

Doing Policy Analysis and Policy Research

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Course Overview

	Morning Session (10:00 ~ 13:00)	Afternoon Session (14:00 ~ 16:00)
2 Aug 2024	Concept of Public Policy	Assignment & Task Division
9 Aug 2024	Research & Doing Policy Analysis	Hands on Using AI tools
16 Aug 2024	Policy Actors & Policy Process	Policy Simulation
23 Aug 2024	Power & Policy Agenda	Elevator Pitch & Policy Brief
30 Aug 2024	Policy Implementation	Policy Workshop

Day II: Session Overview

- Prospective and Retrospective Policy Analysis
- Policy Analysis Steps
- Policy problems, policy instruments and trade-off
- What is evidence?
- Two culture hypothesis
- Use of evidence in policy making
- Evidence-policy gap
- Evidence pyramid and significance in policy analysis

Policy Analysis

	Analysis of Policy	Analysis for Policy
Purpose	Understanding and evaluating existing policies.	Providing recommendations for future policy decisions
Focus	Retrospective, descriptive, and evaluative.	Prospective, prescriptive, and strategic.
Methods	Historical research, Descriptive analysis, ex post impact evaluation	Predictive modeling, scenario analysis, ex ant analysis.
Recommendation	Backward looking, incremental changes	Forward looking, innovative changes
Example	Evaluating the Clean Air Act's impact on air quality.	Developing strategies to increase electric vehicle adoption.

Policy Analysis: Broadache Eightfold Path

- Suited for public problems
- Adaptable across roles of Government, private and nonprofits sectors
- Linear and systematic approach but flexible and adoptive
- Focuses on client's perspectives
- Emphasise on gradual social improvement
- Policy analysis is art than science (includes skills and intuition)

Eightfold Path Steps

1. Define the Problem
 2. Assemble Some Evidence
 3. Construct the Alternatives
 4. Select the Criteria
 5. Project the Outcome
 6. Confront the Trade-offs
 7. Decide
 8. Tell the Story
- Mark Your Territory
 - Get Smart
 - Set the Table
 - Identify What Matters
 - Prognosticate
 - The Hard Part
 - Lead the Way
 - Win

Sources of Policy Problem: Market Failure

- Externalities :
 - Addiction, family breakdown and crime due to online gambling
- Public Goods (non-excludability, Non-rivalry)
 - under provision of internet access, leaving certain populations without this essential service.
- Information Asymmetry
 - Gambling operators have more information about addictive nature of their games but never revealed to public.
- Market Powers
 - Market dominance by bitcoin leading to reduced competition
- Inequality
 - Unskilled job displacement due to automation and technological advancement

Problems Outside the Market

- System breakdown
 - Maternity period disrupting women's professional career
- Low living standards despite market functioning well
 - Market failure to reward low skill jobs – need for labor unions
- Discrimination
 - Systemic barriers faced by women in workplace
- Failure of Government in its traditional roles
 - Failure to ensure human rights – international sanctions

Define the Problem :DOs

- Translate Rhetoric to Problem Statement
 - "Digital Goods and Services Are Taxed Unfairly"
 - The current tax system does not effectively address the unique characteristics of digital goods and services.
 - "Universal Basic Income Is a Utopian Fantasy"
 - Current welfare systems does not fully address the economic challenges posed by automation and job displacement.
- Use language of excess and deficit
 - Too many low-income individuals lack access to affordable and responsible microfinance options.
 - There are several regulatory barriers that limit the ability of labor unions to effectively advocate for worker rights.

Define the Problem: DOs

- Identify the Public Element of Private Trouble
 - Regulations on online gambling are insufficient, leading to inadequate consumer protection and an increase in illegal gambling activities.
- Quantify the Problem
 - Only 20% of digital goods and services are taxed at rates comparable to physical goods, leading to a 30% discrepancy in tax revenue between digital and physical products.

Define the Problem: DOs

- Think of opportunities not just threads
 - Few farmers are recognizing health and environmental benefits of integrated waste management in commercial farming.
- Diagnose the cause (what is causing the problem)
 - Classifying gig economy workers as independent contractors rather than employees creates excessive job insecurity and a lack of essential benefits and protections.

