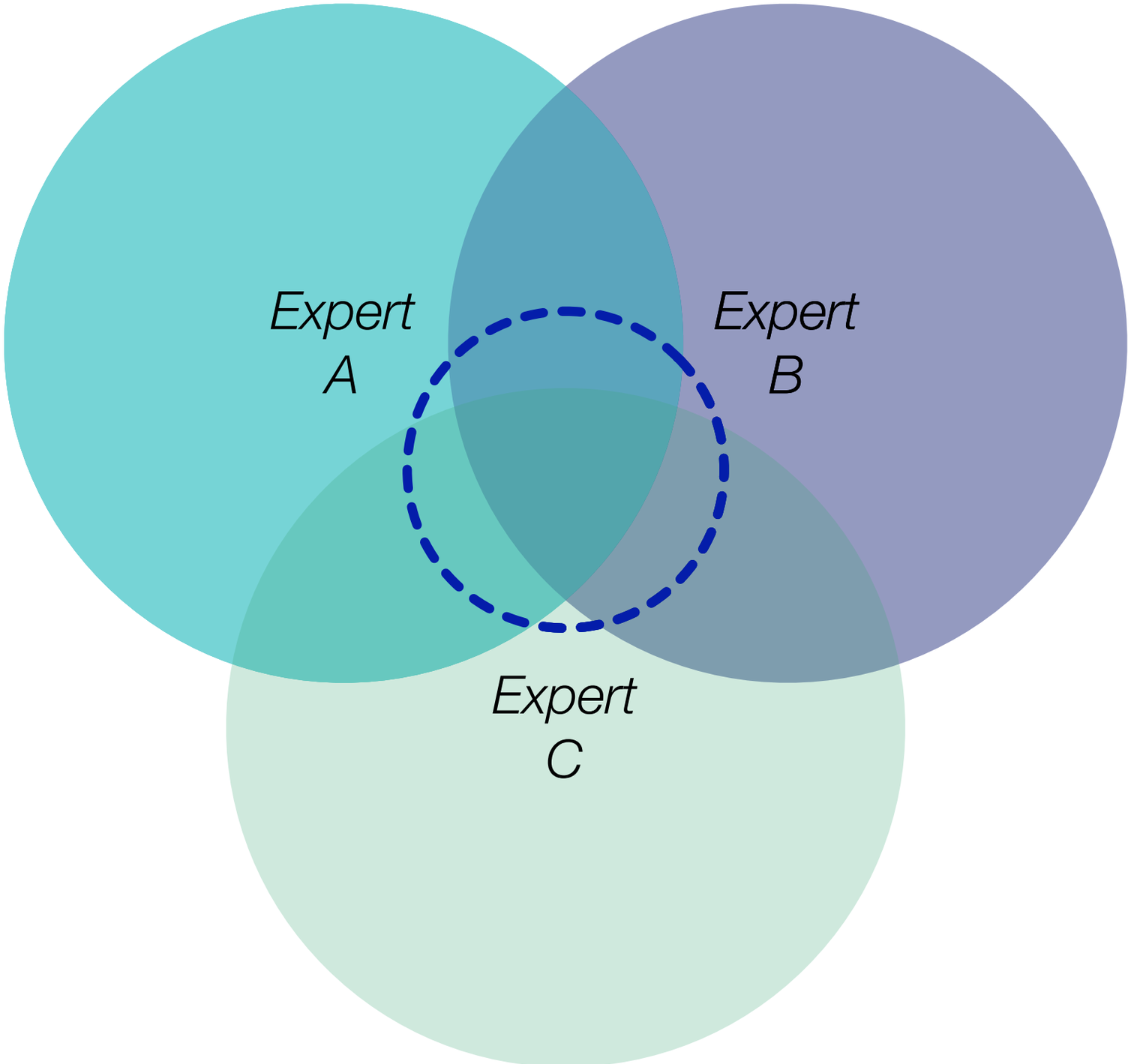
- **Horizon Report Metatrends:**
  - Online at: http://horizon.nmc.org/wiki/Metatrends
- **Ruben R. Puentedura, *Technology In Education – The First 200,000 Years*:**
  - Online at: http://www.hippasus.com/rrpweblog/archives/000069.html

