

Adapting Theory of Change Workshops to Virtual Platforms: An Evaluator's Reflections on Conducting ToCs Under Lockdown

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Abstract

Background: The COVID-19 pandemic disrupted participatory evaluation processes, forcing evaluators to adapt methodologies traditionally reliant on in-person interaction. Theory of Change (ToC) workshops—valued for fostering collaboration, surfacing assumptions, and building shared programme logic—were particularly affected.

Aim: This study examined how ToC workshops were adapted to virtual platforms under crisis conditions, asking what was gained and what was lost when participatory, dialogical processes moved online.

Method: Six ToC workshops with South African education NGOs and partners were analysed: four conducted in person (2018–2019) and two facilitated virtually during the 2020–2021 lockdowns. A reflective comparative approach was employed, drawing on facilitator notes, participant feedback, and workshop artefacts to assess participation, inclusivity, facilitation strategies, and quality of outputs.

Results: Virtual workshops sustained continuity, widened geographic reach, and enhanced documentation through recordings, shared diagrams, and chat transcripts. However, they constrained spontaneity, relational depth, and inclusivity. Connectivity barriers and uneven digital literacy advantaged urban and younger participants, while rural and less digitally fluent stakeholders were marginalised. Outputs were structurally coherent but often thinner in assumptions, risks, and intermediate outcomes compared to in-person workshops.

Recommendations: Hybrid models are proposed as a resilient pathway: virtual workshops for preparatory and follow-up sessions, complemented by in-person or high-bandwidth engagements for deep relational dialogue. Practical supports should include data stipends, low-bandwidth tools, digital literacy training, asynchronous participation channels, and co-facilitation teams with technical support.

Conclusion and Contribution: The study shows that modality is not neutral—it redistributes voice and reshapes the epistemic content of ToCs. By documenting both constraints and innovations, it contributes to debates on participatory evaluation under disruption and offers practical guidance for evaluators, NGOs, and funders designing equitable hybrid facilitation models.

Keywords: Theory of Change; evaluation; virtual facilitation; hybrid models; South Africa; COVID-19.

Background and Introduction

The Theory of Change (ToC) has become a central approach in programme design and evaluation, providing a structured framework to articulate assumptions, pathways, and intended impacts (Mason & Barnes, 2007; Vogel, 2012). More than a planning tool, ToC enables stakeholders and evaluators to interrogate programme logics, surface hidden assumptions, and build shared understanding (Coryn, Noakes, Westine & Schroter, 2011). In participatory settings, ToC workshops are particularly valuable for co-construction, dialogue, and legitimacy (Taplin & Rasic, 2012; Breuer et al., 2014). Recent scholarship emphasises that ToC must evolve beyond static diagrams to become adaptive learning processes capable of responding to complexity and uncertainty (Lam, 2020; Hessels et al., 2023). This situates ToC as both technical and social, with facilitation playing a critical role in ensuring inclusivity and reflexivity.

Despite these benefits, ToC practice faces significant challenges. Workshops often involve diverse actors with differing priorities—government, NGOs, educators, and community stakeholders—making negotiation complex. The process must balance rigour with contextual realities, while also addressing power imbalances (Breuer et al., 2014). Poorly facilitated sessions risk oversimplifying issues or privileging dominant voices, marginalising less powerful participants (Maini, Mounier-Jack & Borghi, 2018). These challenges highlight the centrality of methodological choices in determining whether ToCs genuinely foster collaboration or reinforce hierarchies.

The COVID-19 pandemic added new complexity by disrupting in-person participatory practices and forcing evaluators to experiment with digital facilitation. Organisations such as Mercy Corps (2020) issued rapid guidance on remote MERL, while researchers examined how digital tools sustained project cycles during crisis (Baudoin, Hargreaves & Lema, 2021). Other innovations, such as using big data and social media analytics, expanded evaluation practice (Fabra-Mata & Mygind, 2019). While virtual platforms provided continuity, they also raised concerns about participation quality, data integrity, and the authenticity of participatory processes (Matlala, 2025).

In South Africa, the digital divide amplified these concerns. Structural inequalities in internet access, affordability, and digital literacy determined who could participate effectively (Chomunorwa, Emely & Marevesa, 2023). Urban, well-resourced

stakeholders often engaged more actively, while rural or under-resourced participants were disadvantaged by poor connectivity

or limited devices. This exclusion threatened the participatory ethos of ToC, narrowing deliberation and reducing inclusivity. Against this backdrop, this study reflects on six ToC workshops conducted with South African education NGOs—four in-person before COVID-19 and two virtual during lockdown. Using reflective methodology (Smith & McGannon, 2018; Matlala, 2025), it compares the dynamics of physical and virtual facilitation to document challenges, opportunities, and methodological lessons for adapting ToCs under crisis conditions.

Literature Review / Conceptual Framing

The Theory of Change (ToC) has gained increasing prominence in development evaluation as a participatory, theory-driven approach to articulating how and why programmes are expected to achieve impact (Mason & Barnes, 2007; Vogel, 2012). At its core, ToC seeks to make explicit the causal pathways, assumptions, and contextual factors that underlie programme design and implementation (Coryn et al., 2011). This has led to its adoption across multiple sectors, from education to health and agriculture, where evaluators have employed ToC to guide programme planning, strengthen stakeholder buy-in, and create frameworks for accountability (Breuer et al., 2014; Omoro et al., 2019). Within sustainability science, ToC has been conceptualised as a tool to better understand processes of societal change and to provide a framework for collective action in complex systems (Oberlack et al., 2019). More recently, scholars have called for ToCs to be treated not as static diagrams but as evolving instruments that integrate iterative learning and reflexivity (Lam, 2020; Hessels et al., 2023).