Define the Problem: DONT's

- Do not try to complete whole analysis within problem definition.
 - Unless digital goods and services are no subsidized for 50% tax, innovation will never progress.
- Do not embed or include solution in problem definition.
 - Too few microfinance provide banking education or provide liabilities insurance to their client while approving the loans
- Do not dilute problem statement with values conception
 - Social media users are being brainwashed by ridiculous political advertisement.
- Do not expand or confine the scope of problem definition excessively

Assemble Evidence

- Literature review
- Review of Policy Documents
- Secondary Data
- Gather experts opinion
- In depth interview with key stakeholders
- Public opinion survey and survey of best practices
- Primary survey and experiments (if evidence are not sufficient)

Construct Alternatives: Policy Instrument

Freeing, Facilitating, & Stimulating Markets (Category 1)

- Enhances market efficiency, competition, and innovation
- Reduced consumer protections and potential monopolies.

Using Subsidies & Taxation to Alter Incentives (Category 2)

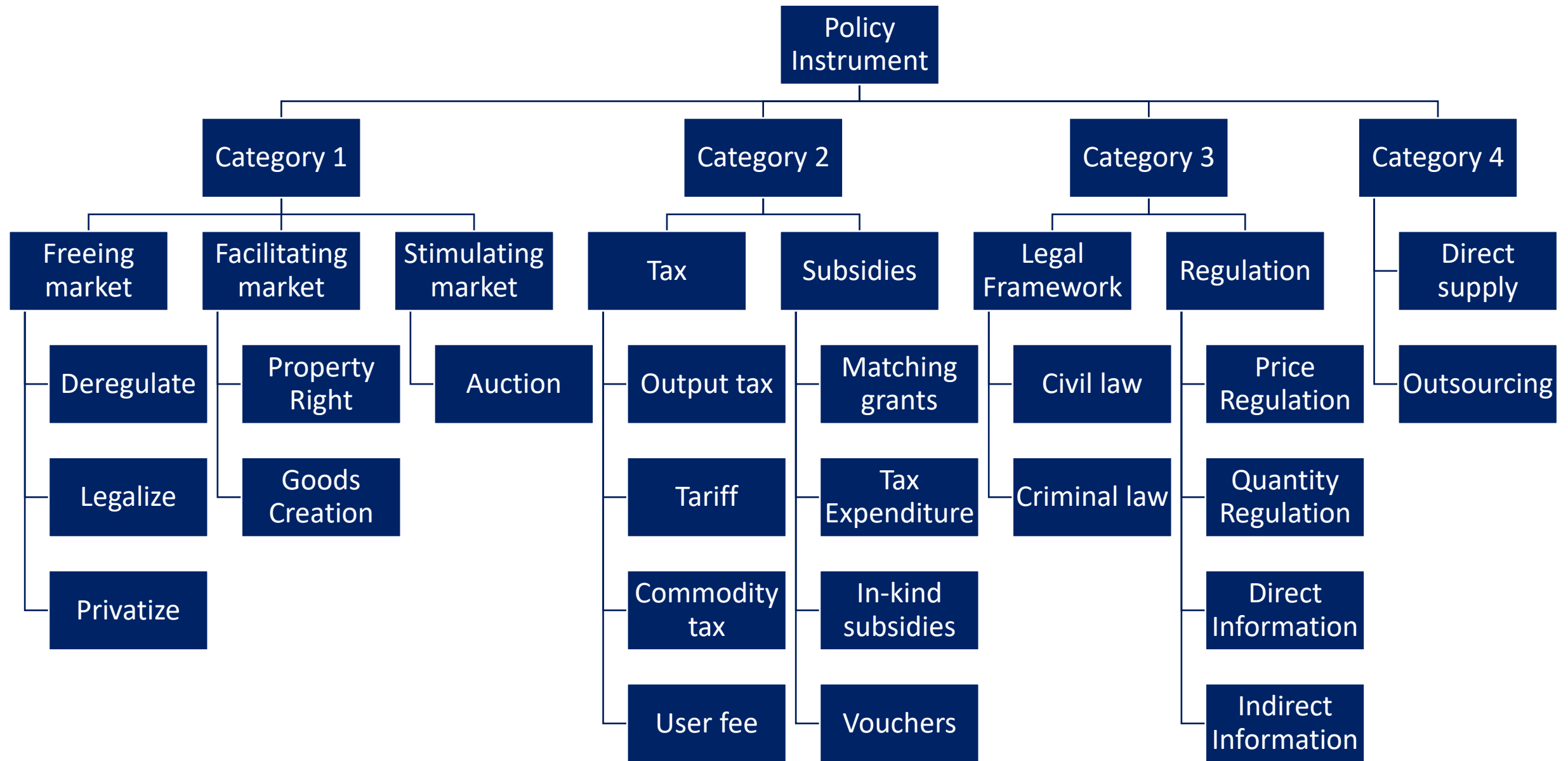
- Directs economic behavior towards socially beneficial outcomes
- Distort market signals and reduce government revenue.

