

## Jim Macnamara's

MEL Manual for Public Communication

# MEASUREMENT, EVALUATION, & LEARNING

Theories, Models, Templates, Tips, and Practical Guidelines



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## INTRODUCTION

I have worked in public communication for half a century and in evaluation of public communication for 30 years – the first dozen in a commercial research firm and then almost two decades as an academic teacher and researcher. This has provided a combination of knowledge (e.g., of research methods and social and behavioural science) and practical experience.

After starting my career in journalism and then working in marketing communication and public relations, my professional experience included founding and heading the Asia-Pacific office of CARMA, a pioneering company in computer aided research and media analysis. As CEO of CARMA International (Asia Pacific) for more than a decade, I led evaluation of corporate and marketing communication and PR for the likes of Nokia, Hewlett-Packard, Alcatel, Singapore Telecom, SAP, Citigroup, UBS, Volkswagen Asia Pacific, and numerous government department and agencies. I say this not to boast, but to note that this guide is not based solely on academic research or theory. It is grounded in practice as well as advanced research methodology.

Following this, my almost two decades as a senior academic have involved leading evaluation projects for major organizations undertaken as contract research (academic research is funded by both government grants and research contracts from industry, government, and NGOs). In that time, I have led evaluation of communication for the World Health Organization (WHO) globally during the COVID-19 pandemic; developed an evaluation framework for the NATO Public Diplomacy Division; advised the European Commission Directorate-General for Communication (DG COMM) on evaluation; contributed to the evaluation framework of the UK Government Communication Service (GCS) as well as several other governments; and worked closely with the International Association for Measurement and Evaluation of Communication (AMEC) as a founding Fellow, Chair of its Academic Advisory Group, and contributor to the AMEC Integrated Evaluation Framework.

To prove a point about the relevance of academic research and knowledge to practice, I entered three evaluation projects that I was contracted to conduct in the AMEC awards in 2016 and in 2020 and won three Gold Awards and an overall Platinum Grand Prix Award.

Over the years in these and many other research projects, I have developed and accumulated a number of models, tools including templates, checklists, tips, and guidelines for what I call *measurement*, evaluation, and learning – a particular arrangement of the MEL acronym for reasons that will be explained.

This resource, including its various downloadable models, templates, and checklists, is published under a *Creative Commons* licence, which makes them available free of charge to anyone who wants to use the materials subject only to acknowledgement of the original source.

Users will find things in this guide that confirm existing knowledge as well as models, templates, checklists, and guidelines that are original and not generally available publicly.

#### Jim Macnamara

January 2024

## **TERMINOLOGY - MEET 'MEL'**

Before diving in, we need to clarify some key terms used in various disciplines and sectors.

Many refer to the implementation of assessment and performance measurement as 'monitoring' or as 'measurement', 1 while much of the research literature uses the single term 'evaluation' as inclusive of these processes. 2 Some use a combination of terms such as 'monitoring and evaluation' (common in development organizations and government) or 'measurement and evaluation' (M&E), which is widely used in education, psychology, and public communication. 4 Others refer to three elements as 'monitoring, evaluation, and learning' giving rise to the MEL acronym.

Monitoring is a necessary function, but there is a need to go beyond monitoring (which can mean little more than observing or recording) to (1) collect relevant *measurements* (i.e., data) and (2) *analyze* these to draw evidence-based conclusions.<sup>6</sup> In the case of communication, measurement incorporates and applies analysis to monitoring of various information flows and ideally audience responses.

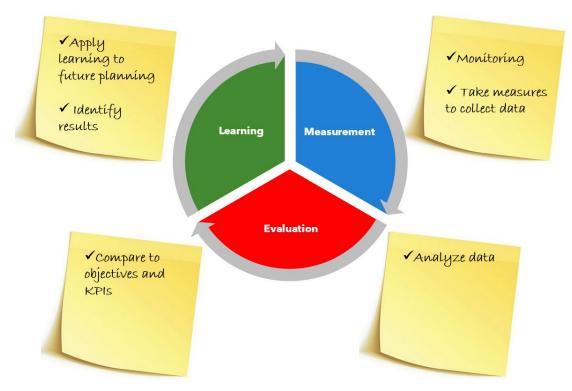
A further key consideration is that monitoring, measurement, and evaluation even at their best involve looking back and reporting on the past. What happened last month, last quarter, or last year? What results of various types were achieved in a previous campaign or project?

#### The MEL Model

Most recently, best practice and research advocate **measurement**, **evaluation**, **and learning** (**MEL**).<sup>7</sup> These steps incorporate monitoring as well as 'assessment' (another term used),<sup>8</sup> but emphasize evaluation to identify the *value* of activities quantitatively and/or qualitatively and, most importantly, *learning* to gain insights that inform future strategy.<sup>9</sup>

The MEL model comprising measurement, evaluation, and learning facilitates a positive, forward-looking approach rather than a retrospective focus that mainly reports on what has been done and can't be changed, or it can report ineffectiveness with no guidance for the future. Conversely, the three-part process of measurement, evaluation, and learning (MEL) supports forward planning and continuous improvement.

Figure 1. The MEL model.



## AN EVALUATION 'FRAMEWORK'

We hear regularly that we need to have and apply an *evaluation framework*. But there is little if any explanation of what a 'framework' is or why we need one. Why not just have a model? Or a tool such as media analysis?

The answer is that there is no one thing that enables valid MEL. There are a number of inter-related elements that are required.

One of the reasons for a reported "stasis" <sup>10</sup> and "deadlock" <sup>11</sup> in practice is that practitioners often seek a single formula, model, or tool – referred to as a search for a 'silver bullet'. Studies universally conclude that there is no single method, tool, or metric to evaluate the diverse field of public communication. <sup>12</sup>

NOTE: Much of the literature uses the single term 'evaluation' to collectively describe the various interrelated processes referred to under 'Terminology'. In this document 'evaluation' should be read as synonymous with MEL denoting measurement, evaluation, and learning.

Definitions describe a framework as "a real or conceptual structure ... to serve as a support or guide for the building of something" such as a system or program and "a set of tools and modules that can be reused for various projects". 14

Many years of research and practice identify a number of key elements required for effective valid MEL.

In the first instance, research and numerous case studies show that the foundation of MEL is formed from organizational **values** – specifically, values such as accountability and transparency. An organization that is not transparent and committed to accountability is culturally and operationally resistant – even opposed – to valid rigorous MEL. A commitment to evidence-based decision making is also a key value that underpins MEL. (See Figure 2.)

With a commitment to valid rigorous evaluation based on organizational values, there are a number of fundamental elements that practitioners need to understand and apply to undertake best practice valid MEL. These are:

- Theory of change (TOC) including principles from what is called realist evaluation;
- **Program logic models** that explicate and illustrate a theory of change identifying the inputs, activities, outputs, and outcomes that are required to achieve desired impacts;
- **Key concepts and principles** to be applied including the three types of evaluation, SMART objectives, and key performance indicators (KPIs); and
- A taxonomy (a categorized list) of available valid and relevant methods, metrics and indicators.

These four elements are illustrated in Figure 2 and explained in Part 1: 'Fundamentals for MEL'.

In addition to the above fundamentals, an applied evaluation framework also needs to include:

- Identification of the specific **methods**, **metrics**, **and indicators** for particular activities, projects, and campaigns to be implemented internally or via external agencies. This may require software applications and/or software as a service (SAAS) (e.g., for website statistics analysis, media content analysis, textual analysis, etc.); and
- Two dimensions of **learning** involving (a) capability development of staff to be able to apply the fundamentals and practical tools; and (b) identifying and applying the insights gained to planning and continuous improvement.

These practical components of an effective evaluation framework are explained and illustrated in Part 2: 'Practical Guidelines for MEL'.

This approach is based on social and behavioural science and case studies as well as more than 50 years of research and practice of evaluation in fields such as public administration, international development, and education, as discussed in the following sections.

Theory of Change **Application Program** of insights Logic Capability Model/s development **Values** Accountability Transparency Effectiveness **Key Concepts** Data & Principles collection 3 types of MEL and analysis SMART objectives KPIs Taxonomy Categorised list of methods, indicators Measurement

Figure 2. Key elements of an evaluation / MEL framework that integrates evaluation with planning.

## The Integrated Process of Planning and MEL

As well as illustrating key elements that make up a best practice evaluation / MEL framework, Figure 2 shows the **integration of planning and evaluation**, with the outer circle representing the cycle of 'planning, measurement, evaluation, and learning' that flows into future planning. Specifically, this cycle shows that the first two elements of evaluation – developing a *theory of change* and a *program logic model* using a *logical framework approach* (LFA) – are part of planning public communication.