# Informing Decision Making: the Delphi Method

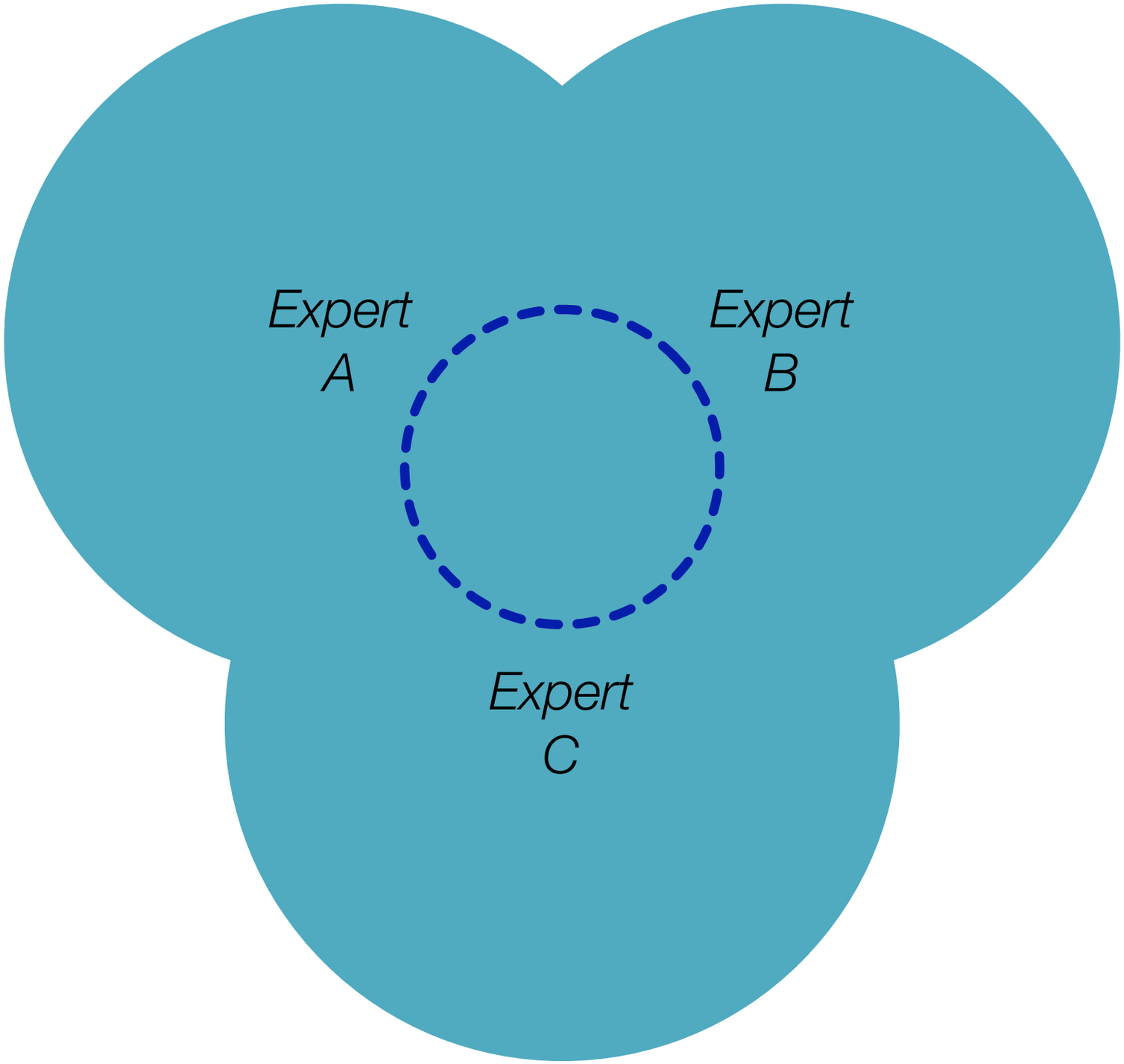
# Wanted: the Relevant Information Space