Establishing Rules (Category 3)

- Protects consumers, ensures fair competition, and market integrity.
- Increase compliance costs and hinder market flexibility.

Supplying Goods Through Non- Market Mechanisms (Category 4)

- Ensures universal access to essential services
- Can be less efficient and more costly



Select Criteria

- Criteria usually are either objectives or standards
 - What objective(s) each alternatives aim to achieve (i.e. goal)?
 - How should each alternative's success be measured (i.e. performance standards)?
- Criteria are public values you will bring to bear in the analysis
- Most analyses have case specific criteria
- The more quantifiable your criteria are the stronger your analyses be.
- Incrementalism is good mindset for listing alternatives and criteria
 - E.g. let present trend continue, do nothing

Key Criteria to Consider

Efficacy

- *Does the alternative reduce the severity of the problem?*

Efficiency

- *Does the alternative add more benefit than cost?*
- *Does the alternative add benefit at minimum added cost?*
- *Does the alternative will minimize waste of resources?*
- *Does the alternative will improve the allocation of benefits and burdens economically?*

Feasibility

- *If implementing the alternative can be achieved?*

Legality

- *Is the alternative permissible and within policy actors' existing authority?*
- *Political Acceptability*
- *Does the alternative garner necessary support among elected officials, voters, etc?*
- *Equity (Fairness, Justice)*
- *Does the alternative treat those affected even-handedly?*
- *Does the alternative take into account social disadvantage?*

Freedom

- *Does the alternative unduly burden the free choice of producers, consumers, and citizens generally*

Project the Outcome

- involves hard thinking about how the alternatives will work in practice
- “Projecting” involves educated guesswork, informed prediction, and estimates
- What specific change(s) will the alternative introduce?
- What people and organizations will be most directly affected by these changes?
- How are those people and organizations likely to react?
- Are there analogous situations from which we can draw inferences about the outcomes?

Projection: Examples

	Example 1	Example 2
Problem	High incidence of childhood obesity	Increasing incidence of high speed accident on rush hours.
Alternative	3% sales tax on sugar sweetened beverages	Reduce speed limit to 30 km/hrs.
Criterion	Effectiveness (Reduce Consumption)	Maximize traffic safety (safety) Least cost
Outcome	How big a drop in consumption is expected if price is increased by 3%?	How many YLL and YLDs are saved due to speed limit enforcement? What is enforcement cost? What is the revenue generated from speeding tickets?

Trade-offs

- Involves seeing how each alternative performs *relative to all other alternatives* (across all outcomes)
- It is creating a logic of comparison for identifying the best alternative and crafting a meaningful and persuasive recommendation
- The outcomes matrix tool helps you reach success
 - Consider a congested highway bridge, where two alternatives are under consideration: adding a bridge lane, and metering traffic.
 - Two criteria: minimize total project cost, and maximize reduction of delays.

	Cost	Vehicle Delay Reduction	Cost Effectiveness
Lane	\$ 50 M	Reduce by 20 min (avg.)	2.5 M per min reduction
Metering	\$ 5 M	Reduce by 10 min (avg.)	0.5 M per min reduction

Decide and Tell Your Story

- “Decide!” means choosing which “story” you should tell in the public interest, *and moving on to deliver that recommendation to your client.*
- Telling your story starts with the concise and simplest version. Longer and technical version of the story should be gauged for specific audience.
- Find comfortable narrative flow and explain why your policy recommendation is the best alternative.
- Always stay in “persuasion” mode – don’t “qualify” statements or emphasize known points of weakness.
- Locate a good balance between precision and comprehensiveness.
- Make your written and oral presentations engaging, clear, and authoritative.
- Focus on few practical options rather than a bucket list of actions.

