Innovative decision-making framework for future public infrastructure based on greater emphasis on sustainability and observed benefits using reliability analysis

Research Problem:
How to comprehensively assess public infrastructure sustainability from the perspective of government through observed benefits and cost, rather than cash-flow forecasts, meantime considering infrastructure uncertainty?

Research Objective:
• A probabilistic evaluation approach for life-cycle costs and benefits of infrastructure projects.
• Quantization project uncertainty and risk to facilitate investment decision-making process.
• Exploring impacts of key factors on the infrastructure project investment evaluation.

More Information
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Figure 2: Research Framework