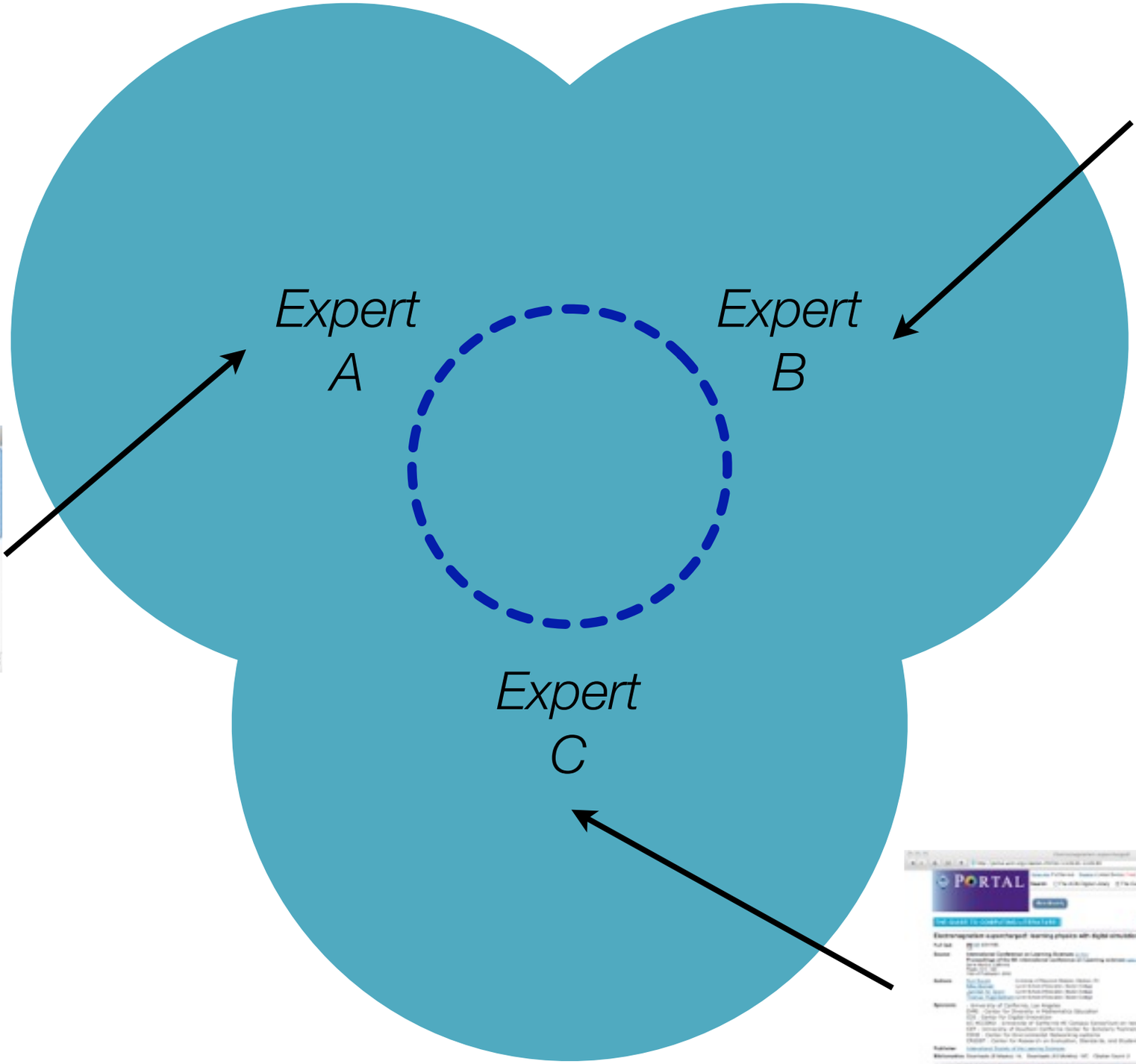
# Stage 1: Bringing In the Experts



# Stage 2: Aggregating the Replies

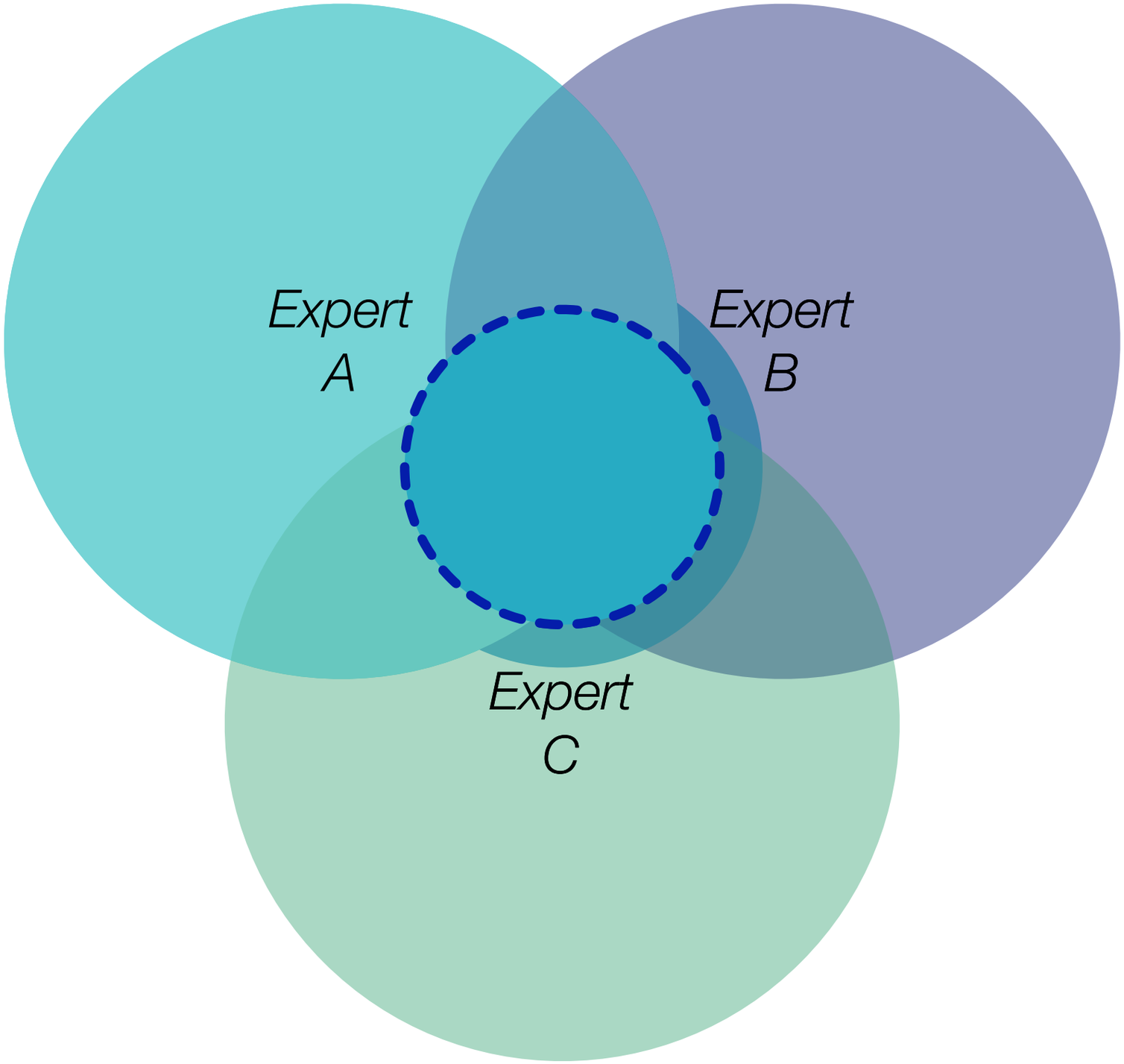