Too Much Crimes in Town Park

	Minimize negative Impacts on kids	Minimize administrative cost	Maximize safety improvements
Curfew (20:00 ~ 22:00)	Date: # of kids visiting park during curfew hours, time of reported crimes, seasonal variations Outcomes: More crime elsewhere; curfew violation, seasonal incontinence	Date: cost of singe information campaign Outcomes: Some administrative cost for police rounds and other program cost	Date: Change in reported crime by category, changes in injuries
Full time Security Guard	Data: Special training need for park security with kids program Outcomes: Increase kids' exposure to guarded spaces	Date: sq foot coverage per \$ worker, Cost of second worker during meal breaks Outcomes: Substantial expense over current expense	Data: Security firms' success rate, nature of service, failure rate in other places. Outcome: Lower crime, criminal will adjust to guard movements?
Close bathroom	Data: Frequency of children's bathroom use Outcomes: Incontinence to some kids and family	Data: Use rates, demand for water and cleaning Outcomes: Sanitary issue, neighboring business impacts	Date: Frequency and severity of crime inside vs outside bathroom Outcomes: Targeting reduction of lying in wait crime

What is Evidence?

- Based on Science
- De-constructing (which constituent part works or don't works)
- Control for bias
- Search for Universal truth
- Concern for rigor and accuracy

Two Culture Hypothesis

Researchers

- Identify Problem
- Identify Causes
- Develop Options
- Analyse Options
- Select Intervention
- Implement and Evaluate

Policymakers

- Identify Problem
- Understand Context
- Develop Options
- Assess reactions
- Use Judgment
- Prepare for Next Crisis

Two Culture Hypothesis

DIMENSSION	RESEARCGERS	POLICYMAKERS
Nature of Work	Discrete, Planned Projects	Continuous, unplanned
Incentive	Publication or Grant	Reorganization/Reelection
Time Frame for Action	Longer	Shorter
Knowledge Spam	Deep but Fewer issue	Broad across many issue
Accountability	Scientific Peers Funding Agency	Politicians/ Electorates
Constrain	Research Funding and Ethic	Political Bureaucratic Imperatives

Uses of Evidence

1. **Knowledge Driven Model:** New Knowledge will automatically drive new policy
2. **Problem Solving Model:** Knowledge are actively sought for pending decision
3. **Interactive Model:** Incremental policy change is interactively driven back and forth by emerging research outcome
4. **Political model:** Evidence is used to support partisan and political support
5. **Technical model:** research is being undertaken as an excuse for delaying decision or deflects criticism

Evidence-Policy Gaps

- **Relevance Gap:** requirement for evidence, and the research that are commissioned often do not match with what is happening in the policy environment.
- **Publication Gap:** the research targeted for publications are often the research with good outcome and successful experiment.
- **Retrievable Gap:** policymakers may have problems in retrieving all of those information.
- **Uselessness Gap:** policymakers may find evidence less useful
- **Hunting Gap:** finding the published and unpublished evidence by policymakers. This involve actively engaging with researchers
- **Critical Appraisal Gap:** critically appraising the systematic review
- **Good Intention Gap:** The belief that evidence is less desirable if policy makers intention is good

Bridging Evidence-Policy Gap

- **Institutional** – rule determines how evidence is used in policy and practice.
- **Blurring boundaries** – interaction between researchers and policy makers
- **Utilitarian evidence** - making research more useful e.g. impact assessments
- **Conduit** – Knowledge brokers
- **Alternative evidence** – researcher provides evidence and policy makers provide research areas
- **Narratives** – talking right people about issue and data e.g. knowledge cafe

Types of Evidence for Evidence-based Policy

Type 1

(Something should be done)

Causes of disease and their magnitude, severity and preventability

Type 2

(Which interventions or policies should be done?)

If specific interventions do or do not work to promote and help inform decisions

Type 3

(How something should be done?)