Workshops have become the principal modality for developing ToCs, providing spaces where diverse stakeholders can surface assumptions, negotiate priorities, and map change pathways collaboratively. Evidence suggests that these workshops can foster logical, evidence-informed, and contextually grounded programme designs, while simultaneously strengthening stakeholder ownership (Breuer et al., 2014; Taplin & Rasic, 2012). However, methodological challenges are widely recognised. In hierarchical systems, ToC workshops risk reproducing existing power dynamics that silence marginalised voices, while overly prescriptive facilitation may lead to oversimplification of complex causal pathways (Maini, Mounier-Jack & Borghi, 2018). The success of workshops therefore depends heavily on the skills of facilitators to balance inclusion with structure and to navigate tensions between stakeholders with unequal power (Mason & Barnes, 2007). In this respect, ToC workshops are as much a social process as they are a technical exercise, underscoring the importance of reflective and adaptive facilitation.

The COVID-19 pandemic disrupted this established mode of engagement, creating unprecedented challenges for participatory methodologies such as ToC. Lockdowns and restrictions on physical interaction necessitated the rapid adaptation of evaluation practices to virtual platforms (Chelsky & Kelly, 2020; Srivastava, 2022). Guidance from international organisations such as Mercy Corps (2020), UNDP (2021), and the OECD (2012) stressed the need for flexible, remote methods that could sustain monitoring, evaluation, research, and learning (MERL) during crises. At the same time, evaluators experimented with digital tools, ranging from video conferencing platforms to collaborative mapping technologies, in order to continue participatory processes remotely (Baudoin, Hargreaves & Lema, 2021). These adaptations were not without risks. Concerns emerged regarding participant engagement, data quality, confidentiality, and the erosion of spontaneous dialogue that characterises face-to-face workshops (Matlala, 2025).

Parallel to this shift, evaluation practice has increasingly intersected with digital technologies and big data approaches. Innovations such as the use of Twitter analysis to evaluate peacebuilding (Fabra-Mata & Mygind, 2019), natural language processing and large language models for analysing unstructured evaluation data (Wencker, Borst-Graetz & Niekler, 2025), and frameworks for integrating artificial intelligence into evaluation education (Tilton et al., 2023) illustrate the potential of digitalisation in reshaping evaluative practice. Yet, as York and Bamberger (2020) note, the nexus between evaluation and digital analytics raises critical questions about methodological rigour, inclusivity, and ethics. Digital evaluation methods can expand reach and efficiency, but they also risk privileging those with digital access while excluding underrepresented voices. These concerns are particularly acute in contexts such as South Africa, where structural inequalities in digital access persist (Chomunorwa, Mashonganyika, & Marevesa 2023).

Taken together, the literature suggests two important trends. First, ToC remains a valuable and widely used tool for evaluation, but its utility depends on careful facilitation, attention to inclusivity, and reflexivity in application (Mason & Barnes, 2007; Breuer et al., 2014; Hessels et al., 2023). Second, the COVID-19 pandemic has accelerated the integration of digital platforms and tools in evaluation practice, creating both opportunities for innovation and challenges for equity and participation (Baudoin et al., 2021; Srivastava, 2022). While there is a growing body of research on ToC methodologies and a parallel literature on digital facilitation during crises, there remains limited reflective evidence on how ToC workshops themselves were adapted to virtual platforms under lockdown conditions, particularly in the education sector in South Africa. This study addresses this gap by documenting the evaluator's reflections on conducting six ToC workshops—four in-person before the lockdown and two virtually during lockdown—with education stakeholders in South Africa. In doing so, it contributes to debates on methodological adaptation, reflexivity, and the future of participatory evaluation practices in digitally mediated environments.

Context of the Study

The South African education sector remains characterised by persistent inequalities despite decades of reform, with under-resourced schools particularly affected by infrastructure gaps, teacher shortages, and socio-economic disparities (Jansen, 2019). In this environment, NGOs have become critical actors, piloting innovative programmes, scaling evidence-based practices, and complementing state-led provision (Fleisch & Dixon, 2019; Muyambi & Ahiaku, 2025). The six organisations at the centre of this study have each worked in education for more than ten years and were seeking to revise their strategies and strengthen M&E systems. This reflected a wider trend where NGOs are increasingly expected to align with national priorities while demonstrating measurable outcomes to donors (Tshiyoyo, 2023; Gustafsson and Taylor, 2022). ToC workshops offered a

structured mechanism to support this process by articulating causal pathways, surfacing underlying assumptions, and strengthening evidence-informed strategies.

The author, acting as a contracted external evaluator, facilitated six ToC workshops with these organisations between 2018 and 2021. The workshops were designed both to refine organisational strategies and to lay the foundation for robust M&E frameworks. Four were held in person (2018–2019), using highly participatory methods such as group dialogue, brainstorming, and visual mapping, which encouraged relationship-building and collective sense-making. When COVID-19 lockdowns in 2020–2021 made physical meetings impossible, two further workshops were conducted virtually using digital collaboration tools. While online facilitation maintained continuity, it also posed challenges around connectivity, digital skills, and reduced non-verbal interaction. Together, these experiences provide a unique basis for reflection on how adapting ToC workshops to virtual platforms affected participation, inclusivity, and learning, while raising broader questions about the sustainability and equity of digital engagement in South African education.

Methodology

Reflective Methodology

This study adopts a reflective methodology, positioning the evaluator's own experiences as a primary source of data and analysis. Reflective approaches in evaluation research are increasingly recognised for their ability to illuminate the tacit knowledge, challenges, and adaptive strategies of practitioners (Finlay, 2002; Smith & McGannon, 2018). Rather than seeking neutrality, reflective methodology acknowledges the evaluator's situated role in the research process and treats subjectivity as a valuable lens for understanding complex phenomena (Schön, 1983; Bolton, 2010). This orientation is particularly appropriate in the context of ToC workshops, where the evaluator functions simultaneously as a facilitator, observer, and interpreter of participatory dynamics.