To be clear on this important point, MEL is integral to project and campaign planning – not a separate process undertaken later. In fact, **best practice planning begins with MEL** – taking measures such as baselines of awareness, audience knowledge, and existing behaviour, plus learning about audience interests, needs, concerns, and channel usage and preferences – from which a logical and evidence-based plan of required *inputs*, *activities*, and *outputs* can be developed that have a high probability of leading to desired *outcomes* and *impact* (the stages of a program logic model, as further explained in Part 1).

## PART 1.

## **FUNDAMENTALS FOR MEL**

## REALIST EVALUATION

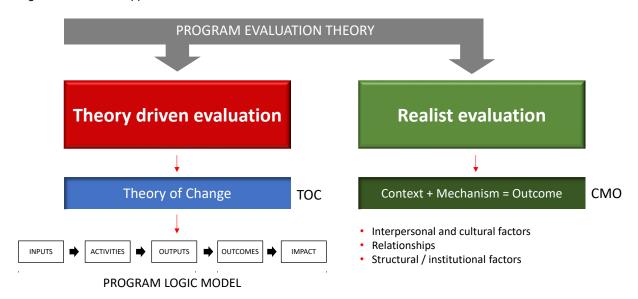
Let's start with realist evaluation. Thank goodness, I hear readers who are sceptical of theory say.

I agree that evaluation has to be realistic. However, there are two main approaches and bodies of knowledge relating to evaluation – or what academics call *theories*. So, let's jump in here and clarify something important about theory.

#### A Word About Theory

The term 'theory' is often misunderstood and resisted among practitioners for two reasons. First, *theoretical* is commonly confused with *hypothetical*. Hypothetical refers to ideas that have not yet been proven. Theoretical refers to knowledge based on substantial research and testing over time. A simple definition of theory is 'what others in other places at other times have learned based on evidence and documented'. Therefore, the related perception that theory is abstract and not relevant to practice is equally ill-founded. Knowledge gained from others' research, testing, and trials (i.e., theory) informs and complements practical experience. In that context, sociologist Kurt Lewin said: "There is nothing so practical as a good theory." <sup>15</sup>

Figure 3. Two main approaches to evaluation.



Realist evaluation rightly places significant emphasis on **context** such as local cultural, social, institutional, structural, political, and economic factors as well as relationships between parties. The approach argues that interventions<sup>1</sup> do not universally achieve the same outcomes and impacts – in simple terms, what works in one situation may not work in another, and vice versa. Realist approaches propose that context needs to be carefully considered. Realist evaluation is summed up as identifying:

What works for whom, in what circumstances, in what respects, and how?

This is represented in the realist evaluation formula: Context + mechanism<sup>2</sup> = outcome (C + M = O). 16

However, theory driven evaluation with *theory of change* at its centre also considers context, as shown in the following section.

<sup>&</sup>lt;sup>1</sup> 'Intervention' is used in scientific and medical fields to refer to activities undertaken to achieve an objective.

<sup>&</sup>lt;sup>2</sup> Mechanism is also an equivalent term to intervention or an activity.

## THEORY OF CHANGE

Theory of change is a long-standing foundational step in best practice planning and evaluation.

Theory of change has been poorly explained in many places, and even many academics have struggled to get their head around its distinctive features and its contribution to planning and MEL. But effort to understand theory of change is very rewarding because TOC, as it is commonly abbreviated, leads to a substantial breakthrough and innovation in planning and MEL.

In overview, developing a theory of change is a process of thinking carefully and thoroughly about what will cause a desired change (i.e., desired impact) and then designing what behaviour change specialists call the "missing middle between what a program or change initiative does (i.e., its activities and interventions) and how these lead to desired goals being achieved". <sup>17</sup>

Cartoonist Sidney Harris illustrates traditional planning and program development as identifying desired goals and objectives to be achieved at the end of a process, then producing information and materials, and hoping for a miracle in the middle.<sup>18</sup>

#### Steps for a Breakthrough and Innovation in Planning and Evaluation

The first two closely connected steps in a theory of change approach are innovative and even radical compared with traditional planning. These are:

- 1. **Start planning from the desired impact or impacts and work backwards**. This is referred to as a "backwards mapping process" to identify what you and your team believe are the key 'drivers' of the desired impact or impacts (economic, social, policy, or other). There may be several.
- 2. Critically review and question the assumptions made in identifying 'drivers' of the desired impact or impacts. How do you know that certain steps and stages such as increased awareness or changed attitudes will cause the desired impact or impacts? Theory of change, as in all good theory building, involves looking for evidence to support assumptions and hypotheses, such as research findings in published articles or reports, case studies, or past experience. Even though certainty is rare in human communication, developing a theory of change requires establishing a high probability that what is proposed will be effective.

Too often, planning of public communication programs and campaigns is driven by creative thinking that leads to activities and communication materials being conceived, and even produced in some cases, without evidence. Creativity is important, but it comes into play later in the planning process.

As noted in the previous section discussing the CMO approach in realist evaluation, context is considered in developing a theory of change. For example, USAID identifies five key components of a theory of change as follows:

- 1. The **context** in which the development problem is situated;
- 2. 'If-then' causal planning a series of 'if we do X, then Y will occur' propositions;
- 3. Major interventions proposed to achieve desired outcomes and impacts;
- 4. Key **assumptions** that underlie the success of this theory (to be questioned and verified);
- 5. Key **indicators** to monitor how progress unfolds during implementation. <sup>19</sup>

Similarly, the World Bank and the Center for Theory of Change describe theory of change as:

- 1. Identify long-term **goals**;
- 2. **Backwards map** to connect the preconditions necessary to achieve these goals;
- 3. Identify and critically review assumptions made about the context and proposed process;
- 4. Identify the **interventions** that will create the desired change;
- 5. Develop indicators to measure outcomes;
- 6. Write a **narrative** to explain the logic of the interventions.<sup>20</sup>

Figure 4 illustrates the initial steps and direction of planning from a NATO guide to strategic planning of communication as part of its public diplomacy program. The arrows illustrate the process of working backwards from the desired *impacts* to the *outcomes* that need to be produced to achieve the impacts and then down to the *outputs* and *activities* required to achieve the planned outcomes.

Figure 4. NATO model of the first stages of developing a theory of change.<sup>21</sup>

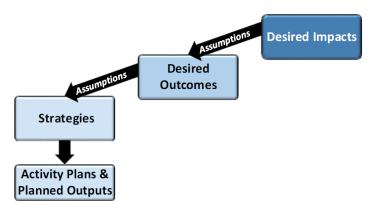
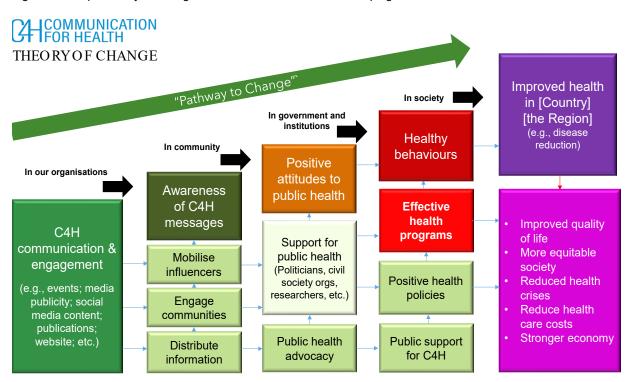


Figure 5 illustrates a comprehensive theory of change developed for achieving desired health impacts through a reduction in the incidence of disease (top right box) in countries participating in a campaign.

Figure 5. Sample theory of change for a health communication campaign.<sup>3</sup>



There are several important points illustrated in the above theory of change including:

• In planning to achieve the objective it recognizes **interventions or what could be called 'drivers' of change other than public communication**, such as effective health programs and health
policies that support public health objectives. While the focus of this manual is on public
communication, it is important to be realistic and recognize other contributions to impact. Avoid
over-estimating and over-claiming what public communication can achieve. This important stage of
planning leads to setting objectives that are achievable as well as measurable. (See 'SMART
Objectives' and 'Causation, Attribution, Contribution' in Part 2.)

Projected public communication outcomes, required outputs, and related activities are shown in green.

Working backwards, Figure 5 identifies the importance of 'public support for C4H' (Communication for Health), which influences policy and supports health programs, and then maps a number of public communication outcomes such as 'positive attitudes', 'public health advocacy', and 'awareness' of health risks and healthy behaviour messages that need to be in place, followed by planning the communication *outputs* and *activities* (what some call interventions) that create these outcomes, collectively creating a 'pathway to change'.

This linkage of steps and stages is also referred to as a results chain as the term 'results' is sometimes used in place of outcomes and impacts.