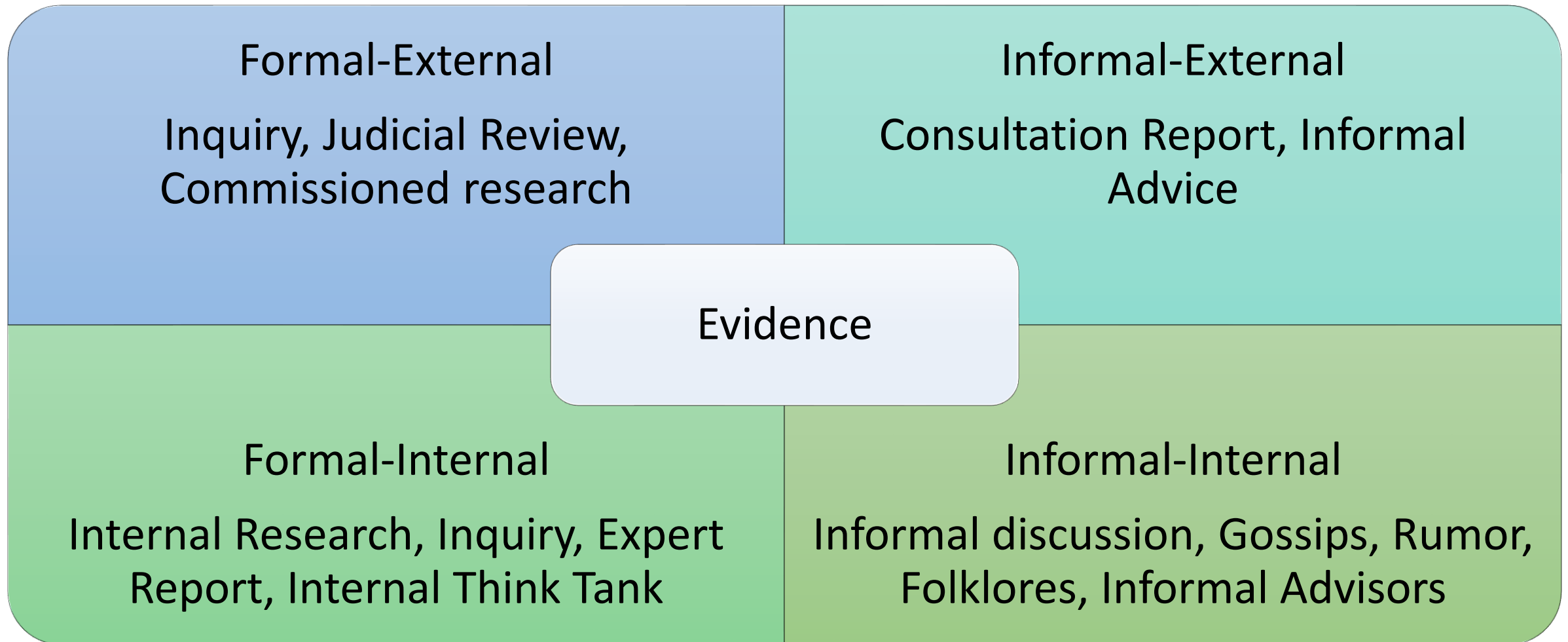
How and under what conditions interventions were implemented and how they were received?