Reflective methodology emphasises iterative cycles of observation, interpretation, and meaning-making, often drawing on autoethnographic, practice-based, or reflexive traditions (Etherington, 2004; Pillow, 2003). In this study, reflections are grounded in the evaluator's facilitation of six ToC workshops with South African education NGOs across two distinct periods: four physical workshops (2018–2019) and two virtual workshops conducted under lockdown conditions (2020–2021). By critically examining the contrasts between in-person and virtual facilitation, the study generates insights into how participation, inclusivity, and workshop dynamics were reconfigured in response to the pandemic. Such reflective accounts contribute to methodological innovation by capturing lessons that might remain invisible in traditional empirical studies (Matlala, 2025).

The reflective stance also aligns with recent calls in evaluation literature to foreground the lived experiences of evaluators as a means of advancing methodological learning and professional practice (Schwandt et al., 2016). By situating the evaluator's voice at the centre of analysis, the study offers not only descriptive accounts of workshop processes but also critical interrogation of the strategies, tensions, and compromises involved in adapting ToC to virtual platforms. This reflexive orientation acknowledges that the evaluator's positionality—contracted by the organisations, responsible for guiding ToC development, and simultaneously navigating the challenges of digital facilitation—influenced both the process and the reflections documented here.

Reflection Process

The reflection process was designed to systematically capture the evaluator's experiences across six ToC workshops, four conducted in-person (2018–2019) and two virtually (2020–2021). While reflective inquiry is sometimes critiqued for its subjectivity, rigor was maintained through structured self-observation, iterative documentation, and analytical reflexivity (Finlay, 2002; Smith & McGannon, 2018). This involved a staged process combining contemporaneous note-taking, post-workshop journaling, and later synthesis.

Immediately after each workshop, the evaluator recorded structured notes on facilitation strategies, participation levels, group dynamics, and challenges encountered. Within 48 hours, these notes were expanded into reflective journals capturing impressions, emotions, and evolving interpretations. These records served both as a means of making tacit practitioner knowledge explicit and as a dataset for later critical analysis (Bolton, 2010; Schön, 1983). Reflections were revisited multiple times and organised into matrices distinguishing between in-person and virtual workshops, which helped surface themes on participation, inclusivity, and technological adaptation.

To move beyond description, thematic analysis principles (Braun & Clarke, 2006) were applied to cluster recurring patterns and trace the evolution of facilitation strategies. Reflexive questioning was also used to acknowledge the evaluator's positionality and potential biases, recognising the dual role of contracted facilitator and reflective author (Pillow, 2003). This ensured transparency in reporting, while framing the outputs as thematic reflections on the practical and methodological challenges of adapting participatory ToC workshops under crisis conditions.

Overview of Virtual ToCs Conducted

Table 1 shows the overall scope of the six ToC workshops. Four were in-person (2018–2019), typically running for two full days with 15–20 participants, while the two virtual workshops (2020–2021) were shorter, structured as two half-day sessions. The virtual workshops retained the same strategic focus—supporting organisational planning and strengthening M&E frameworks—but required adjustments such as the use of a technical assistant to manage online platforms.

Table 1. Overview of ToC Workshops (2018–2021)

Period	Format	Workshop IDs	Organisations Involved	Approx. Duration	No. of Participants	Primary Purpose of ToCs	Facilitator Role (Author)
2018–2019	In-person	W1–W4	4 NGOs (education)	2 full days each	15–20 each	Develop new organisational strategies; align activities with M&E frameworks	External evaluator contracted to design & facilitate workshops
2020	Virtual	W5	1 NGO (education)	2 half-days	18	Revise strategic plan; adapt M&E framework for post-COVID realities	Lead facilitator + technical assistant
2021	Virtual	W6	1 NGO (education)	2 half-days	22	Refine ToC to integrate digital programming and remote delivery components	Lead facilitator + technical assistant

Table 2 provides a detailed breakdown of the virtual workshops' structure across three days. It illustrates how the online format was adapted to replicate the participatory logic of ToC facilitation, beginning with orientation and problem identification, followed by mapping, assumptions analysis, and synthesis. Key adaptations included extended orientation for digital literacy, structured breaks to address online fatigue, and real-time visual editing to maintain transparency. The table highlights how online tools such as Miro, MURAL, and Google Docs enabled collaboration despite physical distance.

Table 2. Structure of Virtual ToC Workshops (2020–2021)

Workshop Phase	Objective	Activities / Techniques	Digital Tools Used	Time Allocation (over 2–3 days)	Notes on Adaptation
Day 1 – Orientation & Ice-breaker	Build rapport; clarify objectives; establish shared understanding of ToC	Introductions, organisational presentations, ground rules, Zoom poll on expectations, interactive ice-breakers	Zoom (plenary, polls, chat), Mentimeter	1.5–2 hours	Extended orientation to accommodate digital literacy and ensure equal participation
Day 1 – Context & Problem Identification	Surface key education challenges and systemic barriers	Brainstorming in plenary; small group discussions in breakout rooms; clustering issues on shared templates	Zoom + Google Docs + Jamboard	3–4 hours	Breaks inserted to manage online fatigue; chat function encouraged quieter voices
Day 2 – Mapping Change Pathways	Develop causal links between activities, outputs, outcomes, and impacts	Small groups construct causal pathways using digital sticky notes; facilitator rotates between groups	Zoom breakout rooms + Miro/MURAL boards	4–5 hours (with breaks)	Online whiteboards allowed simultaneous contributions; assistant provided tool support
Day 2 – Assumptions & Risks Analysis	Identify underlying assumptions, risks, and external factors	Guided prompts, breakout group discussions, real-time recording on shared templates	Google Docs + Zoom whiteboard	2–3 hours	Structured prompts avoided silence; diverse perspectives documented systematically
Day 3 – Synthesis & Feedback	Consolidate inputs into a coherent ToC framework	Facilitator presented integrated diagram; group reviewed, refined, and validated draft framework	PowerPoint (screen share), Miro export	3–4 hours	Real-time editing promoted transparency; participants confirmed changes immediately
Day 3 – Reflection & Next Steps	Capture lessons; link ToC to strategy and M&E framework	Open plenary reflection; anonymous online feedback survey; agreement on follow-up actions	Zoom plenary, Google Forms survey	1.5–2 hours	Feedback form collected candid responses beyond plenary discussion

