The American Jobs Plan: A ShapingEDU Broadband Project Delphi Activity

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The American Jobs Plan



to

Shift-click to make that word the root.

broadband

is the new electricity. It is necessary for Americans even if the infrastructure exists where they live. In t internet than Black or Latino families. The last year made pa service and promote more widespread adoption. Pr . While the President recognizes that individual sub . President Biden's plan will all Americans Too many American families

every American

infrastructure

that provides minimally acceptable s to reach 100 percent coverage. The P in unserved and underserved areas so isn't enough. We also must ensure th

, including the more tha

through a historic invest

It also prioritizes support for broadband networks c coverage rebuilding crumbling infrastructure like roads, brid at minimally acceptable speeds. Build, preserve, and retrofit more than two millicates and retrofit more than two millicates are sentenced as a second secon for all. When President Biden managed the implementation of the Recovery Act, , and electricity service that Americans deserve. Specifically, his plan will: Ensure prices among OECD countries, millions of Americans can't use broadband intern networks owned, operated by, or affiliated with local governments, non-profits, a

in America, and millions of families and our economy reaped the benefits. Broadband internet is the new electricity. It is necessary for Americans to do their jobs, to participate equally in school learning, health care , and to stay connected. Yet , by one definition, more than 30 million Americans live in areas where there is no broadband infrastructure that provides minimally acceptable speeds. Americans in rural areas and on tribal lands particularly lack adequate access. And, in part because the United States has some of the highest broadband prices among OECD countries, millions of Americans can't use broadband internet even if the infrastructure exists where they live. In urban areas as well, there is a stark digital divide: a much higher percentage of White families use home broadband

Shift-click to make that word the root.

ffordable, reliable,

JRE, A RENEWED ELECTRIC GRID, AND of \$100 billion. That investment will: Build

d areas so that we finally reach 100 percent

high-speed

erican, including the more than 35 percent of rural Americans who lack access to \ asportation, safe water, affordable housing, healthy schools, clean electricity, and internet, or experience power outages too often – all while paying more for those d farm in America, and millions of families and our economy reaped the benefits. by one definition, more than 30 million Americans live in areas where there is no k adequate access. And, in part because the United States has some of the highest ighest broadband prices among OECD countries, millions of Americans can't use icture exists where they live. In urban areas as well, there is a stark digital divide: ach 100 percent coverage. The President's plan prioritizes building "future proof" reach 100 percent high-speed broadband coverage. It also prioritizes support for en playing field with private providers, and requiring internet providers to clearly en playing field with private providers, and requiring internet providers to clearly ust ensure that every American who wants to can afford high-quality and reliable plan invests in rural and Tribal communities, including by providing 100 percent

broadband

systems, improving the health of our country's children and communities of color. It will put hundreds of thousands of people to work laying thousands of miles of transmission lines and capping hundreds of thousands of orphan oil and gas wells and abandoned mines. And, it will bring affordable, reliable, highspeed broadband to every American, including the more than 35 percent of rural Americans who lack access to broadband at minimally acceptable speeds.

> Build, preserve, and retrofit more than two million homes and commercial buildings, modernize our nation's schools and child care facilities, and upgrade veterans' hospitals and federal buildings. President Biden's plan will create good jobs building, rehabilitating, and retrofitting affordable.