# Stage 3: Informing the Process





# Stage 4: Selecting the Relevant Information Space



# Things to Keep In Mind

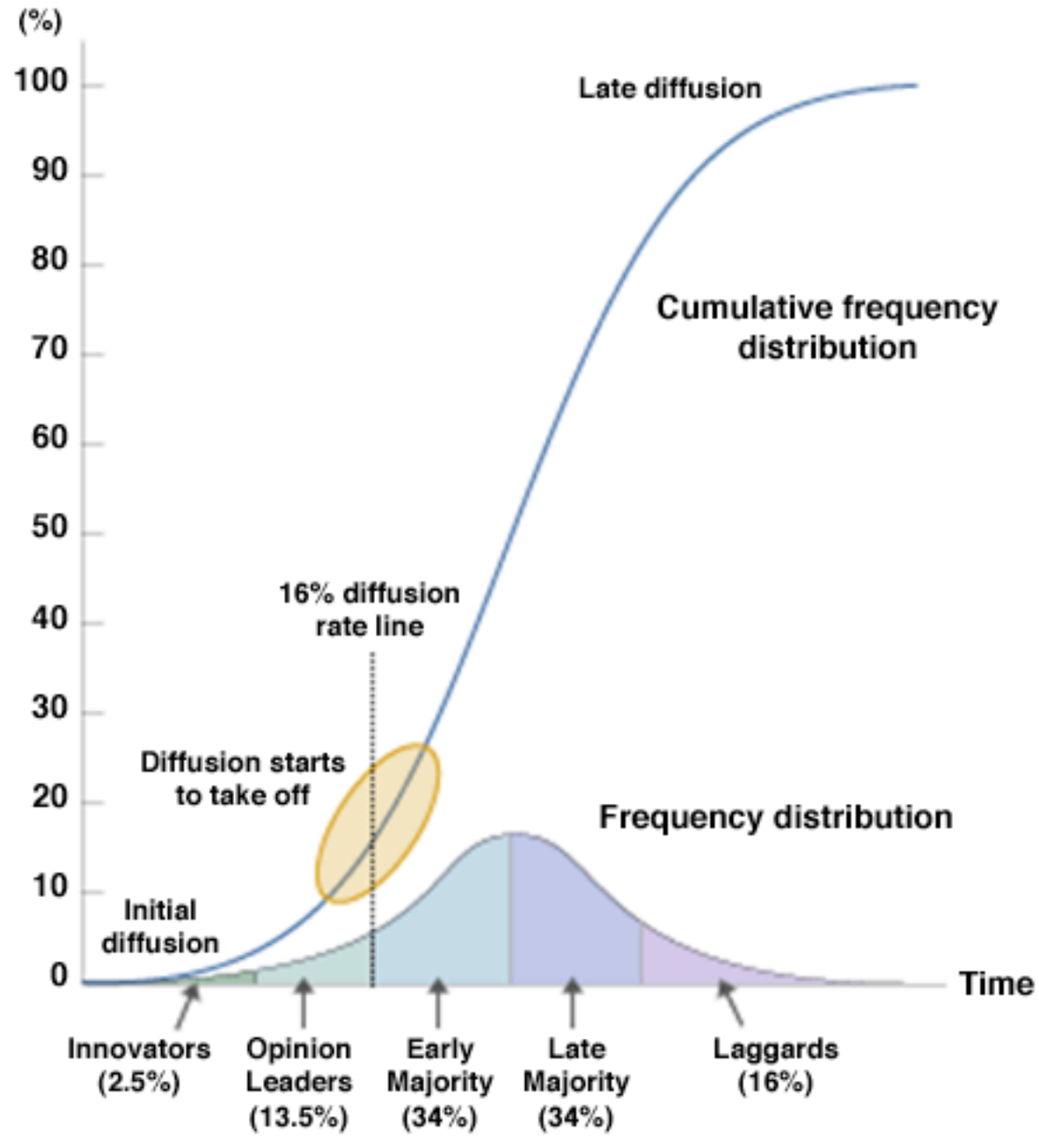
- Change some, but not all, of your expert panel members each year:
    - Too much change leads to unstable recommendations, too little change leads to groupthink-like phenomena.