A theory of change can be documented in notes, or in a table (see Figure 8) or illustrated graphically in a model as shown in Figures 4, 5, and 7.

In summary, theory of change for public communication:

- Identifies the impacts desired (organizational, social, economic, political, etc.) and then works backwards to
- Identify communication *outcomes* that need to be achieved to contribute to the desired impacts;
- Identify communication outputs that need to be produced and distributed to achieve those outcomes;
- Identify communication activities to be undertaken to produce those outputs; and
- Identify *inputs* required to undertake the communication program or campaign.

As this backwards mapping process takes shape and is fleshed out, it informs a program logic model – the *logic* on how desired impacts will be achieved in a program or campaign.

The Social Impact Toolbox<sup>22</sup> (see Figure 6) shows the evolving process of planning from a theory of change (top right) in which external factors are considered (context), assumptions are queried, and evidence is sought to formulate a program logic model. Logic models explicate and illustrate how a theory of change will be implemented.

Figure 6. Overview of establishing a theory of change that informs a program logic model.<sup>23</sup>



Program Name of your program & organisation

#### Theory of Change

Your summary statement: "Through doing activity X, we can address social issue Y, and achieve outcome Z!"

#### Issue Addressed

What is the social issue that your program is addressing? You may want to include academi references of key research, and/or any statistics relevant to the issue addressed.

#### Assumptions

Any underlying assumptions you have made in the development of this model. Your assumptions must be grounded in evidence, as they will set the foundations for your Theory of Change.

#### **External Factors**

Any external factors which may influence the results of your program. These factors may improve or hinder your impact, however they are not part of your planned work.



#### Inputs

List any resources that are necessary for the running of your program. These of your program. These will include the human, financial, organisational, and community resources a program has available to direct toward doing the work. Don't forget to include any inkind donations, funding sources and volunteer time.



what the program does what the program does with the resources. Activities are the processes, tools, events, technology, and actions that are an intentional part of the program implementation. Be sure to include program evaluation and reporting as an activity



#### Outputs

Outputs are the direct Outputs are the direct result of program activities and may include the types, levels and targets of services delivered. They are the activities, products, and participation resulting from your program. You may include program participation, resources participation, res provided or produced, reports or research outputs.



#### Outcomes

Outcomes are you intended results – they are the changes you want to see from your program. These may be on an individual or community level. The time frames associated with your outcomes will be relative to the type of social change and of social change and program implemented.



These are the long-term impacts of your program. These outcomes are Inese outcomes are the fundamental intended or unintended change occurring in individuals, communities or systems as a result of your program. It is important to note impact often occurs after the conclusion of project funding, and requires long-term evaluation.

Before leaving theory of change and discussing program logic models, two further examples of theory of change are presented. Visually illustrating a theory of change can bring it to life and **help tell the story of what communication can achieve** – the "narrative" as recommended by the World Bank.<sup>24</sup> This is told in the main desired impact of a program as well as in 'flow-on' impacts (see top right in Figures 5 and 7, shown in purple because of their association with success and power), and then in the contributing factors from communication (shown in green) as well as other interventions and influences.

Figure 7. Theory of change for a smoking cessation campaign.

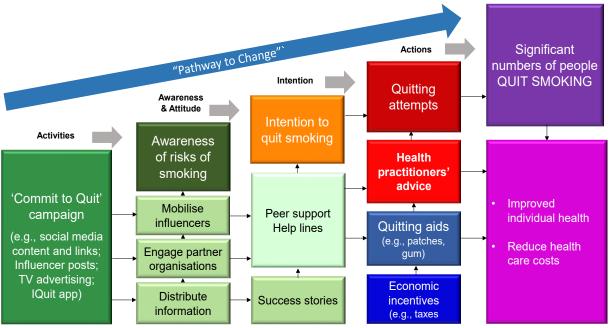


Figure 8 on the next page illustrates an alternative way of developing a theory of change as a table. This presents a theory of change for a commercial organization in the automotive industry. Starting from the top, the first column of the table shows the following.

- The company's first desired impact is sales. In addition, however, a theory of change should identify that sales should lead to profit (not selling at a loss), which in turn creates business sustainability. Furthermore, profitable sales and business sustainability result in a positive contribution to the economy such as through employment by the business, supplier contracts, etc. Identifying flow-on impacts as well as organizational impacts identifies and strengthens the 'narrative' and logic of the proposed interventions (i.e., why they are important and how they connect).
- The outcomes required to achieve these impacts are identified as brand and product awareness, information seeking, and creating interest that are likely to lead to a showroom visit, test drive, negotiating a deal, and forming an intention to buy. Some of these outcomes are the responsibility and result of other functions such as sales staff, but the theory of change also identifies contributions of public communication.
- Communication outputs are then planned to create the desired outcomes in this example, a
  launch event for the model, TV advertising, website content, media releases to generate publicity,
  and social media content.
- The theory of change and related planning finally identify **inputs** required including market research to inform targeting and marketing communication as well as product knowledge among sales staff.

In addition to identifying desired *impacts* and working backwards to identify *outcomes* required to achieve the desired impacts, then the *outputs* necessary, and so on, the table format In Figure 8 allows identification of **assumptions** that need to be critically assessed at each step (2<sup>nd</sup> column) and also it begins the process of identifying **metrics and indicators** to evaluate progress (3<sup>rd</sup> column) and the **methods** to obtain them (4<sup>th</sup> column). This integrates MEL into planning from the outset. (See Figure 8.)

Figure 8. A theory of change for company selling motor vehicles developed as a table.

	What occurs	Assumptions	Indicators	Method
Impacts  ↑  ↑  ↑	<ul> <li>Positive contribution to the economy</li> <li>Business sustainability</li> <li>Profit</li> <li>Sales</li> </ul>	• PCs* will buy	Profit figures     Sales statistics	Business reporting
Outcomes	<ul> <li>Intention</li> <li>Good deal</li> <li>Test drive</li> <li>Showroom visit</li> <li>Interest</li> <li>Information seeking</li> <li>Awareness of product</li> <li>Brand loyalty or interest</li> </ul>	Retailer will offer a good deal     PCs* will visit showroom     PCs* will seek more information     PCs* know / like	<ul><li>Social posts</li><li>Showroom visits</li><li>Web inquiries</li><li>Phone calls</li><li>Brand</li></ul>	<ul> <li>Social media analysis</li> <li>Web statistics</li> <li>Call tracking</li> <li>Brand survey</li> </ul>
Outputs  ↑  ↑  ↑	<ul> <li>Social media posts/vids</li> <li>Media reviews</li> <li>Website pages</li> <li>TV advertising</li> <li>Launch event held</li> </ul>	the brand  PCs:  On social media  Read reviews  Visit car websites  Watch TV	Media analysis data     Website stats     Media consumption data	Media content analysis     Web statistics     TV ratings     Audience survey
Activities	<ul> <li>Produce social content</li> <li>Write media releases</li> <li>Write Web content</li> <li>TV ad production</li> <li>Plan launch event</li> </ul>	PCs: On social media Read reviews Visit car websites Watch TV	Production complete, on time on budget	Activity reporting
Inputs	Market research	Potential customers (PCs) can be identified	% baseline awareness, knowledge, interest	Market survey

<sup>\*</sup> PCs - Potential customers

The left columns of Figure 8, reading from the bottom to the top, reflect the 'customer journey' or what some call the 'journey to the sale' and show how communication, as well as other influences, contribute.

Whether recorded as a table, diagram, or simply in notes, like all good theory, a theory of change should involve some hard thinking, searching for and studying evidence, and often discussion and debate within a team.

A well-developed theory of change evolves into and informs a program logic model. However, unlike program logic models that illustrate the **implementation** of programs in chronological order from inputs to impacts (see next section), developing a theory of change is a key part of **strategic planning** that should precede operational processes related to implementation.

NOTE: Don't be confused by use of the term 'change' in theory of change when discussing outcomes and impacts. All desired outcomes and impacts require change from the status quo – e.g., to increase sales, healthy behaviours, trust, etc. or reduce risky behaviour, crime, road accidents, etc. Even maintaining existing performance requires actions to offset natural attrition, fatigue, etc.

## PROGAM LOGIC MODELS

Program logic models are widely used to guide the practical design of programs and campaigns by illustrating the stages of applying a theory of change in a particular situation.

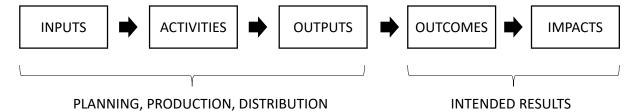
A further breakthrough and innovative approach in planning and MEL is that **best practice program logic models continue the 'backwards mapping' focus** by always 'keeping an eye' on the desired impacts and the required outcomes, rather than becoming preoccupied with day-to-day activities and visible outputs. Assumptions that communication outputs will lead to desired outcomes and impacts should continue to be questioned during program implementation by looking for, collecting, and analyzing evidence of progress along the 'pathway to change' (see 'Three Types of MEL' under 'Key Concepts and Principles of MEL').