Table 3 outlines participant composition. The two virtual workshops drew 18 and 22 participants respectively, with balanced representation across management, programme staff, M&E teams, and external partners. Gender distribution was relatively even, and geographic spread was wider in the 2021 workshop, reflecting cross-provincial participation. Notes also point to

digital divides, with rural participants experiencing unstable connectivity and M&E staff demonstrating stronger online engagement due to technical familiarity.

Table 3. Participant Composition in Virtual ToC Workshops

Workshop	Total No. of Participants	Senior Management	Programme Staff	M&E/Research Staff	External Partners (Donors, Advisors)	Gender Balance	Geographic Spread	Notes
W5 (2020)	18	3	8	4	3	10 women, 8 men	SA national scope	Some rural-based participants had unstable connectivity
W6 (2021)	22	4	10	5	3	12 women, 10 men	SA + cross-provincial	Higher engagement from M&E staff due to stronger tech familiarity

Table 4 summarises facilitation logistics. It shows the practical infrastructure needed for virtual ToC workshops, including platform choice (Zoom), collaborative tools (Miro, MURAL, Google Docs), and pre-workshop support for inclusivity. The addition of a technical assistant freed the evaluator to focus on facilitation. Data capture was managed through recordings, exports, and notes, while post-workshop deliverables ensured continuity. The table highlights the balance between adapting to digital limitations and sustaining the rigour of ToC processes.

Table 4. Facilitation Logistics for Virtual Workshops

Dimension	Description	Notes
Platform	Zoom (licensed account) for plenary and breakout group sessions	Stable platform but limited bandwidth for some participants
Collaborative tools	Miro and MURAL (for mapping pathways), Google Docs (for notes), Google Forms (feedback surveys)	Allowed visualisation but required advance orientation
Pre-workshop support	Orientation pack emailed; test session held; one-on-one support for participants unfamiliar with tools	Essential for ensuring inclusivity, especially for senior staff
Facilitation team	Lead evaluator (author) + technical assistant (for managing breakout rooms, Miro boards, chat)	Freed evaluator to focus on facilitation rather than technical issues
Duration	2 half-days per workshop (3.5 hours/day, total 7 hours per NGO)	Shorter sessions to avoid online fatigue
Data capture	Screen recordings (with consent), exported Miro boards, facilitator notes, and chat transcripts	Allowed triangulation during reflective analysis
Post-workshop deliverables	Draft ToC diagrams shared within one week; written synthesis report within two weeks	Ensured continuity and organisational uptake

Ethical Considerations

As this study is based on the evaluator's own reflective accounts and secondary literature, no organisational data or personal participant information was collected.

Methodological Limitations

The primary limitation of this study lies in the reliance on a single evaluator's reflective practice. While this provides valuable practitioner insight, it also introduces subjectivity and limits the extent to which findings can be generalised. The absence of triangulation with participant perspectives means that the analysis reflects facilitation experiences rather than collective stakeholder views. Furthermore, as the reflections are situated in a specific time and context—the South African education sector during COVID-19 lockdowns—the lessons may not transfer seamlessly to other settings. Finally, virtual facilitation itself posed constraints, including uneven digital access and reduced non-verbal cues, which shaped both the process and the reflective data available.

Findings

Participant Profile

Participants represented a range of roles within the South African education sector, including senior management, programme implementers, M&E specialists, and external partners such as donors and technical advisors. The demographic composition of participants reflected the diversity of the NGOs engaged in the process. Gender representation was relatively balanced, with women slightly outnumbering men across most workshops. Sectoral representation was dominated by non-governmental organisations, consistent with the focus of the study, though donor representatives and advisors participated in selected

sessions. Geographic spread covered both urban and rural provinces, though digital access constraints disproportionately affected rural-based participants in the virtual workshops. The profile of participants is summarised in Table 5 below.

Table 5. Demographic Profile of Workshop Participants (2018–2021)

Workshop (Year)	No. of Participants	Senior Management	Programme Staff	M&E / Research Staff	External Partners (Donors/Advisors)	Gender Balance (F/M)	Geographic Spread
W1 (2018)	18	3	9	4	2	10 / 8	National (urban & rural)
W2 (2018)	20	4	10	4	2	12 / 8	National
W3 (2019)	16	2	8	4	2	9 / 7	Provincial (urban focus)
W4 (2019)	17	3	9	3	2	8 / 9	National
W5 (2020, Virtual)	18	3	8	4	3	10 / 8	SA national (digital barriers for rural)
W6 (2021, Virtual)	22	4	10	5	3	12 / 10	Cross-provincial

This profile demonstrates that the workshops successfully brought together a cross-section of organisational roles essential for developing and refining ToCs. The inclusion of M&E specialists alongside programme staff and senior management enriched the discussions by linking strategic intent with operational realities. However, disparities in participation became more evident in the virtual workshops, where rural-based staff reported difficulties engaging consistently due to unstable internet connectivity and limited access to devices. These contextual factors shaped both the nature of participation and the inclusivity of the ToC process.