- 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 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.

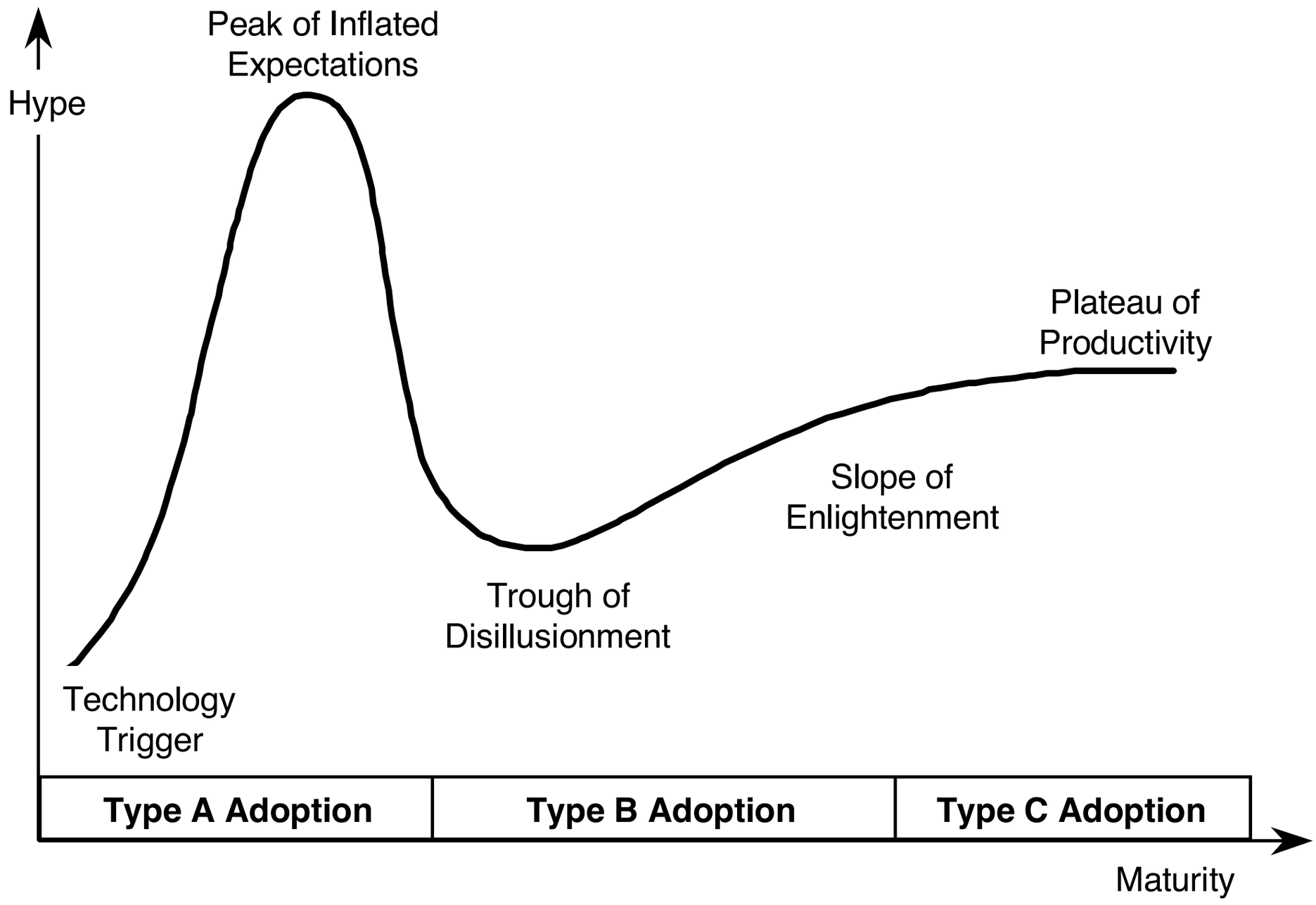
# Additional Toolkits

# How Innovations Spread
# (Everett M. Rogers, *Diffusion of Innovations*)




Source: *The Innovator Theory*. Online at http://www.mitsue.co.jp/english/case/concept/02.html