"We need to get over ourselves, thinking of ourselves as communication experts knowing what to do from experience or intuition. Instead, we need to be social scientists searching for evidence and applying logic." (Anonymous Head of Analytics)

Program logic models originated in public administration in the late 1960s<sup>25</sup> and in the work of international development and aid agencies in the 1970s such as the logical framework approach (LFA, or sometimes abbreviated to *logframes*) published in 1971 to guide the work of USAID. <sup>26</sup> This was later updated in *The Logical Framework: A Manager's Guide to a Scientific Approach to Design and Evaluation*.<sup>27</sup> The term 'program logic model' is attributed to researcher Joseph Wholey whose 1979 book *Evaluation: Promise and Performance* was among pioneering texts in the field.<sup>28</sup> Along with Joseph Wholey and Edward Suchman, other influential authors who established a substantial body of research literature, handbooks, and guidelines on evaluation include Carol Weiss,<sup>29</sup> Claude Bennett,<sup>30</sup> and Huey Chen and Peter Rossi.<sup>31</sup>

Figure 9 is the format of a widely-adopted five-stage program logic model developed by the Kellogg Foundation.<sup>32</sup> This identifies *inputs* required for planning and development; *activities* to be undertaken; *outputs* to be distributed (what is 'put out'); *outcomes* desired and expected; and resulting *impacts* aligned to the goals and objectives of the organization (see 'SMART Objectives' in Part 2).

Figure 9. The structure of a basic five-stage program logic model.



Some evaluation literature advocates a seven-stage program logic model by breaking outcomes into **short-term**, **medium-term**, **and long-term**, recognizing that outcomes often occur over time.<sup>33</sup> Some of the following program logic models take a middle ground and propose tracking of short-term and long-term outcomes.

In public relations theory and practice, many refer to short-term outcomes as **outtakes** denoting what audiences take out of communication, with outcomes related to what they do as a result.

The following figures show examples of some commonly used program logic models for public communication.

#### **AMEC Integrated Evaluation Framework**

Figure 10 is the main screen of the online evaluation tool developed by the International Association for Measurement and Evaluation of Communication (AMEC) as part of its Integrated Evaluation Framework (IEF).

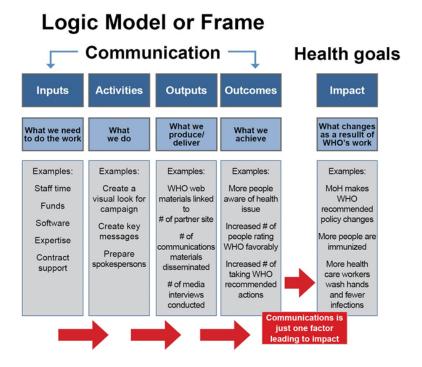
Figure 10. The online AMEC evaluation tool that is part of its Integrated Evaluation Framework.34



#### World Health Organization Program Logic Model for Communication

The World Health Organization (WHO) program logic model for communication identifies several important issues in relation to MEL. While the WHO uses the common five-stage program logic model, <sup>35</sup> the WHO model separates *impact* slightly from *outcomes* denoting that impacts are time-delayed. It also notes that "communication is just one factor leading to impact". Impacts are usually *multi-causal*. However, the model is clear in identifying that communication must include identification of *outcomes* that contribute to the desired impact or impacts – not simply undertake *activities* and produce and distribute *outputs*. (See Figure 11.)

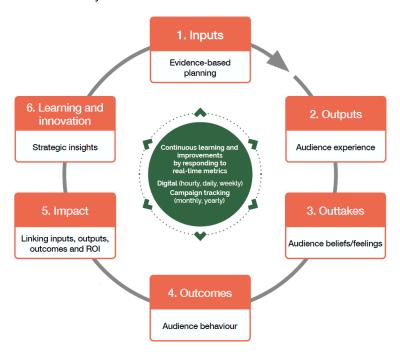
Figure 11. The World Health Organization program logic model for communication.<sup>36</sup>



#### UK Government Communication Service (GCS) Evaluation Cycle

Figure 12 is the UK Government Communication Service (GCS) Evaluation Cycle launched in February 2024 replacing the GCS Evaluation Framework 2.0 that was based on traditional program logic models.

Figure 12. The UK GCS Evaluation Cycle. 37



Significant features of the GCS Evaluation Cycle are:

- In Step 1, it emphasizes that *inputs* should include "evidence-based planning", reinforcing the link between and integration of strategic planning and evaluation discussed on page 5;
- It illustrates that evaluation is a continuous process, not an ex-post activity;
- Like the MEL model presented in this manual, it highlights **learning** as the final stage of the cycle in which "strategic insights" are gained to inform future planning and as the "core" of the planning and evaluation cycle.

## An Integrated Planning and Evaluation Model

Figure 13 is an integrated planning and evaluation model that reflects some further important principles. Key features of this model that inform best practice communication are:

- It **identifies stakeholders**, **publics**, **and society** in the model, whereas most program logic models for communication do not, thus failing to reflect *two-way* communication;
- It recognizes the **context** of communication, which influences effectiveness, such as economic, political, social, cultural, competitive, and internal factors (the background to the model);
- It specifically identifies the **two-way information flow** required for communication and for evaluation (shown as red arrows). The arrows illustrate that from the outset when setting objectives the interests, needs, concerns, and channel preferences of audiences should be identified and considered and that during the *inputs* stage planning should be informed by formative evaluation. While *activities* and *outputs* involve outbound communication from the organization, *outcomes* require collection of feedback and information from audiences to identify reaction and response.
- Furthermore, Figure 13 shows the stages of program logic models as overlapping spheres
  rather than as separate 'boxes'. In reality, inputs continue to be collected and received during
  activities; activities continue while outputs are distributed, outputs continue to be distributed while
  outcomes are being generated, and so on.

The Organisation CONTEXT Organisation (Economic, political, social, cultural, competitive, and internal) Objectives Intended and unintended impacts Short, medium, long terr **OUTPUTS OUTCOMES INPUTS ACTIVITIES IMPACT** (e.g., ads placed, publicity, Web content, events, publications, etc.) Communication (e.g., formative (e.g., writing, design Objectives research, strategic printing, media relations) savings, improved public health, etc.) planning, pre-testing) Planning and Preparation Production Distribution and Exposure Reception, Reaction, Response Results Stakeholders, Publics, Society

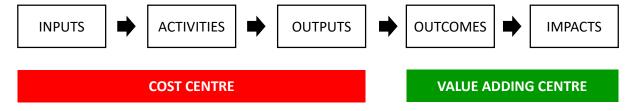
Figure 13. An integrated planning and evaluation model.<sup>38</sup>

#### Value Adding Centre vs. Cost Centre

Program logic modelling highlights in a very practical way why it is essential to conduct MEL beyond measuring *outputs*. As shown in Figure 14 below:

- When practitioners are collecting inputs, undertaking activities, and producing and distributing outputs, they are a COST CENTRE spending time and money producing materials, events, etc. with no demonstration of their effects or results.
- It is only when practitioners generate and demonstrate outcomes and contribute to desired impacts
  that they become and are seen as a VALUE ADDING CENTRE.

Figure 14. Program logic model illustrating the importance of identifying outcomes and impact.



#### Logic

The word 'logic' is used in these models for planning and MEL for a very important reason. In planning and reporting, it is essential that we apply logic – not assumptions, guesswork, habit, or instinct.

**Logic refers to "correct reasoning" in making inferences and drawing conclusions.** <sup>39</sup> Correct reasoning is based on rational thinking and, ideally, supporting evidence. While not all logic can be *mathematical* (i.e., formal logic), even informal logic requires sound rational reasoning.

False logic – which results in *fallacies* – is all-too-commonly used in evaluation practices for public communication and has no place in MEL. See the next section and examples in Part 2 under 'MELevolents to Avoid'.

#### Knowing your Outputs from Outcomes and Impacts

One of the most common pitfalls and breakdowns in logic in evaluation of public communication is referred to as 'substitution error'.

As early as 1985, a leading public relations textbook identified that a "common error in program evaluation is substituting measures from one level for those at another level". <sup>40</sup> The authors repeated this warning in several subsequent editions. <sup>41</sup> Emeritus PR professor Jim Grunig specifically described substitution error as using "a metric gathered at one level of analysis to show an outcome at a higher level of analysis". <sup>42</sup> Grunig should have said 'claim' rather than 'show' an outcome, because lower-level metrics such as evidence of outputs do not show an outcome or impact.