Type 4

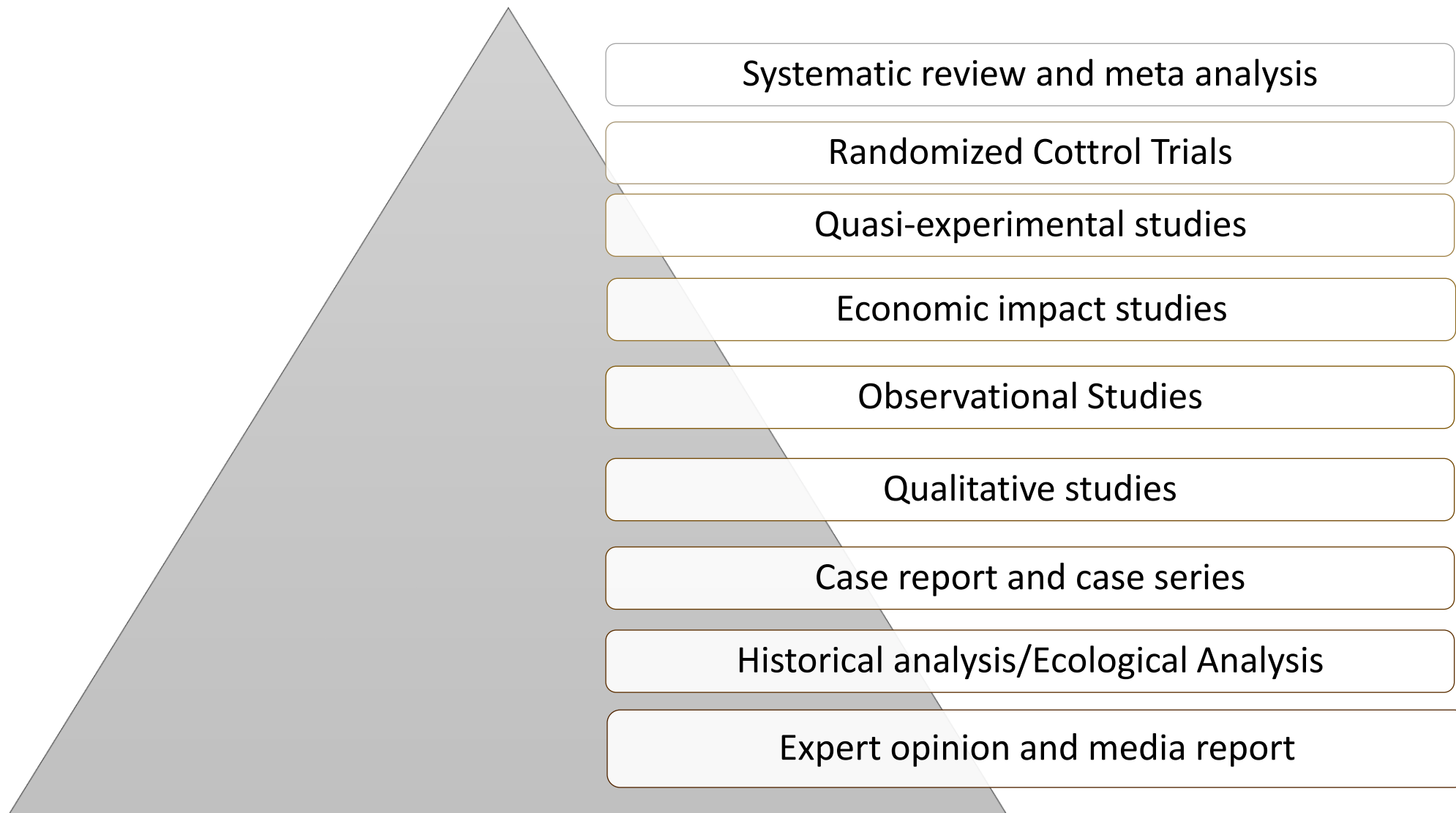
(What does it cost?)

What is the cost per unit and/or cost-effectiveness of the intervention(s) as compared to doing nothing or alternate?

Source of Evidence for Policymaking



Evidence Pyramid



Role of Research in Policy Analysis

Systematic Review and Meta Analysis	<ul style="list-style-type: none">• If the policy options works and under what circumstances?
RCTs and Quasi Experimental Studies	<ul style="list-style-type: none">• What is the impact of policy options on the outcome (policy impact)?
Economic Impact Studies	<ul style="list-style-type: none">• What is the financial implications of policy options?
Observational Studies	<ul style="list-style-type: none">• What is the policy problem and how big is the problem?
Qualitative Studies	<ul style="list-style-type: none">• How policy problems/options are perceived, experienced and expressed within the policy environment?
Case report and case series	<ul style="list-style-type: none">• What are emerging policy problems? Are there unique instances for policy adoptions?
Historical analysis/ ecological study	<ul style="list-style-type: none">• What precedents exists in relation to policy adoption? What are long term perspectives on policy problems/solutions?
Expert Opinion/ Media Report	<ul style="list-style-type: none">• How does public view policy problems and options in the first hand?

Thank You !

Basic Overview: Understanding AI Tools

What are AI tools?

- Software application that use artificial intelligence to perform task
- Always require human intelligence for its operation.
- They can process information, learn from data and make predictions.

How do they work?

- Machine learning – learn from data to make predictions.
- Natural Language processing – NLP algorithm to understand human language.

