

MEASURING AND EVALUATING RESEARCH IMPACT BEYOND PROJECT COMPLETION

AUTHOR

SIDDHARTH MANOJ RAMANI
Research Co-ordinator
& Continuing Education Student

Applied research projects lack tools to measure long-term societal, economic, and academic impacts post-completion. Overemphasis on short-term outputs (e.g., publications, patents) neglects systemic benefits like policy changes, equity gains, and community empowerment. Addressing this gap strengthens funding bids, stakeholder trust, and alignment with Canada's innovation and reconciliation priorities.

01. RESEARCH QUESTION

Primary Question

What tools, metrics, and frameworks can research managers adopt to systematically measure long-term societal, economic, and academic impact?

Sub-Questions

1. What systematic approaches exist for evaluating long-term impacts?
2. How to balance quantitative metrics with qualitative narratives?
3. What role do stakeholders play in defining equity-focused impact criteria?

Research impact spans six interconnected domains, merging the NHMRC and Canadian Academy frameworks into a unified model:



04. RECOMMENDATIONS

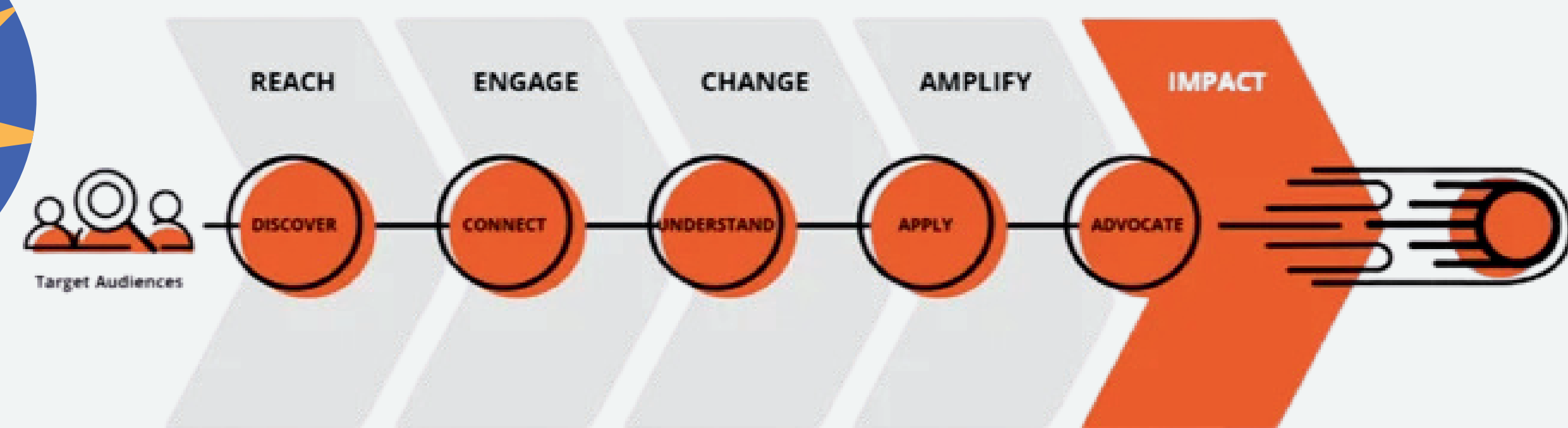
To address gaps in long-term impact evaluation identified through global frameworks and stakeholder insights, the following actionable, evidence-based strategies empower research managers to balance accountability with equity, leverage hybrid methodologies, and sustain societal value beyond project completion.

Recommendation	Action	Key Benefit	Challenge	Implementation Strategy
Hybrid Evaluation Frameworks	Integrate quantitative metrics (e.g., ROI, patents) with qualitative narratives (e.g., case studies, equity audits).	Balances accountability (quantitative) with contextual relevance (qualitative).	Increased administrative workload; potential resistance to qualitative reporting.	Train staff in mixed-method analysis; use templates to standardize hybrid reporting.
Stakeholder Co-Creation Panels	Partner with Indigenous communities, SMEs, and policymakers to co-design impact criteria and validation processes.	Ensures culturally relevant, equity-focused impact validation.	Risk of privileging dominant voices; prolonged decision-making.	Allocate dedicated resources for inclusive engagement; use third-party facilitators.
Longitudinal Tracking Tools	Invest in open-access platforms (e.g., customized ResearchFish® modules) to automate post-project monitoring.	Enables trend analysis and early identification of underperforming projects.	Privacy concerns with sensitive data; platform costs may exclude smaller institutions.	Partner with funding agencies to subsidize platform access; anonymize sensitive data.
Impact Literacy Training	Mandate workshops on systems thinking, ethical storytelling, and contribution mapping.	Empowers researchers to articulate non-academic impacts (e.g., policy changes).	Time diverted from core research activities; oversimplification of complex impacts.	Embed training in grant requirements; collaborate with KT (Knowledge Translation) experts.
Flexible Funding Structures	Advocate for 10–15% of grants to fund post-project tracking, tied to milestones.	Aligns project timelines with realistic impact horizons (e.g., 5-year outcomes).	Reduced upfront funding for project execution.	Negotiate with funders to protect core budgets; incentivize third-party evaluators.
Equity-Focused Metrics	Develop metrics for inclusivity (e.g., % underrepresented partnerships) and conduct equity audits.	Addresses systemic barriers; aligns with Canada's reconciliation priorities.	Perceived subjectivity may deter funders; data gaps in marginalized communities.	Co-design metrics with affected communities; pilot audits in high-impact projects.