Common examples in MEL for public communication are reporting media *impressions* and *sentiment* as alleged outcomes, or even impact. In the same way, website statistics such as *visits* and *views* are sometimes claimed as outcomes or impact when, in fact, they simply show that a certain number of people clicked on a website. Web statistics do not provide evidence of whether visitors believed messages, changed their attitude, or acted in some way based on visiting a website. (See 'Vanity Metrics' in Part 2.)

To address widespread confusion in identifying outcomes and impact versus outputs, I developed a 'dissected program logic model' supported by two tests (two simple questions) that make correct identification of public communication *inputs*, *activities*, *outputs*, *outcomes*, and *impact* easy and clear.

'Dissecting' is a scientific practice to "cut apart" something to "examine the structure ... part by part" and the relation between the parts. <sup>43</sup> The purpose was not to create yet another model in a field flooded with models. Rather, the dissected model is based on widely used program logic models such as that of the Kellogg Foundation and the *Logic Models Guidebook* of Knowlton and Phillips cited previously, which are also the basis of many contemporary evaluation models for public communication. In the 'dissected' model, the stages are separated and described as shown in Figure 15.

The two tests that can be used to construct a 'Dissected Program Logic Model' are as follows.

- **The 'Doer Test'** asks 'Who is doing the thing that is measured?' The 'Dissected Program Logic Model' shows that inputs, activities, and outputs are what practitioners, or their contracted agencies do, produce, and/or arrange.
- The 'Site Test' asks 'Where is the reported metric or indicator occurring?' The 'Dissected Program Logic Model' shows that inputs and activities occur in the organization; outputs occur in media or channels of some type (traditional or social media, websites, publications, etc.); outcomes occur in audiences; and impacts occur in a business, industry, the economy, or society.

Figure 15 shows typical inputs, activities, outputs, outcomes, and impacts related to public communication. Outcomes are divided into short-term and medium to long-term to recognize the progression of change over time.

The 'Dissected Program Logic Model' for public communication clearly illustrates that media publicity reported with metrics such as reach, impressions, and sentiment; website visits and views; social media posts by the organization; and publications, videos, and events produced by the organization are *outputs* because they involve information distributed (put out) by the organization. Along with inputs and activities, they relate to planning, production, and distribution.

Outcomes are indicators of audience reception, reaction, and response, escalating from simple short-term indicators such as likes, shares, and retweets to clickthroughs for more information, forming an intention to act in accordance with messages, and taking minor actions such as registering or subscribing, to longer-term indicators of increased awareness, positive attitudes, and ultimately desired behaviour.

Figure 15. 'Dissected Program Logic Model' for public communication.44

#### WHAT PRACTITIONERS DO AND PRODUCE

Planning, producing, and distributing information

#### **INPUTS OUTPUTS ACTIVITIES** Situation Advertising Advertising placements analysis campaign (reach; impressions; design (e.g., Literature share of voice; etc.) creative; copywriting) review Media briefings Media publicity Research (reach; impressions; • Writing (e.g., (e.g., formative sentiment; etc.) media releases: Web to gain audience content: social posts) Website content (views; duration; insights) Producing bounce rates) Baseline videos data Social posts Producing Concept publications Videos (views 100%: 50%) testina (e.g., brochures, newsletters, posters) Publication (readership) **Event** (attendance) In THE In **MEDIA** or **ORGANISATION** other channels **PLANNING DISTRIBUTION PRODUCTION**

#### WHAT AUDIENCES / PUBLICS DO

Reception, reaction, and response

#### **OUTCOMES**

Short-term / Outtakes Medium Long-term

- Engagement low-level (e.g., follows and likes)
- Engagement (e.g., shares; retweets; positive comments)
- Conversions (e.g., clickthroughs to websites for more information, to register, subscribe, join)
- Intention (e.g., to act in accordance with messages)

In the AUDIENCE RECEIPT & RESPONSE

- Increased
  - awareness (e.g., of messages, issues, policies)
- Positive attitude change (e.g., increase in TRUST; customer SATISFACTION)
- Behaviour change (e.g., increased vaccinations, sales, votes, etc.)
- Adoption of proposed policy
- Compliance (e.g., with laws, policies, etc.)

#### WHAT HAPPENS

wholly or partly as a result



#### **IMPACT**

- Improved public health
- Increased investment
- Increased tourism
- Profit (for commercial organizations)
- Increased recycling
- Reduced industrial disputation, violence, etc.

In the BUSINESS, INDUSTRY, SOCIETY, etc. RESULTS Impacts are resulting effects that occur in a business, industry, the economy, or society such as improved public health; increased investment; profits in commercial organizations; reduced crime, and so on.

The dissection of inputs, activities, outputs, outcomes, and impact informed by the *Doer Test* and the *Site Test* can also be summarized in tables that serve as helpful checklists for public communication practitioners.

Table 1. The Doer Test for evaluating public communication.

THE DOER TEST	PROGRAM STAGE
What practitioners produce and arrange	Inputs Activities Outputs
What audiences / stakeholders / publics do immediately and short-term as part of reception and in reaction	Out-takes / short-term outcomes
What audiences / stakeholders / publics do in the medium to long-term in response	Outcomes
What industry, the economy, policymakers, or society do as a result	Impact

Table 2. The Site Test for evaluating public communication.

THE SITE TEST	PROGRAM STAGE
What occurs in the organization	Inputs Activities
What appears in media (mass, social, and other media such as websites, publications, events, etc.)	Outputs
What occurs in audiences / stakeholders / publics as part of reception, reaction, and response	Out-takes / short-term outcomes Outcomes (intermediate and long-term)
What occurs in industry, the market, the economy, or society wholly or partly as a result	Impact

The model is eminently customizable to different objectives and different modes of communication and engagement. Therefore, it is widely applicable in the public communication field and serves as a tool to address one of the most common failings in evaluation.

The 'Dissected Program Logic Model' was developed as part of a *MEL Manual* for use by the World Health Organization and has been published in a refereed academic journal.<sup>45</sup>

In addition to listing what is planned and desired at each stage, the culmination of using a program logic model as a planning and MEL tool is to add relevant **metrics and indicators** for each stage. While the 'Dissected Program Logic Model' (Figure 15) is shown in a traditional format of 'boxes', Figure 16 is an example of a program logic model using the overlapping sphere format of the Integrated Planning and Evaluation Model (Figure 13) with examples of relevant metrics and indicators added.

See the section 'Taxonomy of Methods, Metrics, and Indicators' for a list of commonly used metrics and indicators for MEL in public communication.

A TEMPLATE for producing a program logic model for public communication based on Figure 16 is available as part of this MEL manual. (See Appendix 2.)

Figure 16. Program logic model showing examples of inputs, activities, outputs, outcomes, and impacts with relevant metrics and indicators.

INPUTS	ACTIVITIES	OUTPUTS	Short-term OUTCOMES (Outtakes)	Medium & long-term OUTCOMES	IMPACTS
<ul> <li>Audience research</li> <li>Pre-testing</li> <li>Strategic planning</li> </ul>	<ul> <li>Writing</li> <li>Editing</li> <li>Graphic design</li> <li>Photography</li> <li>Video production</li> <li>Media liaison</li> <li>Event planning</li> <li>Advising on communication</li> </ul>	<ul> <li>Media publicity</li> <li>Website content</li> <li>Social media posts</li> <li>Publications</li> <li>Events (own events and conferences)</li> <li>Stakeholder engagement (e.g., meetings, forums)</li> </ul>	<ul> <li>Website visits and views</li> <li>Likes, shares, retweets (i.e., online engagement)</li> <li>Clickthroughs*</li> <li>Positive online comments</li> </ul>	<ul> <li>Increased awareness</li> <li>Inquiries and requests</li> <li>Stakeholder satisfaction with communication</li> <li>Reputation</li> <li>Trust</li> </ul>	<ul> <li>Increased sustainable food production</li> <li>Economic development in partner countries</li> <li>Reduced poverty</li> <li>Positive foreign relations</li> <li>Geopolitical security</li> </ul>
<ul> <li>METRICS AND/OR</li> <li>INDICATORS:</li> <li>Baseline levels of impressions, sentime awareness, etc.</li> <li>Audience satisfaction pre-tests</li> </ul>		METRICS AND/OR INDICATORS:  Impressions  Media content sentiment  Publication circulation  Event attendance	METRICS AND/OR INDICATORS:  • Website statistics  • Social media analytics  * Clicking links to other pages as	METRICS AND/OR INDICATORS:  • Survey data  • Interview data  • NPS scores  • Trust index	METRICS AND/OR INDICATORS:  • Project reports  • Economic data  • Academic studies  or to register, subscribe, etc.