Basic Overview: Different Types

- General Purpose AI
 - Chat GPT and Bard, capable of performing wide range of general task.
- Specific Research tools
 - Semantic Scholar: AI-powered research tool that helps researchers find and understand academic papers.
 - IBM Watson: Used in various industries for data analysis, machine learning, and AI-driven insights.
 - LexisNexis: AI-powered legal research tool for finding and analyzing legal documents.
 - Power BI: Microsoft's tool for visualizing data with AI capabilities for identifying patterns and trends.

Basic Overview: Capabilities and Limitation



Capabilities

- Efficacy
- Consistency
- Insightful
- Scalability

Limitations

- Lack of Creativity
- Lack of contextuality
- Bias
- Data dependency
- Ethical Concerns

Effective Use : Emerging Issues & Patterns

- Scan news articles, social media and research papers
 - What are major news articles about online gambling from the past year? What pattern can be observed towards public sentiment? What emerging themes can you identify?
- Identify potential policy gap
 - Compare regulation (by World Bank region) on traditional gambling with those on online gambling. The comparison should be region specific but country specific features can be highlight for contrasting cases. What are the potential gaps you identified in the regulation of online gambling?
- Forecasting future trend
 - Predict potential challenges and opportunities related to online gambling in the next five year.
 - Based on historical data, what are the projected impacts of legalizing online gambling on tax revenue and crime rates?

Effective Use: Summarizing Complex Information

- Condense lengthy reports and papers
 - Are you familiar with the 'The OECD 2016 Report on Economic Impact of Online Gambling'? Succinctly summaries the report in 200 words.
- Extract key points and arguments
 - What are the arguments made by lawyers, politicians, economist and media in favor of and against the legalization of online gambling?
- Create an outline of policy alternatives
 - Create an outline of potential policy options for regulating online gambling. Consider various policy instrument and their rationales while outlining the options.

Effective Use: Credibility of the Content

- Verify information from multiple sources
- Cross-reference AI generated contents from with established knowledge and research.
- Be aware of potential biases in AI model and their impact on generated content.
- Use critical thinking to assess the plausibility and reliability of the information
- Caution: Treat AI generated information as starting point rather than a definite source.
- Use AI to argument your intelligence not replace it.
- Use your judgement and expert opinion to contextualise AI generated contents

Preparing the Poster

- Visualization Tools: Tableau, Power BI, Gephi and Infogram
- Design Assistance: Canvas, Figma
- Image generator: Midjourney, Stable Diffusion, DALE-E
- Speech generator: Google Text to Speech, Murf AI, Eleven Lab
- AI Feedback: Presenter, Grammarly, Trinko
- Reference Manager: Zotero, Mendeley
- Text Analysis: NLTK, spaCy, Textblob
- Data Analysis: Python, R, Tableau
- Note taking: Evernote, Obsidian
- Animation: Blender, Animaker

Preparing the Poster

- Portrait orientation
- No larger than 900 mm width and 1500 mm height
- Organize your poster into clearly defined sections. use columns to structure your content; typically, two.
- Use a clean and balanced layout with ample white space.
- Choose legible fonts and use different sizes for headings, subheadings, and body text.
- Ensure you have sufficient margins around the edges to prevent any important content from being cut off or hard to read.

Preparing the Poster

- **Title:** Choose a concise and informative title that accurately reflects the content of your poster.
- **Author Information:** Include the names, affiliations, and contact information of all authors. This should be prominently displayed near the title.
- **Background:** Provide a brief background on the policy issue investigation and the objective of the review.
- **Method:** Summarise the method concisely including key technique or approaches/key theoretical lens etc.
- **Policy Problem:** Provide a succinct statements about the policy problems under investigation (problem statement). Problem statement should be evidence based.
- **Policy Options:** Discuss policy options against criteria and trade-offs. Discuss arguments supported by facts figures and evidence.
- **Conclusion:** Conclude your story with specific policy actions (recommendation) in support or oppose to policy issue under investigation.
- Include all the relevant references used in poster at the bottom of the poster. Reference and in text citation should follow Vancouver style .

Ethical Issues

- Data privacy: Never input personal data, financial information, geo locations and other sensitive identifiers.
- Make AI decision and process transparent: e.g. keeping log of prompts
- Accountability: Ensure that AI generated content aligns with ethical guidelines. AI is not accountable for its decisions but you are for the AI driven decisions.
- Data Integrity: Ensure that AI generated data, figures and contents are reliable.
- Disclose the use of AI tools and their limitations in research publication
- Plagiarism: Too risky to copy the AI generated contents directly

The Bottomline

- Let your intelligence guide the AI rather than you under the AI's influence.
- You will always be held accountable for the misconduct not your AI.
- AI can be a starting point but it is not all in all. AI generated contents are not the ultimate truth.
- You must do your own research, readings, analysis and writing. There is no shortcuts to success.