1. Fix highways, rebuild bridges, upgrade ports, airports and transit systems.

2. Deliver clean drinking water, a renewed electric grid, and high-speed broadband to all Americans.

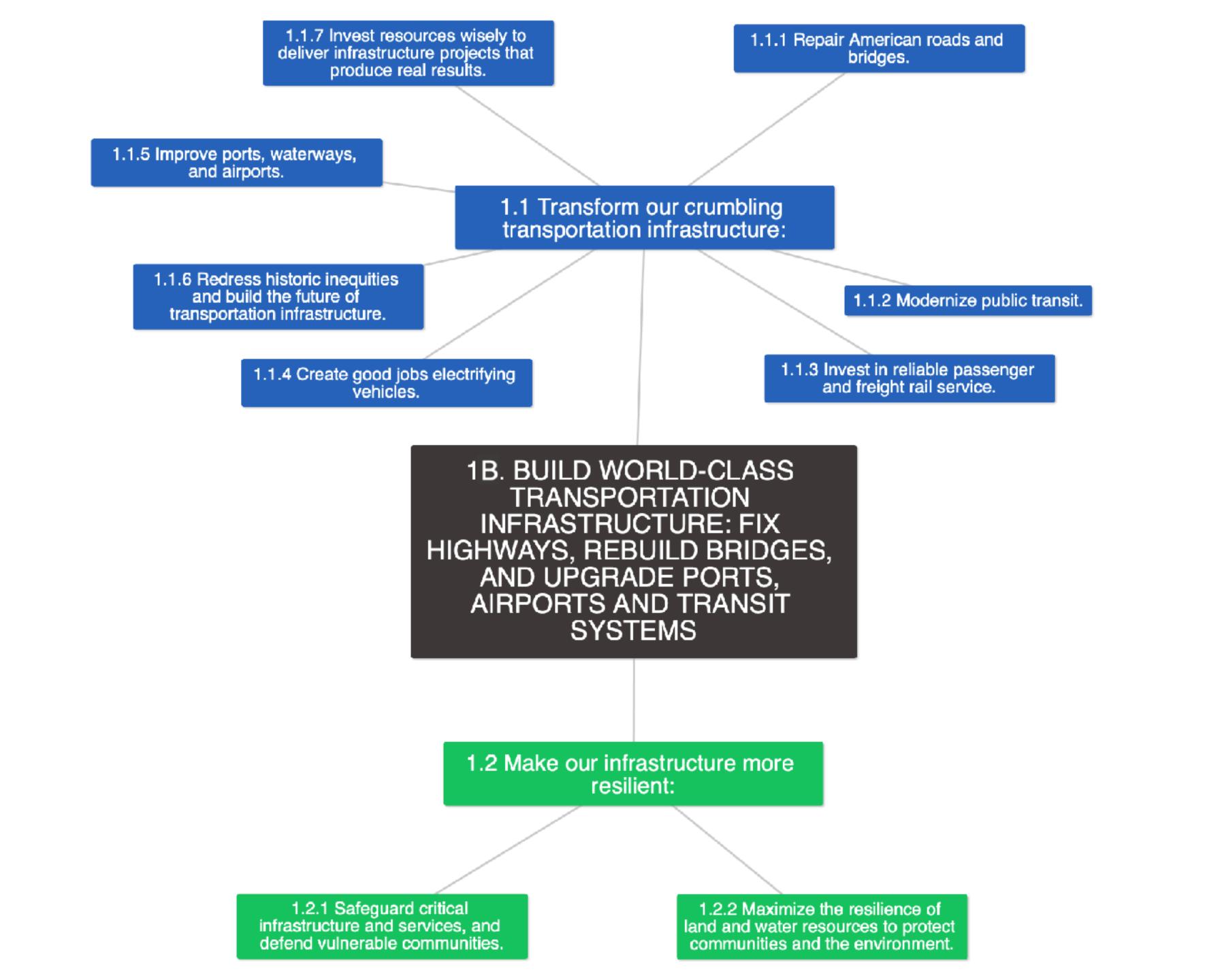
3. Build, preserve, and retrofit more than two million homes and commercial buildings, modernize our nation's schools and child care facilities, and upgrade veterans' hospitals and federal buildings.

American Jobs Plan

4. Solidify the infrastructure of our care economy by creating jobs and raising wages and benefits for essential home care workers.

5. Revitalize manufacturing, secure U.S. supply chains, invest in R&D, and train Americans for the jobs of the future.

6. Create good-quality jobs that pay prevailing wages in safe and healthy workplaces while ensuring workers have a free and fair choice to organize, join a union, and bargain collectively with their employers.



2.1.2 Upgrade and modernize America's drinking water, 2.1.1 Replace 100 percent of the wastewater, and stormwater 2.2.1 Build high-speed broadband nation's lead pipes and service 2.2.2 Promote transparency and systems, tackle new contaminants, infrastructure to reach 100 percent competition. and support clean water coverage. infrastructure across rural America. 2.2 Revitalize America's digital 2.1 Ensure clean, safe drinking water is a right in all communities: infrastructure: 2.2.3 Reduce the cost of 2B. REBUILD CLEAN DRINKING broadband internet service and WATER INFRASTRUCTURE, A RENEWED ELECTRIC GRID, AND HIGH-SPEED BROADBAND promote more widespread adoption. TO ALL AMERICANS 2.3.6 Mobilize the next generation 2.3.1 Build a more resilient electric of conservation and resilience transmission system. workers. 2.3 Reenergize America's power infrastructure: 2.3.2 Spur jobs modernizing power 2.3.5 Build next generation generation and delivering clean industries in distressed electricity. communities. 2.3.4 Remediate and redevelop idle 2.3.3 Put the energy industry to real property, and spur the buildout of critical physical, social, and civic

work plugging orphan oil and gas wells and cleaning up abandoned infrastructure in distressed and mines. disadvantaged communities.

3.1.1 Produce, preserve, and retrofit more than a million affordable, resilient, accessible, energy efficient, and electrified housing units.