## **KEY CONCEPTS AND PRINCIPLES OF MEL**

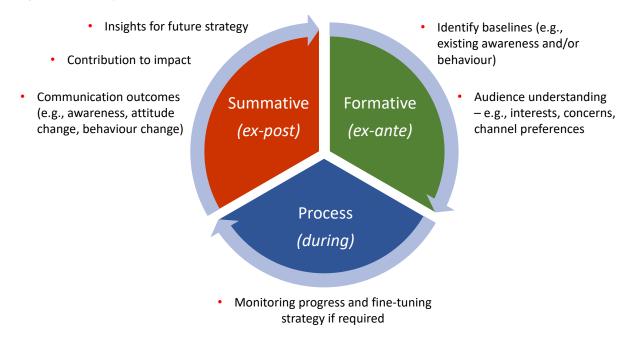
There are several other key concepts and principles that are important for conducting valid MEL. These notably include the following.

#### Three Types of MEL

A common misunderstanding is that MEL is undertaken at the end of programs and campaigns. This is problematic for several reasons. First, it means that *baseline* levels of awareness or incidence of a desired behaviour before the program or campaign are unavailable, making later comparison impossible. Also, a lack of early MEL leads to a lack of understanding of audiences (e.g., their interests, concerns, needs, and channel preferences). Many communication programs fail because those responsible do not know what information their target audience wants or how they prefer to receive it.

Research literature commonly identifies three types of evaluation – **formative** (*ex-ante*), **process**, and **summative** (*ex-post*). Some propose four types as *formative*, *process*, *outcome*, and *impact* evaluation to draw attention to outcomes and impacts as key stages that are often separated in terms of time as indicated in the WHO program logic model (Figure 12).

Figure 17. Three types of evaluation.



As illustrated in Figure 17, MEL should start from the very beginning of planning. Formative MEL:

- Identifies **baselines** such as existing levels of awareness, attitudes, and behaviour against which summative evaluation can compare data to show change;
- **Informs planning** by providing insights into audience interests, needs, concerns, and channel preferences.

Process evaluation involves monitoring to track progress and adjust strategy or tactics if necessary.

#### Summative evaluation:

 Reports outcomes of communication such as audience response (e.g., likes, shares, and comments), increased awareness, knowledge, trust, or reputation; intention to act in accordance with messages; and sometimes behaviour such as registering, subscribing, joining, visiting a store to view products; etc.;

- Identifies contribution to impact such as becoming vaccinated, committing to a fitness program, publishing a discussion paper that informs policy; or generating inquiries that lead to sales, profits, and business sustainability;
- Provides **insights** that can inform future planning such as what worked and what did not work and identification of trends or patterns in a market or sector.

#### **CASE STUDIES:**

Planners of a **health campaign** for remote villagers thought a video explaining how to protect themselves against a disease would be a good idea based on research that shows visual messages have high impact. However, this involved an assumption that villagers had TV sets and video players. Checking out this assumption as part of developing a theory of change revealed that only 25% did. Other published research (secondary data) indicated that radio was a popular and widely-accessed medium. Thus, the communication strategy focussed on radio informed by formative MEL.

A company instructed its communication team to increase employee awareness and support for a **restructuring** planned to occur during the following six months. Management expressed an expectation of 90% awareness and 80% of staff 'Strongly supporting' or 'Supporting' the restructuring within the next three months (i.e., the organizational objectives). A formative MEL survey of employees revealed that, while 65% of employees were aware of the planned restructuring, only 20% supported it. Based on this formative MEL data, the communication team proposed SMART objectives with a three months target of 50% support and a follow-up campaign over 12 months, which was more likely to be *achievable* as well as being specific, measurable, relevant, and time-bound. A failure to conduct formative MEL would most likely have seen the employee communication campaign fall well short of overly ambitious targets and reflect poorly on the communication team. It also would have left management with an inflated perception of support for the restructuring.

#### **SMART Objectives**

Best practice MEL rests heavily on having SMART objectives as illustrated in Figure 18 and explained in the following.

Figure 18. SMART objectives.



#### Specific

Broad non-specific objectives, such as 'To increase awareness of ...' or 'To build the reputation of ...' are unmeasurable because they do not identify the scale of change required, the target audience, or the deadline. Specific objectives **should contain some numbers or percentages and dates**.

Examples of specific communication objectives are:

- Increase the percentage of citizens vaccinated against [Name] disease by 25% in the next 12 months;
- Achieve 75% of employees 'Very satisfied' or 'Mostly satisfied' with [Organization's Name] internal communication next year and 80% in the following year.

#### Measurable

In addition to facilitating measurability through including specific target numbers or attributes and dates in objectives, measurability requires identification of methods for collecting relevant data and ensuring that these are able to be implemented within available resources, expertise, and budget. This step is referred to as **evaluability assessment** defined as:

... an early review of a proposed activity in order to ascertain whether its objectives are adequately defined, results verifiable, and evaluation questions answerable. An Evaluability Assessment establishes whether and how an intervention can be evaluated reliably and credibly.<sup>48</sup>

Trying to add on measurement to inform evaluation and learning later is usually unsuccessful because data capture methods were not put in place and often data cannot be captured retrospectively.

#### Attainable (or achievable)

Objectives for communication should be realistic. Research literature and case studies in the field can help identify the types and levels of change that are achievable.

#### Relevant

Relevant communication objectives are those directly aligned to the overarching goals and objectives of the organization and/or stakeholders and society. Construction of a theory of change and a related program logic model will ensure that all communication activities are relevant.

#### Time-bound

The deadline for achievement of objectives should be clearly identified.

#### **Key Performance Indicators (KPIs)**

The first thing to note about KPIs is that they are called *indicators* – not metrics or numbers. Indicators can be qualitative factors such a positive comments and feedback as well as numbers. Also, it is worth noting that many measures presented as numbers such as satisfaction rates on a Likert Scale (e.g., Very satisfied; Satisfied; Neither satisfied or unsatisfied; Unsatisfied; Very unsatisfied) and rankings are *ordinal* numbers showing an order or interval on a scale – not *cardinal* numbers used for counting (what most understand as 'real' numbers).

The second key thing to note is that no organization, department, unit, agency, or practitioner can evaluate everything they do.

Don't try to measure everything. Select KPIs for SMART objectives with some at outcomes and impacts stages as well as for outputs.

There is no hard and fast rule, but practical experience and commonsense suggest that 4–6 KPIs is manageable and sufficient in most projects and campaigns.

The third key point to note about KPIs is that too often KPIs report *activities* and *outputs*. Having one or two KPIs for *outputs* such as the audience reach and tone of media publicity or views of webpages or videos is useful for progress reporting, but **identifying effectiveness and value requires that most KPIs report** *outcomes* **(e.g., increases in awareness, trust, reputation, or changed behaviour) and, ideally, at least one indicates** *impact* **or a contribution to impact.** 

## TAXONOMY OF METHODS, METRICS & INDICATORS

As part of its Integrated Evaluation Framework released in 2016, the International Association for Measurement and Evaluation of Communication (AMEC) published a taxonomy of methods, metrics, and indicators that I produced.<sup>49</sup> Since, I have updated this several times in undertaking evaluation research and designing MEL frameworks for organizations.

As part of this manual, users have access to the latest version of my 'Taxonomy of Methods, Metrics, and Indicators' for public communication, a taxonomy being a categorized and classified list of elements, organisms, or species<sup>50</sup> – in this case, a categorized list of metrics and indicators and the methods to obtain them relevant to public communication.

The taxonomy attached as APPENDIX 1 and downloadable as an A4 or A3 PDF lists 70 metrics and indicators relevant to public communication next to the communication channel or medium for which they are appropriate, including:

- Paid media advertising;
- Editorial media publicity;
- Websites;
- Social media:
- Publications such as reports, brochures, and newsletters;
- Events, presentations, and whole campaigns.

For each metric and indicator, the taxonomy shows

- 1. Whether it is quantitative or qualitative (**methodology**);
- 2. The **method** for generating the metric or indicator; and, very importantly,
- 3. The **stage** at which the metric or indicator is applicable i.e., whether the metric or indicator reports an activity; an output; a short-term, medium-term, or long-term outcome; or an impact.

NOTE: As discussed in the previous section on 'Key performance indicators', you should not try to measure and evaluate everything you do. Most organizations select 4, 5, or 6 of the most relevant and readily available metrics and indicators.

See the 'Taxonomy of Methods, Metrics and Indicators by Program Stage' as APPENDIX 1.