Example Online Gambling

Public finance

- What is the revenue generated from online gambling?

Addiction Theory

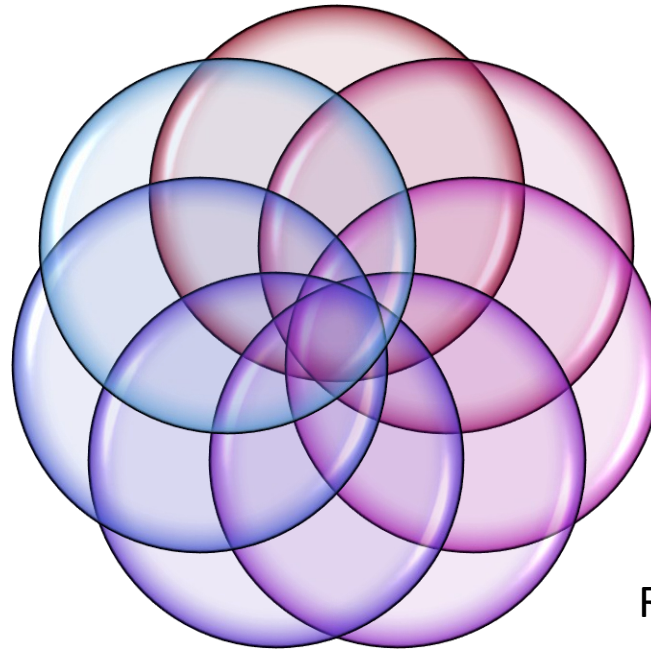
- How online gambling can lead to addiction and the psychological mechanisms behind it? What are reward systems and behavioral reinforcement?

Policy Diffusion Theory

- Does any country have the regulation or legislation? How does that might affect other country or region?

Interest group theory

- What are the lobbying by gambling and anti gambling advocacy groups?



Cost benefit analysis

- What is the potential economic benefits of tax revenue against the social costs of gambling?

Public Choice Theory

- What could be the motivations behind the push for and against legalization and regulation of online gambling?

Regulatory Capture Theory

- What are the potential pressure for regulatory agencies from gambling industry?

For	Against
Regulations can safeguard consumers from fraudulent practices, ensuring fair play and transparent gaming environments.	legal gambling may normalize betting behavior, particularly among younger populations, potentially leading to long-term negative consequences
Regulated gambling can generate significant tax revenue for governments, which can be used to fund public services and infrastructure.	The economic cost of addiction and social harm outweigh tax revenue generated from online gambling. Uncertain revenue.
A regulated gambling market can reduce the influence of illegal operators who often provide no safeguards for consumers. Tight regulation can help prevent money laundering, tax evasion, and other criminal activities associated with the gambling industry.	Complexity in implementing regulation due to cross border nature, country differences in legal framework
Strict regulations can maintain the integrity of the gambling industry, deterring illegal operators and ensuring fair competition.	regulation represents excessive government intervention in personal choices and freedoms.

For	Against
Offering promotions can help mitigate the career penalties associated with taking time off for childbirth and childcare.	Promotions should be based on performance and qualifications, regardless of gender. Prioritizing women for promotions without considering their work output can undermine the principle of meritocracy.
Women who take maternity leave should not be penalized for fulfilling a biological function and that promotions can help level the playing field.	Rather than focusing on promotions, companies should prioritize creating supportive work environments that enable women to balance motherhood and career, such as flexible work arrangements, childcare support, and mentorship programs.
Providing promotions or clear advancement opportunities to returning mothers can boost their morale and job satisfaction. This support can also enhance employee retention.	Offering promotions to women returning from maternity leave without considering the performance of other employees could lead to resentment and decreased morale among colleagues.
Companies that prioritize gender equality and support working mothers are often seen as more attractive employers,	Implementing a policy of automatic promotions for women returning from maternity leave can be logistically complex and may create challenges in determining the appropriate promotion level.

Thank You !