3.1.2 Build and rehabilitate more than 500,000 homes for low- and middle-income homebuyers.

3.1 Build, preserve, and retrofit more than two million homes and commercial buildings to address the affordable housing crisis:

3.1.3 Build and rehabilitate more than 500,000 homes for low- and middle-income homebuyers.

3.1.4 Address longstanding public housing capital needs.

3.1.5 Put union building trade workers to work upgrading homes and businesses to save families money.

3.2.1 Modernize our public schools.

3.2.2 Investing in community college infrastructure.

3.2 Modernize our nation's schools and early learning facilities:

3.2.3 Upgrade child care facilities and build new supply in high need areas.

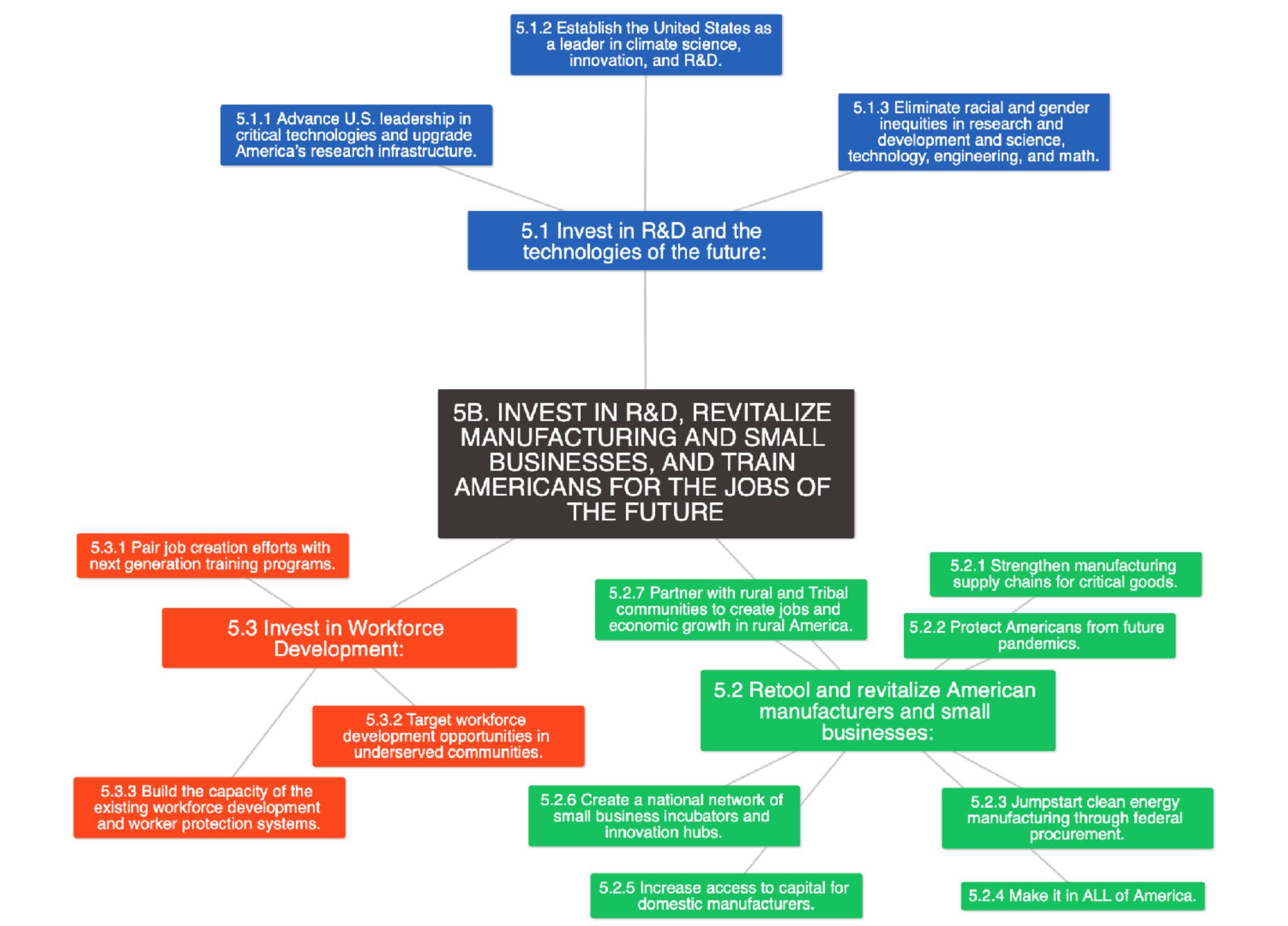
3B. BUILD, PRESERVE, AND RETROFIT MORE THAN TWO MILLION HOMES AND COMMERCIAL BUILDINGS; MODERNIZE OUR NATION'S SCHOOLS, COMMUNITY COLLEGES, AND EARLY LEARNING FACILITIES; AND UPGRADE VETERANS' HOSPITALS AND FEDERAL BUILDINGS