## What About When I Have No Budget?

This is one of the most common questions asked and the most common reason (or excuse) for not doing MEL. While the following tips relate to 'Practical Guidelines for MEL' (Part 2), this question is addressed here because it comes up as soon as methods, metrics, and indicators are mentioned. There are two answers.

First, if MEL is part of planning, as it should be, it is budgeted as part of the overall project or campaign (i.e., built in to the cost of a program or campaign). So, you should never have no budget for MEL.

Second, there are low-cost and even no-cost tools and methods available including the following.

- Free social media analytics are provided on most social media platforms such as the Meta Business Suite that provides analytics for Facebook and Instagram.
- Third-party social media analysis applications are available for free or for less than US\$100 a month.
- Google Analytics, the basic version of which is free to track visits, views, etc. on your website.
- **Key informant interviews** key informants are representatives of stakeholder or community groups who can reflect the views of their constituency. A few key informant interviews can provide valuable feedback and insights and you can do them yourself if necessary.
- E-surveys can be done for little or no cost using tools such as SurveyMonkey or Qualtrics.

## DATA COLLECTION AND ANALYSIS

As metrics and indicators are collected using methods such as those listed in the taxonomy, a key step to progress from raw data to showing value, learning, and applying insights is data analysis. In most cases, data analysis is handed over to specialists who are trained in statistics and/or interpretive methods of analysis. But it is important for all communication professionals to have some understanding of the methods involved and what they produce.

Different specialized methods of analysis are used for quantitative data (referred to as *structured* data because it is numeric) and qualitative data, which are usually in the form of text such as interview transcripts, open-ended comments in surveys, submissions, etc. (referred to as *unstructured* data).

#### **Quantitative Analysis**

Analysis of quantitative data involves statistical analysis of which there are three main types.<sup>4</sup>

- **Descriptive** analysis describes visible characteristics in a data set such as counts and percentages (e.g., what percentage of people say they like a particular brand in a survey).
- Inferential analysis draws conclusions that can be generalized about a population (the total group in a category) based on identified patterns or trends in a sample (e.g., based on a high percentage of people who say they like a particular brand, it can be concluded that the brand will be competitive in a market).
- Predictive analysis goes further to make generalized predictions based on data derived from a
  sample and sometimes combined with or compared to other data (e.g., based on a high percentage
  of people who say they like a particular brand, and related data such as high ratings for quality and
  competitive prices, it can be predicted with reasonable reliability that the brand will gain a dominant
  market share). Drawing on multiple data sets, referred to as triangulation, strengthens the reliability
  of inferences and predictions.

Statistical analysis can identify findings with *significance* and *reliability* based two key inter-related calculations as follows:

- *P-values* measure probability and, therefore, the statistical significance of findings (e.g., a p-value of .05 means there is a 5% chance that the observed results occurred by random chance). Therefore, quantitative research seeks low p-values such as <.05;
- Confidence intervals provide information about the range in which the true value (reality) lies with a certain degree of probability (e.g., 90–95% confidence levels are considered highly reliable).

Complicated, yes. Unless you are trained in statistics, it is best to leave statistical analysis to specialists. Therefore, a practical tip is to engage a data analyst in your MEL team.

## Qualitative Analysis

Qualitative analysis of unstructured data, such as text drawn from open-ended questions in surveys, transcripts of interviews and focus groups, transcribed digital recordings from call centres,<sup>5</sup> submissions to consultations, notes in journals, etc. involves *interpretive* methods. There are a number of interpretive methods for analyzing text and images of which the most common are:

- Content analysis (can be used for quantitative and qualitative analysis);
- Textual analysis;
- Thematic analysis;
- Narrative analysis.

There are other types of statistical analysis such as prescriptive analysis, causal analysis, and exploratory data analysis, but descriptive, inferential, and predictive are the most widely used.

Calls to call centres, which are usually digitally recorded, can be transferred to text for analysis using voice to text (VTT) software.

Whereas quantitative data (numbers) are analyzed using statistical methods, the basis of qualitative data analysis (e.g., of text) is *coding*. Coding is a process of identifying and 'tagging' (i.e., labelling) key words and phrases in a body of text, which enables them to be grouped into categories such as by topic or theme.

For example, mentions of brands, products, names of organizations or individuals, and key terms that indicate tone, sentiment, or an attribute (e.g., innovative, high quality, poor quality, etc.) can be coded manually by a human analyst, or as is increasingly common, by automated machine coding using a computer software application.

Once coded, counts of mentions can identify leading topics, themes, messages, sources, and so on.

NOTE: Coding of text is typically done after 'a', 'an', and 'the' (articles), pronouns, and prepositions (e.g., to, from, for, etc.) are removed. These are referred to as 'stop words' to denote stop coding these as they are invariably the most frequent words in texts and do not contribute to meaning as substantially as nouns (naming word), verbs (doing/action words), and adverbs and adjectives (describing words).

Words and phrases to be coded can be identified inductively or deductively.

- Inductive coding involves open searching in a body of text to find the most frequently occurring
  words and phrases irrespective of what the analyst is searching for. This has the advantage of
  minimizing bias (e.g., an analyst searching for only what they want to find). However, the method
  can lack accuracy because some occurrences of key words and phrases can be missed in the early
  stages of the coding while a human analyst identifies a pattern, or an algorithm is 'trained' to identify
  synonyms and equivalents (see Note below on synonym matching).
- Deductive coding uses a pre-prepared list of key words and phrases and analysis focusses on finding and categorizing these. This has the advantage of ensuring accuracy of counts. The disadvantage is that some frequently occurring words and phrases can be missed because they were not in the coding list. To ensure comprehensiveness in deductive coding, the coding list is usually prepared based on pre-coding or 'pilot coding' a sample of the text (what content analysts call 'immersion in the message pool').<sup>51</sup>

NOTE: A coding list usually includes synonyms and phrases that have similar meanings as key words and phrases. For example, a coding category called 'Criticism' might include mentions of 'attack', 'dispute', and 'charge' and their respective verbs, while a coding category called 'Innovative' might include mentions of 'new', 'leading', 'front-runner' and other similar terms.

Computer applications can also identify and capture a nominated number of words either side of key words, referred to as *key words in context* (KWIC coding). As the term suggests, this facilitates interpretation of the meaning of key words and phrases.

Most textual analysis (also referred to as text analysis) and content analysis now involve automatic coded using machine learning software. Machine learning tools require 'training' the algorithm by checking coding in the early stages and adjusting parameters if required. Manual coding often employs multiple coders with a percentage of coding 'blind double coded' to check for consistency, referred to as intercoder reliability assessment.

## Organizational Listening

In simple terms, MEL involves listening. While widely lacking in public communication by organizations, listening is an essential component of communication. <sup>52</sup> Simply transmitting and distributing messages is not communication. Listening is essential to learn (e.g., to understand audience interests, needs, and channel preferences) and to identify audience responses.

Analysis of data such as relevant social media posts, survey responses, interview transcripts, and stakeholder feedback, as well as complaints, submissions to consultations, summaries of calls to call centres, etc. is an essential part of organizational listening. Data analysis is how sense is made and understanding is created from various forms of feedback and input by stakeholders.

# PART 2.

# PRACTICAL GUIDELINES FOR MEL

## LINKING 'COMMS' TO OUTCOMES AND IMPACTS

In collecting and analyzing metrics and indicators as part of MEL, we are seeking to establish *causation*, also referred to as *causality* – i.e., that our communication activities and outputs wholly or partly caused changes in awareness, attitudes, or behaviour, and potentially flow-on benefits (i.e., outcomes and impacts).

#### Causation

Causation is often confused with *correlation*. Correlation can be by chance (e.g., share prices go up on sunny days), with no causal connection. There are three rules for establishing causation.

- 1. **Temporal precedence** the alleged cause must precede the alleged effect. For example, share price rises can result in positive media publicity, not the other way round. Timing tells the difference.
- 2. **Covariation of cause and effect –** there must be a demonstrated connection between the alleged cause and effect. For example, in public communication there needs to be evidence that the audience accessed and used information provided during a decision-making process.
- 3. **No plausible alternative explanation** other possible causes of the effect must be ruled out as far as possible (e.g., no other source provided the information referred to above).

#### **Attribution**

The process of identifying causation is referred to as attribution. Attribution is usually taken to mean that the full effects are claimed to be caused by certain activities, interventions, actions, or influences.

Attribution is challenging and sometimes impossible when multiple activities, interventions, actions, and influences occur concurrently or in a short space of time. Many public communication projects and campaigns involve a range of activities, materials, and channels such as paid media advertising, media publicity, social media posts and content such as videos, publications, and so on. Impacts also are commonly caused by policy, legislation, economic conditions, and other factors.