Accessibility and Inclusivity

A central issue that shaped the experience of the virtual ToC workshops was the uneven accessibility of digital platforms and the implications this had for inclusivity. Although the transition online theoretically expanded participation by removing travel costs and enabling engagement across provinces, in practice it amplified structural inequalities that are well documented in the South African education sector. Persistent barriers such as unstable internet connections, high data costs, and limited access to digital devices disproportionately affected participants from rural or under-resourced organisations. In several instances, participants were forced to log out mid-session or switch off their video to save bandwidth, which compromised their ability to fully engage. These disruptions not only reduced the immediacy of dialogue but also shaped whose voices were consistently heard, privileging those with stable connectivity and technological resources.

Participation patterns before and after the shift to virtual formats reinforced this divide. As Table 6 illustrates, while some organisations managed to involve larger groups because travel and accommodation were no longer limiting factors, others reported declining participation, particularly among staff working outside metropolitan areas. Crucially, inclusivity was not only about participant numbers but also about the quality of engagement. Stakeholders with poor connectivity often missed critical sections of discussion or were unable to use collaborative tools such as Miro and Google Docs effectively. This imbalance meant that those with stronger internet access and familiarity with digital tools disproportionately influenced the construction of causal pathways, while others became peripheral observers rather than active co-creators. In this sense, the participatory ethos of ToC—which depends on the integration of diverse perspectives to surface assumptions and legitimise strategies—was compromised by digital exclusion.

Table 5. Accessibility and Inclusivity in ToC Workshops (2018–2021)

Dimension	In-Person Workshops (2018–2019)	Virtual Workshops (2020–2021)	Illustrative Examples / Notes
Average No. of Participants	17–20 per workshop	18–22 per workshop	Slight increase in participant numbers due to reduced travel barriers.
Participation Quality	High: active group discussions, informal exchanges, non-verbal cues supported inclusivity.	Mixed: strong voices dominated; participants with poor connectivity often silent or dropped out.	Rural staff in W5 repeatedly lost connection during group mapping.
Connectivity & Access	Not applicable (face-to-face setting ensured physical presence).	Unequal: urban-based staff engaged fully; rural participants constrained by unstable internet and costly data.	Some rural staff joined audio-only, limiting ability to use visual tools.
Use of Tools	Flipcharts, sticky notes, visual mapping (accessible to all present).	Digital platforms (Zoom, Miro, Google Docs, Google Forms) – required digital literacy and reliable devices.	Senior managers struggled to use Miro; relied on assistants for input.
Digital Literacy	Not a limiting factor (materials were physical).	Varied: younger M&E staff adapted quickly, senior staff required repeated support.	Orientation sessions extended workshop time; ad hoc one-on-one support offered.

Inclusivity Challenges	Dominance of more vocal stakeholders still present, but mitigated through physical facilitation techniques (e.g., small group rotations).	Digital divide deepened inequities; those with better tech access disproportionately shaped the ToC pathways.	Power imbalance reinforced by digital exclusion, undermining participatory ethos.
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A further sub-theme was digital literacy, which strongly shaped the degree of participation even among those with sufficient connectivity. Senior managers often required additional support to use collaborative platforms, while programme and M&E staff—generally younger and more tech-comfortable—were more active in digital group activities. The workshop data showed that orientation and technical support consumed significant facilitation energy, sometimes detracting from substantive deliberation. Although ad hoc tutorials and one-on-one guidance helped address immediate challenges, the lack of systematic capacity-building left many participants with low confidence in navigating virtual tools. Table 6 highlights this unevenness, showing how digital literacy influenced both participation quality and the distribution of voice across workshops. Without deliberate investments in digital skills, virtual ToC processes risk reproducing hierarchies of participation, where those with both access and competence dominate outcomes. For future practice, integrating structured digital literacy training into workshop preparation should not be viewed as supplementary but as an essential prerequisite for ensuring equitable participation and safeguarding the integrity of participatory evaluation processes.

Quality of Engagement and Participation

The shift from in-person to virtual ToC workshops significantly influenced the quality of engagement and patterns of participation. In physical workshops, the richness of interaction was facilitated not only through structured dialogue but also through informal exchanges, body language, and spontaneous side conversations that often generated new insights. By contrast, the virtual environment reduced these opportunities for relational depth. Breakout rooms and digital collaboration tools allowed structured contributions, yet participants frequently reported a sense of detachment, with less energy and immediacy in group interactions. The absence of physical cues—such as nods of agreement or subtle gestures of dissent—meant that facilitators had to rely more heavily on explicit prompts to maintain momentum. This reduction in spontaneity constrained creativity, as ideas tended to follow facilitator-driven structures rather than emerging organically from group dynamics.

Evidence of reduced spontaneity was also observed in the outputs of the workshops. For example, in-person sessions often generated complex and multilayered ToC diagrams enriched by collective brainstorming, whereas virtual diagrams tended to be more linear and technically precise, reflecting structured digital inputs rather than fluid co-creation. Participants occasionally struggled to sustain engagement over extended online sessions, with fatigue setting in more quickly than in physical workshops. This fatigue contributed to shorter, less exploratory exchanges, limiting the iterative questioning and critical reflection that are central to robust ToC development. While digital tools supported efficiency, they simultaneously narrowed the creative and dialogical space that characterises in-person participatory processes.