3.3 Upgrade VA hospitals and federal buildings:

4.0.1 Expand access to long-term care services under Medicaid.

4B. SOLIDIFY THE
INFRASTRUCTURE OF OUR
CARE ECONOMY BY CREATING
JOBS AND RAISING WAGES
AND BENEFITS FOR ESSENTIAL
HOME CARE WORKERS

4.0.2 Put in place an infrastructure to create good middle-class jobs with a free and fair choice to join a union.



6.0.1 Empower Workers.

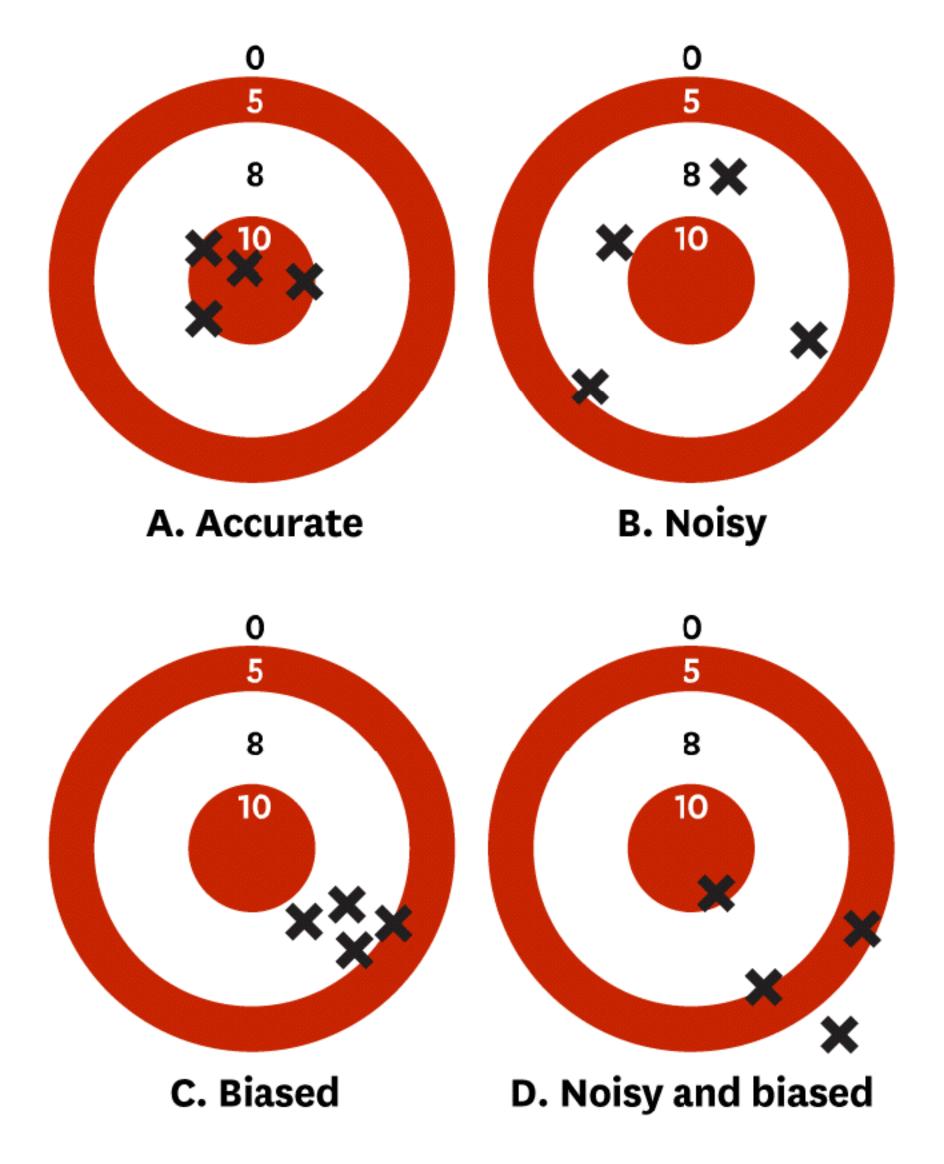
6B. CREATE GOOD-QUALITY
JOBS THAT PAY PREVAILING
WAGES IN SAFE AND HEALTHY
WORKPLACES WHILE
ENSURING WORKERS HAVE A
FREE AND FAIR CHOICE TO
ORGANIZE, JOIN A UNION, AND
BARGAIN COLLECTIVELY WITH
THEIR EMPLOYERS