# The Gartner Hype Cycle




Source: GartnerGroup

# The Gartner Hype Cycle: Phases and Adoption Types

- **Five Phases:**
  - *Technology Trigger*: a new technology generates significant press and industry interest;
  - *Peak of Inflated Expectations*: a flurry of well-publicized activity results in some successes, but more failures;
  - *Trough of Disillusionment*: the technology becomes unfashionable, and the press abandons the topic;
  - *Slope of Enlightenment*: focused experimentation and solid hard work lead to a true understanding of the technology's applicability, risks, and benefits;
  - *Plateau of Productivity*: the real-world benefits of the technology are demonstrated and accepted.
- **Three Adoption Types:**
  - *Type A*: technologically aggressive organizations.
  - *Type B*: technologically low risk organizations, focused on maintaining competitiveness.
  - *Type C*: technologically cautious organizations, focused on cost reduction.

# The SAMR Model (Puentedura, 2003)

**Redefinition**
*Tech allows for the creation of new tasks, previously inconceivable*

**Modification**
*Tech allows for significant task redesign*

*Transformation*

**Augmentation**
*Tech acts as a direct tool substitute, with functional improvement*

**Substitution**
*Tech acts as a direct tool substitute, with no functional change*

*Enhancement*

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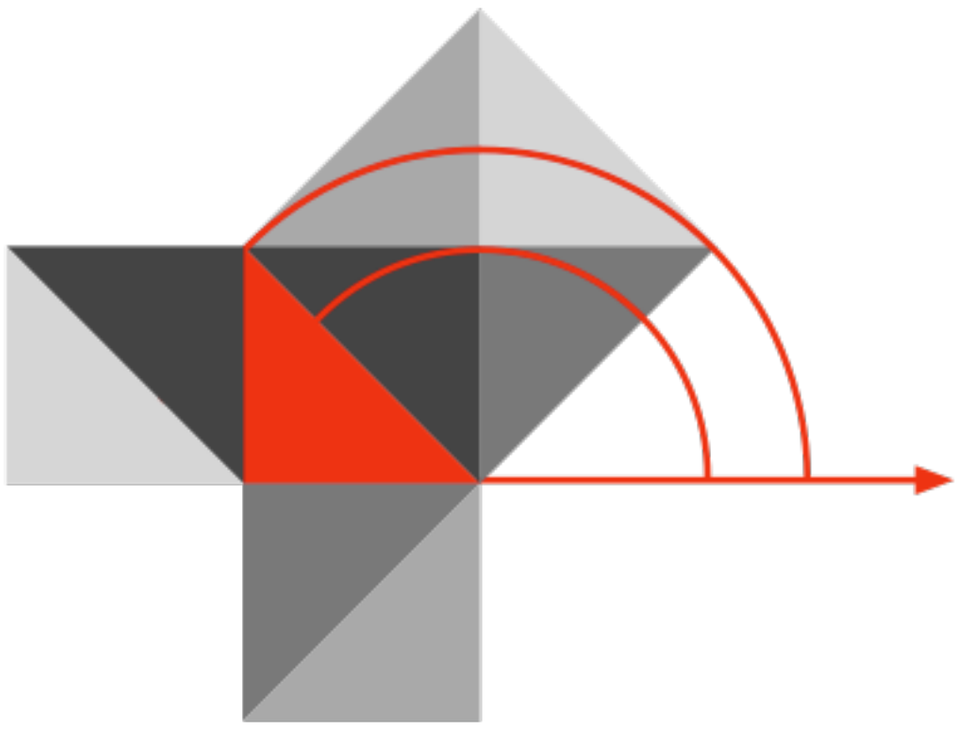
# Hippasus



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