A notable sub-theme within this dynamic was the dominance of certain voices in the virtual environment. While physical workshops allowed facilitators to balance participation by moving between groups and drawing out quieter members, the online setting often reinforced existing power dynamics. Those with strong digital confidence and stable connectivity tended to speak more frequently and at greater length, while others—particularly participants experiencing technical disruptions—became less visible. This pattern heightened the risk of privileging dominant organisational perspectives and marginalising grassroots or community-based voices, which are essential to inclusive ToC development. The reliance on chat functions helped to some extent, offering a space for quieter participants to contribute, but these inputs were not always integrated with equal weight into plenary discussions. As a result, the virtual format subtly reconfigured participation hierarchies, raising questions about whether digital facilitation can genuinely replicate the inclusivity of in-person workshops without intentional strategies to counterbalance these dynamics.

Facilitation and Adaptation Strategies

Facilitating the transition from in-person to virtual ToC workshops required deliberate adaptation strategies to preserve the participatory and dialogical ethos of the process (see Table 5). The use of breakout rooms was one of the key techniques, enabling small-group discussions that attempted to replicate the intimacy and depth of in-person exchanges. Collaborative tools such as Miro, MURAL, and Google Docs provided shared spaces for participants to co-construct diagrams and record assumptions in real time, allowing for simultaneous contributions that were not always possible in physical workshops. To compensate for the loss of informal exchanges, facilitators relied more heavily on structured prompts, interactive polls, and plenary check-ins to ensure that participants remained engaged and that diverse perspectives were voiced. These strategies were designed not only to maintain continuity but also to counteract the risks of digital exclusion by offering multiple channels for participation.

Table 6. Comparative Overview of Facilitation Adaptations in Virtual ToC Workshops

Adaptation Strategy	Worked Well	Challenges / Failures	Lessons Learned
Breakout rooms	Enabled focused small-group discussions; replicated some features of in-person engagement.	Some participants dropped out due to connectivity; limited facilitator oversight in all rooms simultaneously.	Pre-briefing and assigning co-facilitators improved balance and prevented marginalisation.

Collaborative tools (Miro, MURAL, Google Docs)	Allowed real-time contributions; transparent visualisation of causal pathways; strong uptake among younger/tech-savvy staff.	Created barriers for participants with low digital literacy; slow internet disrupted use of visual tools.	Tools are powerful but require advance orientation and backup options (e.g., PDFs, simplified diagrams).
Structured prompts & polls	Maintained focus and ensured everyone could contribute; polls encouraged quieter participants to share views.	Felt rigid to some participants; risk of over-structuring limited spontaneous dialogue.	Combining structured prompts with open discussion preserves balance between inclusivity and creativity.
Session recordings & exports	Provided comprehensive documentation; useful for follow-up and validation.	Raised minor concerns about confidentiality; not all participants revisited shared outputs.	Transparency improved, but reminders and summaries remain essential for sustained uptake.
Facilitator energy reallocation	Time spent on technical support improved inclusivity for less confident participants.	Diverted attention from substantive dialogue; occasional delays reduced workshop momentum.	Dedicated technical assistants are critical to allow facilitators to focus on content and dynamics.

However, not all adaptations proved equally effective. While the collaborative tools offered novel opportunities for visualising causal pathways and tracking contributions transparently, they also introduced barriers for participants with limited digital literacy or unstable internet connections. In some cases, participants struggled to navigate the platforms or were unable to contribute fully due to lagging connectivity, creating frustration and reinforcing hierarchies of participation. Attempts to encourage creativity through online whiteboards occasionally resulted in rigid, overly structured diagrams, reflecting the constraints of the medium rather than the richness of collective thinking. The loss of spontaneity and informal relational dynamics, which often spark innovative ideas in face-to-face settings, could not be fully mitigated by technical fixes. These limitations highlighted that digital facilitation, while functional, was not always able to replicate the experiential depth of in-person workshops.

At the same time, the process also generated valuable innovations. The ability to record sessions, export digital diagrams, and capture chat transcripts provided evaluators with more comprehensive documentation than physical workshops typically yielded. Some participants, particularly younger programme staff and M&E professionals, found the digital tools empowering, as they could contribute simultaneously in writing rather than waiting for verbal turns. The structured pacing of virtual sessions also helped keep discussions focused, reducing the tendency for dominant voices to monopolise time in plenary. While these innovations did not eliminate all challenges, they offered glimpses into hybrid possibilities where digital tools could complement rather than replace physical interaction. The overall experience underscored that successful facilitation in virtual ToC settings requires a balance between embracing technological opportunities and recognising the structural and relational constraints that digital environments impose.

Outcomes of Virtual ToC Workshops

As shown in Table 7, accessibility and inclusivity emerged as central concerns in the transition to virtual evaluation. While access to digital tools expanded opportunities for participation, persistent connectivity challenges limited equitable engagement across different stakeholder groups. Notably, participation rates improved after moving to virtual platforms, suggesting that online modes created new avenues for involvement. However, the sub-theme of digital literacy and training needs highlights that many participants still struggled to navigate digital spaces effectively, underscoring that inclusivity in virtual evaluation requires more than access to technology—it also demands capacity-building to ensure meaningful participation.

Table 7. Comparative Outcomes of In-Person vs. Virtual ToC Workshops

Dimension	In-Person Workshops (2018–2019)	Virtual Workshops (2020–2021)	Key Lessons Learned
Programme Logic Clarity	Rich, iterative discussions produced detailed causal pathways with multiple layers of outcomes.	Core pathways articulated clearly, but intermediate outcomes often simplified.	Virtual tools sustain structure but risk compressing programme logic.
Assumptions & Risks	Nuanced assumptions and risks surfaced through spontaneous debate and informal exchanges.	Assumptions less elaborated; discussions constrained by time and digital fatigue.	Structured prompts in virtual sessions help, but depth remains limited.
Stakeholder Buy-in	Strong ownership fostered through relational dynamics, side conversations, and informal networking.	Buy-in achieved through transparency of shared diagrams and real-time edits.	Ownership possible online, but relational depth weaker without informal interactions.
Quality of Outputs	Comprehensive ToC diagrams included contextual contingencies and detailed indicators.	Outputs functional but thinner; indicators and risks often underdeveloped.	Hybrid approaches needed to balance clarity with depth.