6.0.2 Create good jobs.

6.0.3 Protect workers.

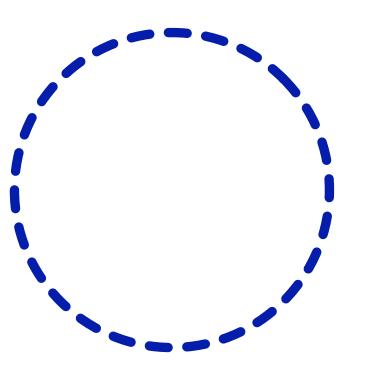
The Modified Delphi Process

How Noise and Bias Affect Accuracy

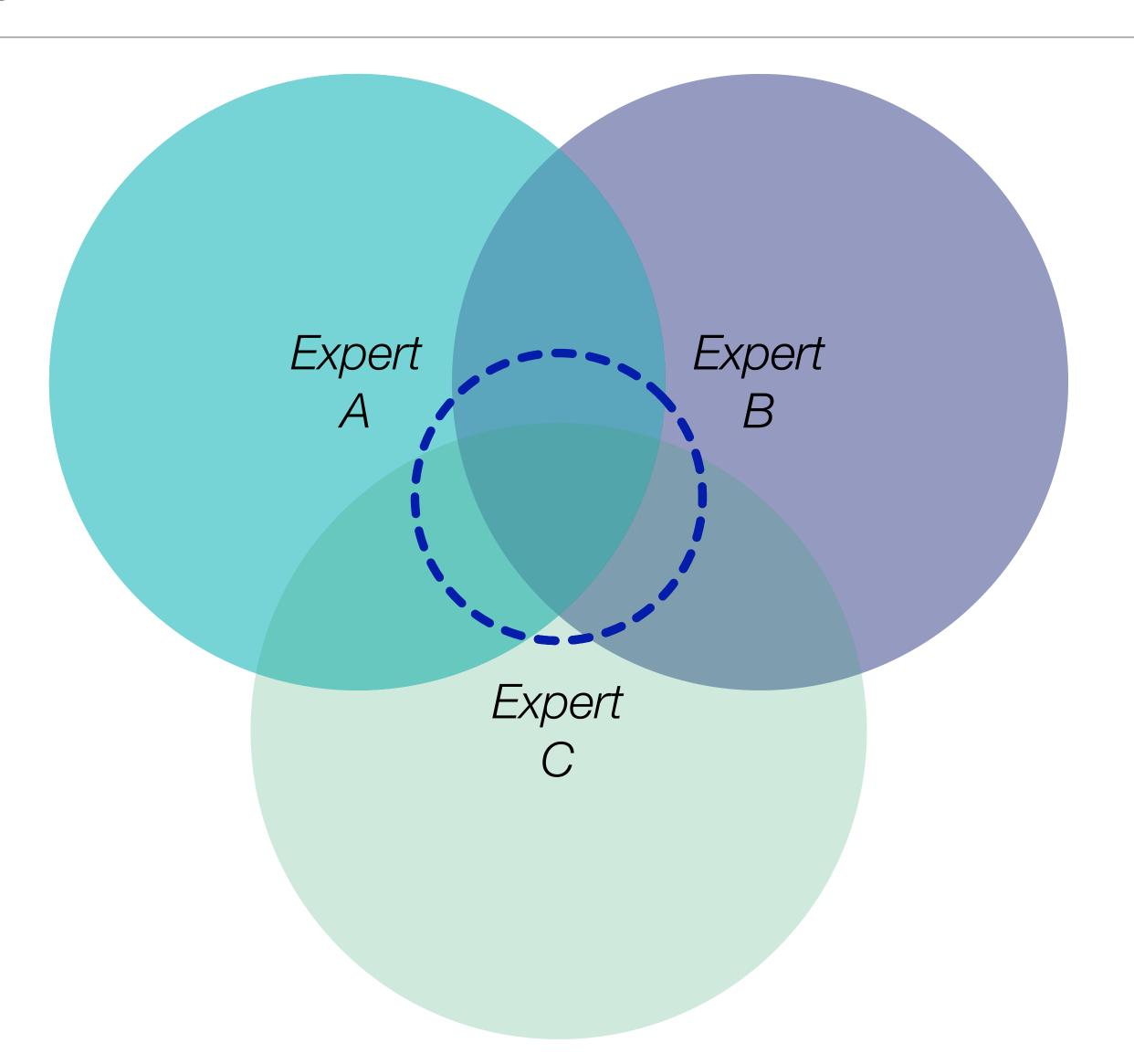


SOURCE DANIEL KAHNEMAN, ANDREW M. ROSENFIELD, LINNEA GANDHI, AND TOM BLASER FROM "NOISE," OCTOBER 2016

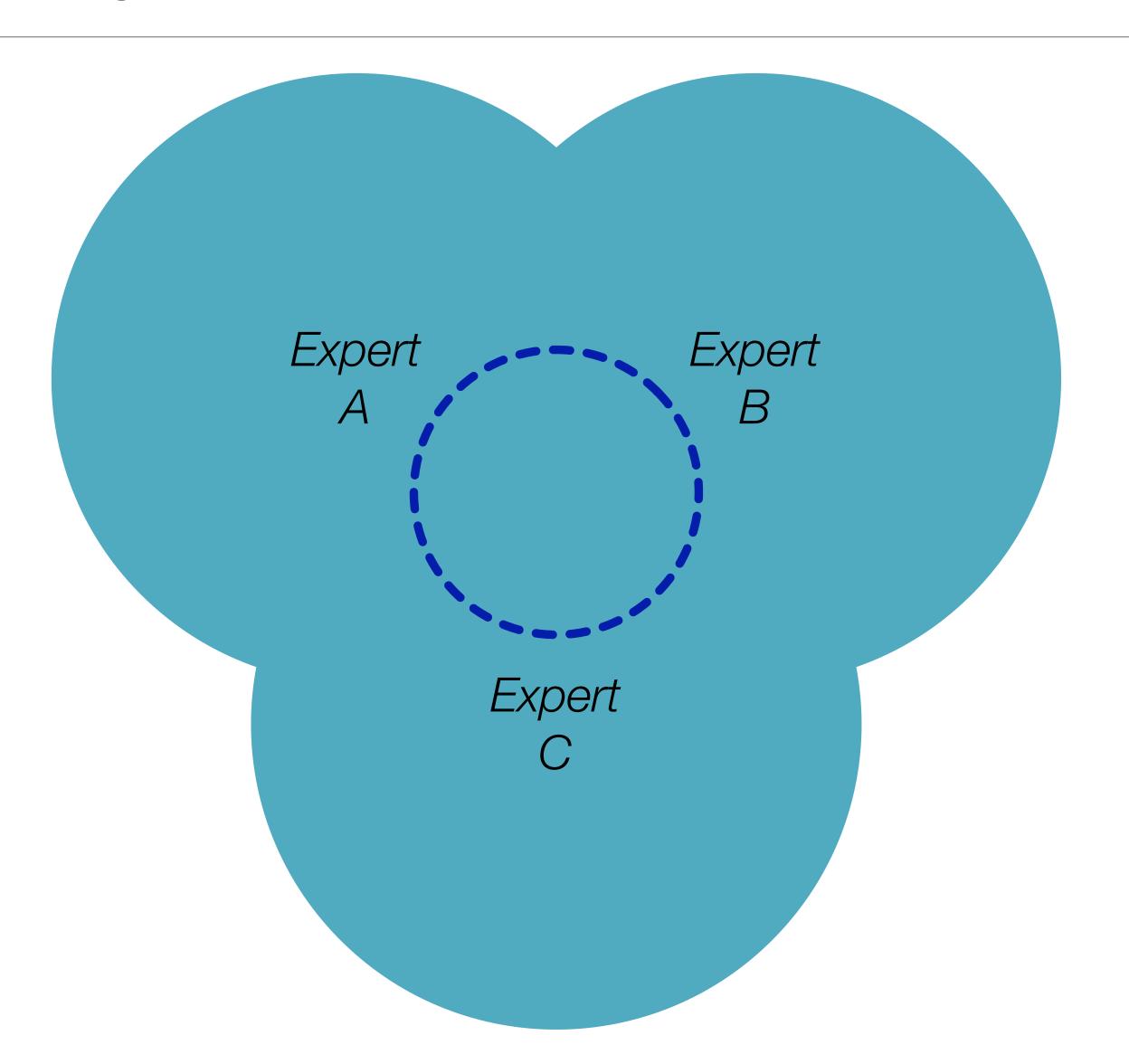
Wanted: the Relevant Knowledge



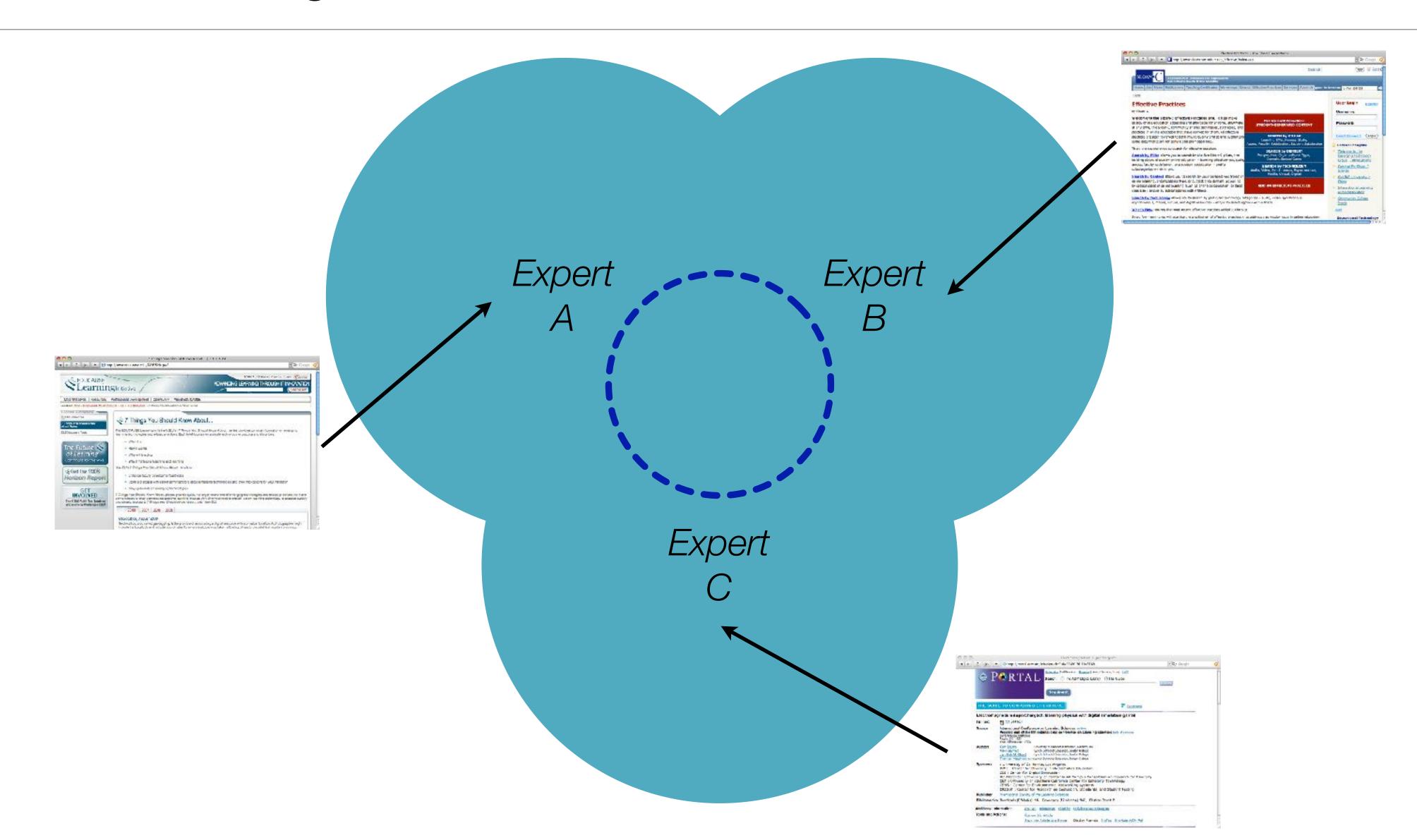
Stage 1: Seeding the Field



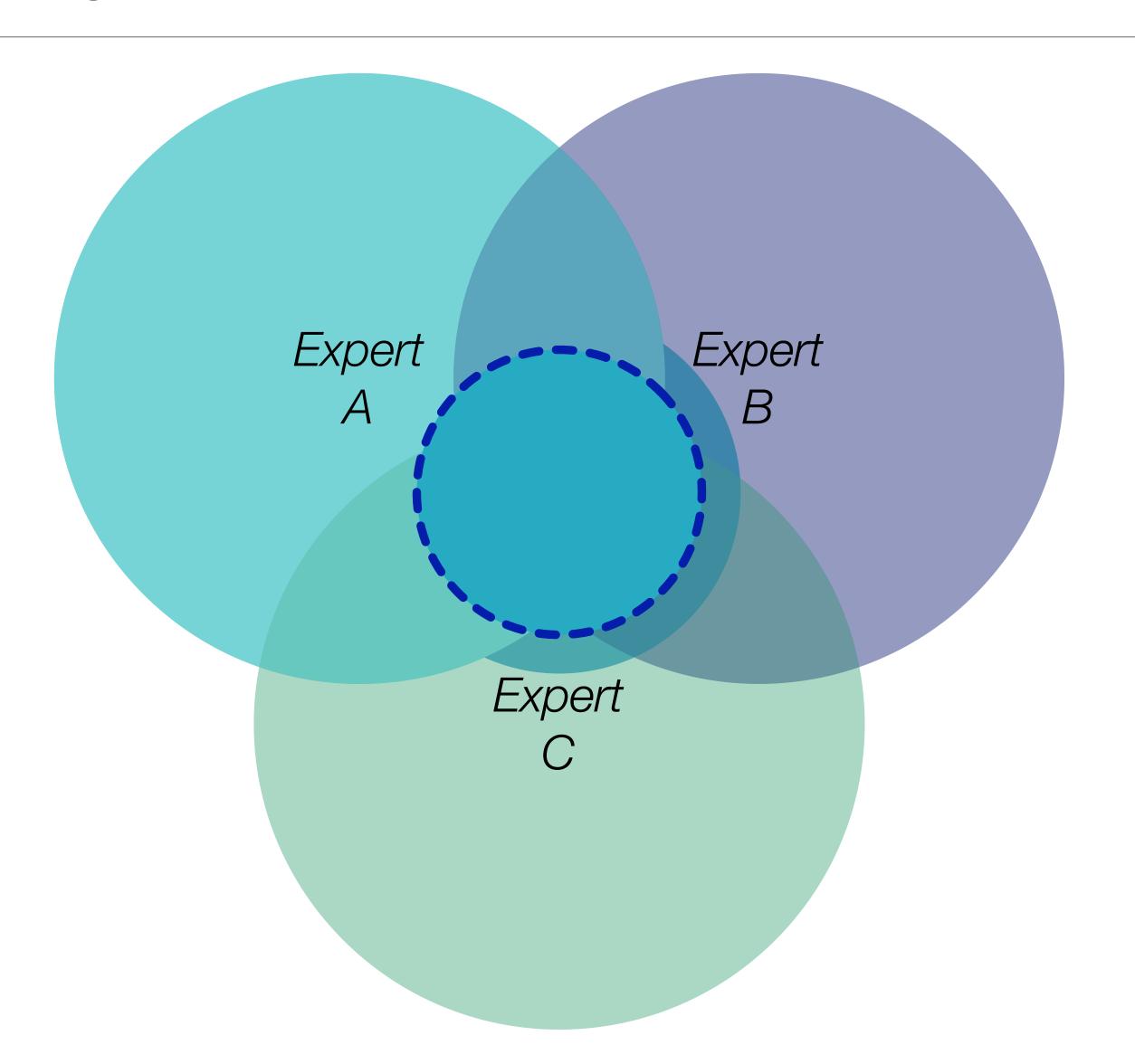
Stage 2: Aggregating the Replies



Stage 3: Informing the Process



Stage 4: Winnowing Down the Results