05. CONCLUSION

- Hybrid frameworks balance quantitative metrics (ROI, patents) with qualitative narratives (stakeholder testimonials, equity audits).
- Stakeholder co-creation panels (Indigenous communities, SMEs) ensure equity-focused impact criteria and validate societal benefits.
- Longitudinal tracking tools (e.g., ResearchFish®) require open-access features to avoid bias in long-term data aggregation.
- Impact literacy training empowers researchers to document and articulate non-traditional outcomes.
- Post-project funding (10–15% of budgets) must align with realistic impact timelines (e.g., 5–10 years).
- Equity metrics (% underrepresented partnerships, policy audits) address systemic disparities and align with reconciliation goals.
- Failure to adopt structured evaluation risks lost credibility, funding, and stakeholder trust.
- Flexible frameworks prioritizing inclusivity, adaptability, and post-project tracking maximize societal and economic returns.

A Model for Accelerating Research Impact



02. HOW DO WE EVALUATE RESEARCH IMPACT

EXPERIMENTAL AND STATISTICAL METHODS	SYSTEMS ANALYSIS METHODS	TEXTUAL, ORAL, AND ARTS-BASED METHODS	INDICATOR-BASED APPROACHES	EVIDENCE SYNTHESIS APPROACHES
<p>Isolate causal relationships with quantitative rigor</p> <p>What: RCTs, quasi-experiments (e.g., difference-in-differences).</p> <p>Strengths: High internal validity; gold standard in medicine/economics.</p> <p>Limitations: Assumes linear causality; ignores systemic complexity.</p>	<p>Map complexity in dynamic ecosystems</p> <p>What: Social Network Analysis (SNA), Agent-Based Modeling (ABM).</p> <p>Strengths: Captures emergent, non-linear impacts.</p> <p>Limitations: Resource-heavy; requires interdisciplinary teams.</p>	<p>Amplify voices through qualitative storytelling</p> <p>What: Narratives, PhotoVoice, ethnotheatre, focus groups.</p> <p>Strengths: Centers marginalized perspectives; contextual depth.</p> <p>Limitations: Subjective interpretation; reproducibility challenges.</p>	<p>Track predefined metrics for accountability</p> <p>What: Logic Models, Theories of Change (e.g., patents, policy citations).</p> <p>Strengths: Simplifies reporting for funders/institutions.</p> <p>Limitations: Overlooks unexpected impacts; rigid frameworks.</p>	<p>Aggregate data for scalable insights</p> <p>What: Systematic reviews, realist synthesis (e.g., SDGs).</p> <p>Strengths: Guides global policy; identifies trends.</p> <p>Limitations: Struggles with ambiguous/heterogeneous data.</p>

03. EMERGING APPROACHES TO MEASURING RESEARCH IMPACT

- 01 Electronic Databases (e.g., UK's Researchfish®)**
Automate real-time tracking of 11 impact categories linked to funding streams, reducing reliance on resource-intensive case studies.
- 02 Realist Evaluation**
Examines "What works for whom in what circumstances?" to uncover context-specific pathways from research to impact, emphasizing non-linear mechanisms.
- 03 Contribution Mapping**
Redefines impact as the stabilization of researcher-policy-maker-community networks through three phases (formulation, production, extension), capturing indirect influences like co-created guidelines.
- 04 SPIRIT Action Framework**
Shifts focus from research outputs to organizational readiness for policy agencies, emphasizing capacity-building and engagement (Figure 3: SPIRIT Framework).
- 05 Participatory Research Models**
Connect grassroots co-design (e.g., Native American health equity partnerships) to systemic policy change, prioritizing community empowerment and trust-building.

06. REFERENCES

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