Participation Dynamics	Diverse voices surfaced through interactive, flexible group discussions.	Participation skewed toward digitally literate or well-connected participants.	Equity of participation requires explicit digital inclusion strategies.
Documentation	Flipcharts and facilitator notes captured outputs; risk of partial records.	Session recordings, exported Miro boards, and chat transcripts provided full documentation.	Digital tools strengthen documentation, useful for follow-up and validation.

Nevertheless, when comparing virtual outputs to those from in-person workshops, differences in quality and depth became evident. The in-person workshops conducted prior to the lockdown were marked by richer discussions that allowed for more granular articulation of assumptions and risks. In contrast, the virtual workshops produced ToC diagrams that were sometimes less detailed, particularly in specifying intermediate outcomes and contextual risks. Participants themselves noted that connectivity interruptions and digital fatigue constrained the depth of dialogue, often resulting in compressed causal pathways and fewer elaborated assumptions. Similarly, while the virtual format enhanced transparency through shared digital diagrams, it also reduced opportunities for iterative group reflection that typically enriches indicators and pathways in physical settings. Overall, the virtual workshops delivered outputs that were functional but comparatively thinner in scope than their in-person counterparts. Clarity was achieved at a structural level, with causal pathways and outcomes mapped out in a logical sequence, but the nuanced layers of assumptions and contextual contingencies—critical to robust ToC models—were less systematically developed. These differences underscore that while virtual platforms can sustain ToC processes under conditions of disruption, they cannot fully substitute for the depth of exchange afforded by face-to-face facilitation. The findings suggest that hybrid approaches, where virtual tools complement but do not replace in-person deliberation, may offer the most resilient model for sustaining both the clarity and the richness of ToC outputs in the future.

Perceived Value and Limitations

Stakeholder reflections gathered during facilitation highlighted that the process of conducting ToC workshops virtually was seen as both necessary and unexpectedly valuable during lockdown conditions. When probed about their experiences, many acknowledged that moving online preserved a critical space for dialogue and collective thinking at a time when physical interaction was impossible. The ability to connect across provinces without incurring travel costs or logistical delays was frequently noted as a benefit, especially for organisations with dispersed staff. Several participants appreciated that digital tools, such as shared diagrams and chat functions, made the process more transparent and created records they could revisit after sessions. These features gave participants a sense that, despite the distance, they remained part of an ongoing strategic conversation.

At the same time, stakeholders were candid about the constraints of the virtual process. Many noted that the sessions felt more rigid and structured than in-person workshops, leaving less room for the informal exchanges and relational dynamics that typically build trust and spark creativity. Fatigue from prolonged screen time was repeatedly mentioned, with some participants expressing that virtual engagement demanded higher concentration yet provided fewer opportunities for spontaneity. In addition, there was concern that the nature of online participation tended to privilege those already comfortable with digital platforms, while others remained quieter, reducing the diversity of voices in discussions. These reflections suggest that the participatory ethos of ToC was challenged by the very medium of delivery.

Looking forward, participants expressed nuanced views about the sustainability of virtual ToC processes. While they did not advocate replacing in-person workshops altogether, many saw value in retaining virtual elements for specific phases of facilitation, such as preparatory meetings, follow-ups, or involving geographically distant stakeholders. Their reflections pointed to the promise of hybrid models, combining the efficiency and reach of digital tools with the relational depth of face-to-face encounters. Importantly, they stressed that for virtual facilitation to remain viable, greater attention must be paid to supporting inclusivity through digital orientation, shorter sessions, and multiple modes of participation. These insights underline that the perceived value of virtual ToC workshops lies not only in continuity during disruption but also in their potential to reshape facilitation practices for the future.

Discussions and Recommendations

This study examined what is gained and what is lost when a participatory process, such as ToC, is moved online under crisis conditions. The findings affirm that ToC is both a technical artefact and a social process where meaning is negotiated and validated (Vogel, 2012; Breuer et al., 2014). In-person workshops created dense sociality through informal exchanges and embodied cues that surfaced tacit assumptions (Coryn et al., 2011), while virtual workshops narrowed this bandwidth: structured prompts, breakout rooms, and digital canvases sustained activity but limited spontaneity and joint sense-making (Maini, Mounier-Jack & Borghi, 2018). Yet the digital turn also introduced strengths, such as screen-shared diagrams, transcripts, and recordings that enhanced transparency and documentation, aligning with calls to leverage digital tools for learning (Baudoin, Hargreaves & Lema, 2021; Mercy Corps, 2020).

The equity consequences of going virtual proved more complex than the promise of “wider reach.” Tables 5 and 6 show that although participant numbers sometimes rose online, engagement quality was uneven. South Africa’s structural digital divide—unstable connectivity, high data costs, and uneven device access—privileged urban, digitally literate participants while rural staff drifted to the margins. This risks undermining the legitimacy of ToC, which depends on inclusive deliberation (Breuer et al., 2014). Ensuring equitable participation thus requires redistributive measures rather than technical fixes: subsidised data, low-bandwidth tools, asynchronous inputs, and staggered micro-sessions (Mercy Corps, 2020; Srivastava, 2022). Without such strategies, virtual facilitation risks entrenching hierarchies under the guise of efficiency.