The First Round Voting Method

- · Every participant gets a number of "tokens" to distribute among their preferred replies
- The number of tokens T is determined by the number of replies, according to the following formula: $\# of \ tokens = \sqrt{\# of \ replies}$
- A participant can distribute their tokens any way they want for instance, if a participant got 7 tokens, they could:
 - Put 1 token on each of 7 different replies
 - Put all 7 tokens on one reply
 - Put 2 tokens on one reply, 4 tokens on a second reply, and 1 token on a third reply

. . .

- Voting is private
- The top T replies will be selected for the second round of voting

The Second Round Voting Method

- In this round, every participant gets exactly three tokens to distribute among their preferred replies
- As in the previous voting round, a participant can distribute their tokens any way they want – they could:
 - Put 1 token on each of 3 different replies
 - Put all 3 tokens on one reply
 - Put 2 tokens on one reply, and 1 token on a second reply
- · As before, voting is private

Resources

The American Jobs Plan:

Online at https://www.whitehouse.gov/american-jobs-plan/

Jason Davies' Tools for Text Analysis:

- Word Cloud Generator: https://www.jasondavies.com/wordcloud/
- Word Tree: https://www.jasondavies.com/wordtree/

The Delphi Method:

• Harold A. Linstone and Murray Turoff (Eds.) *The Delphi Method: Techniques and Applications*. Online at https://web.njit.edu/~turoff/pubs/delphibook/index.html

Noise and Bias:

- Kahneman, Daniel, et al. "Noise: How to Overcome the High, Hidden Cost of Inconsistent Decision Making." Online at https://hbr.org/2016/10/noise
- Kahneman, D., Sibony, O., & Sunstein, C. R. (2021). *Noise: a flaw in human judgment*. Little, Brown Spark.