Facilitation strategies also had to be re-engineered. Breakout rooms and collaborative tools sustained structure and visibility but shifted power toward the digitally confident and constrained creativity (Table 6). Online environments required explicit turn-taking, polls, and chat integration, producing cleaner artefacts but thinner dialogue (Lam, 2020). Reflexive adaptations—co-facilitation with technical assistants, structured “assumption sprints,” and deliberate integration of chat inputs—helped rebalance inclusivity and content focus (Schön, 1983; Bolton, 2010; Finlay, 2002). Still, as Table 7 shows, virtual outputs were less detailed in assumptions and risks, highlighting that while digital tools strengthen documentation, co-presence deepens thought. Practical correctives include separating diagramming from assumption-testing and embedding post-workshop reflection loops to capture contributions from those with unstable access (Chelsky & Kelly, 2020).

Finally, the South African context shaped these dynamics. Programme and M&E staff, often younger and more digitally fluent, gained space online, while senior leaders sometimes withdrew, inverting organisational hierarchies (Fleisch & Dixon, 2019; Gustafsson and Taylor, 2022). This highlights the need to stage facilitation so that broad inputs are captured virtually, while final synthesis and trade-offs occur in hybrid or in-person sessions. More broadly, reflexivity is essential: facilitators must be transparent about whose voices are missing and what assumptions remain under-tested (Pillow, 2003; Smith & McGannon, 2018). The study advances three claims: modality is not neutral, equity requires deliberate design, and rigour is a reflexive practice rather than a function of medium. Hybrid ToC models—with equity scaffolds, asynchronous channels, and reflexive checkpoints—emerge as the most sustainable pathway for participatory

Conclusions and Lessons Learnt

This study set out to interrogate how participatory, dialogical ToC workshops were adapted to virtual platforms under the constraints of the COVID-19 crisis. Drawing on comparative analysis of six workshops conducted between 2018 and 2021, the research combined participant reflections, facilitator notes, and workshop artefacts to examine changes in participation, facilitation strategies, and quality of outputs. By holding together the technical artefacts of ToC—diagrams, causal pathways, and monitoring frameworks—with the social processes of negotiation, deliberation, and validation, the study offered a holistic account of what is gained and what is lost when ToC processes are relocated from in-person to digital environments. This dual focus was crucial, as it enabled an interrogation not only of the functionality of outputs but also of the relational and participatory ethos that gives ToC its legitimacy and transformative potential.

The findings show that while virtual platforms provided continuity, efficiency, and improved documentation, they simultaneously constrained spontaneity, relational depth, and inclusivity. On one hand, digital tools such as breakout rooms, Miro boards, shared documents, and polling software provided structure and transparency, making contributions visible and creating permanent records of deliberation. On the other hand, these very tools also shifted dynamics by privileging those who had the connectivity, digital literacy, and confidence to engage fluently, while others—often rural-based or less digitally adept participants—found themselves marginalised. Connectivity barriers, high data costs, and unfamiliarity with platforms meant that participation was not evenly distributed. This unevenness underscores that ToC cannot be understood solely as a technical mapping exercise, but must be recognised as a social process that depends on the full and equitable inclusion of diverse voices. Virtual workshops, while successful in sustaining activity under crisis conditions, often produced outputs that were thinner in detail and relational richness than their in-person predecessors.

The lessons that emerge from this study are significant and multilayered. For facilitation practice, the findings emphasise that reflexivity, adaptability, and redistribution of participation opportunities are indispensable. Virtual facilitation is not a matter of simply transferring existing methods to an online setting, but of re-engineering the process so that it counters the structural inequities of digital environments. Co-facilitation models, in which technical assistants manage digital logistics while lead facilitators focus on dialogue, proved essential to sustaining both flow and inclusivity. Explicit techniques to integrate quieter or less digitally confident voices—such as systematically reviewing chat inputs, assigning rotating roles within breakout groups, or instituting asynchronous feedback loops—helped redistribute influence in deliberations. For organisations and M&E frameworks, the study highlights that digital readiness is not an optional enhancement but a fundamental dimension of evaluation capacity. Data stipends, investment in low-bandwidth alternatives, systematic digital literacy training, and simplified participation templates need to be built into programme design and donor budgets if virtual evaluation processes are to remain equitable. These requirements are not technical add-ons, but structural conditions for participatory rigour. For future crises and adaptations, the lesson is that hybrid models provide the most resilient architecture. Virtual workshops can serve effectively in preparatory phases, follow-ups, and engagement with geographically dispersed stakeholders, but in-person or hybrid sessions remain necessary for the deeper relational and dialogical work of surfacing assumptions, interrogating risks, and negotiating strategic trade-offs. This layered sequencing of modalities offers a sustainable way to balance efficiency with depth, documentation with dialogue, and inclusivity with rigor.

In conclusion, this study contributes to knowledge by demonstrating that modality is not neutral: it redistributes voice, shapes deliberation, and influences the epistemic content and practical utility of ToC outputs. It highlights the ethical and methodological imperative of designing virtual facilitation with deliberate equity scaffolds, redistributive strategies, and reflexive checkpoints. Future research should explore how hybrid evaluation architectures can be institutionalised across diverse contexts, how structured methods for assumption-surfacing and risk interrogation can be adapted to online settings, and how digital traces such as chat transcripts, interaction logs, and recorded sessions can be harnessed to strengthen evaluative reasoning without compromising inclusivity. For the South African education sector and other resource-constrained environments, the central lesson is clear: credible, resilient Theories of Change are not produced solely by robust causal logic but by careful attention to the relational, structural, and methodological conditions under which that logic is constructed.

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