Some methods have been developed to establish attribution in public communication such as *market mix modelling*. One approach is varying the marketing mix in two or more markets that are similar and comparing results. Another approach is to stop some communication activities for a period in a market while others continue. If results fall and no other cause can be identified, the decline is the effect of the ceased activity. If results continue at previous levels, the stopped activity is not effective. Market mix modelling can rotate through multiple communication activities and methods to isolate the effects of each – although the method is only moderately reliable because context can change (e.g., competitor activity or economic conditions).

#### Contribution

In most cases, it is more realistic to seek to show *contribution* of public communication to desired outcomes and impacts in a business, industry, the economy, or society.

The *theory of change* illustrations in Part 1 recognize other important contributions to and causes of outcomes and impacts. It is best to be honest in making claims for your work. Establishing a theory of change can help make the case for where, when, and how public communication plays a role – even a major role sometimes – in achieving desired outcomes and impacts.

Valid, rigorous MEL will provide data to substantiate a theory of change.

See the next section for further important considerations in seeking to claim attribution or contribution of communication.

## BARRIERS AND OBSTACLES TO OVERCOME

It is important to understand that progressing from inputs through communication activities and outputs to outcomes and ultimately impact, is not automatic and not easy. The stages do not occur like falling dominoes. Research shows that audiences often do not see information and messages because of selective exposure and selection attention. Even when they do, they can ignore them or reject them and, even if they engage with the content, they often forget it or simply do nothing as a result. Psychology and social psychology identify a range of barriers and obstacles to effective communication. Common examples are cognitive biases and what are called heuristics.

#### Cognitive Biases and Heuristics

Cognitive biases are ever-present and inevitable in people because of their prior experiences as well as their social, cultural, political, educational, and socioeconomic backgrounds, and partly due to nature (e.g., introvert vs. extrovert; idealist vs. sceptic, etc.).

Heuristics are 'mental shortcuts' that people apply in making many decisions. Psychologists point out that people cannot apply deep thinking (referred to as *elaboration*,<sup>53</sup> *systematic* thinking,<sup>54</sup> and *System* 2 thinking,<sup>55</sup>) in every situation. In many day-to-day decisions, people rely on habit, familiarity (e.g., known brands), social norms, trusted authorities, and a number of unconscious tendencies – factors that advertisers have long recognized. Common biases and heuristics include:

- Confirmation bias messages are often interpreted to confirm existing attitudes even if they
  contradict them:
- **Schema (schemata**, plural) messages are interpreted based on pre-existing mental frameworks (e.g., memories and stereotypes);
- **Status quo** as the name suggests, many people are conservative or fearful of change and opt to 'stick with what they know' when faced with decisions;
- **Present bias** a focus on short-term and immediate results and ignoring important long-term considerations (even some corporate CEOs and politicians exhibit this bias);
- **Groupthink and 'bandwagon' effect** believing or acting a certain way because of a perception that lots of people are doing it;
- **Cognitive dissonance** messages that contradict existing attitudes or behaviour cause mental discomfort and anxiety, so they are often rejected.<sup>56</sup>

Sociology and cultural studies also inform us about how communication often fails or breaks down, as well as how it can be effective due to social interaction and cultural influences.

For many decades it was believed that mass media had major direct effects based on 19<sup>th</sup> and 20<sup>th</sup> century *mass communication theory*. Perhaps that was true once when there were limited choices in media and when people were less educated and trusted authorities and institutions. However, studies of media effects during the 1960s and 1970s found "limited effects" in many circumstances.<sup>57</sup> Furthermore, in recent times, trust in media has fallen to less than 50% in most countries – and as low as 37% in the UK and 27% in South Korea.<sup>58</sup> Also, media audiences have declined substantially.

Social media are even less trusted according to some studies and are responsible for much of the flood of misinformation and disinformation that has created what political scientists call a *post-truth* society.<sup>59</sup>

Even in the case of carefully researched and crafted media advertising, US marketer John Wannamaker famously said:

Half of my advertising is wasted; the only trouble is I don't know which half.60

In short, we cannot assume that messages distributed through traditional, social, and other forms of media will create effects in line with our communication objectives (i.e., outcomes and impact). MEL is essential to identify change and its causes.

## 'MELEVOLENTS' TO AVOID

There are a number of invalid and spurious methods and metrics used in MEL for public communication that need to be avoided to have credibility.

#### Advertising Value Equivalents (AVEs)

One notorious example is the use of so-called **advertising value equivalents (AVEs)**, also referred to as advertising value equivalency. AVEs, calculated by multiplying the amount of space and/or time gained as editorial media coverage by the advertising rate for each medium, are fallacious for many reasons including:

- The amount calculated (e.g., in dollars, euros, pounds, etc.) is **not a value. It is an estimated cost** of an equivalent amount of space or time purchased for advertising;
- Editorial media coverage and advertising are **not equivalent**. Advertising content is controlled in terms of positioning and is always positive and 'on message', while editorial content is commonly neutral reporting and sometimes negative and its prominence varies considerably;
- Client organizations would most likely not buy advertising in many media in which editorial coverage occurs, as advertising is strategically placed only in priority media;
- Many digital and social media do not accept advertising.

This is not to say that editorial media coverage is not valuable. However, comparing it to the cost of advertising is illogical as well as fallacious. Advertising is not evaluated based on its cost – that would be absurd. The value of advertising is the awareness, attitude change, and behaviour that it generates.

#### 'Black Box' Algorithms

While algorithms and increasingly sophisticated artificial intelligence (AI) applications are useful in MEL, a problematic method used in evaluating public communication, particularly media coverage, involves 'black box' algorithms (i.e., secret code within computer applications) containing spurious calculations.

Algorithms are commonly used to auto-calculate the so-called *sentiment* of editorial media content as a score out of 5, 10, or 100. This is nominally fallacious in the first instance because sentiment refers to human emotion. Texts do not contain sentiment. Tone, favourability, or positive-neutral-negative ratings are more appropriate descriptors. Automated calculations of tone or favourability are valid if the parameters used are transparent and logical. **Natural language processing (NLP)** applications can be used to track the frequency of key words and phrases and categorize them by tone, topic, theme, and other criteria. **Machine learning** enhances the process because users can 'teach' the algorithm to correctly identify and categorize terms.<sup>6</sup>

However, algorithms and AI processes are used by some data suppliers to claim *outcomes* and even *impact* of communication illogically and falsely. For example, one leading media analysis company claims to report "impact" using on an algorithm that calculates a score based on the following:

Impact is based on the *credibility* of the source; the audience *reach*; and the *relevance* of the article to a particular company and topic.<sup>61</sup>

The company subjectively decides the credibility of sources quoted in media and the relevance of content, and audience reach is the maximum number of potential readers, viewers, or listeners based on media circulation or ratings data. Reach and impressions are hypothetical numbers because not all readers, viewers, and listeners consume each media item. Thus, the calculation reports media content characteristics only (mostly subjectively) and gives no indication of impact on audiences.

Another media analysis company previously employed by the WHO claimed *impact* of communication based solely on media impressions<sup>62</sup> (see definition of impressions in the 'Glossary of Terms').

It also needs to be borne in mind that media coverage, even when positive and 'on message', is an output – not an outcome or impact.

If you engage a media analysis company, question their staff about how they calculate their various metrics. Challenge them if they are making illogical claims. These guidelines give you the information necessary to determine the validity of methods, metrics, and indicators.

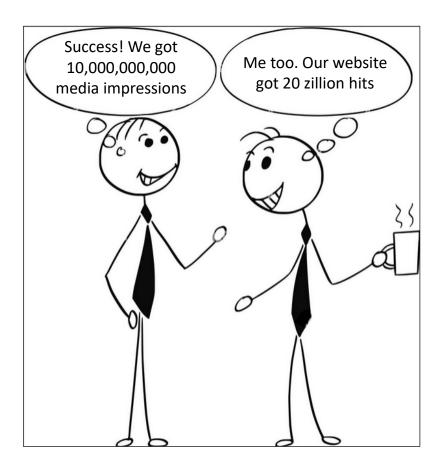
#### Vanity Metrics

Another approach to avoid is the production and use of 'vanity' metrics – so called because they play to our vanity by producing large, seemingly impressive numbers, but which are irrelevant or even false.

Media impressions is a popular example. Media analysis frequently reports millions or even hundreds of millions of impressions claiming that these are the number of people who have consumed media messages with the assumption that this equates to the number of people influenced by the content.

The number of media 'impressions' is not the number of people who were impressed.

(Author in a presentation to the 2023 AMEC Summit)



## OTHER STUFF YOU MIGHT NEED OR FIND USEFUL

There is more that researchers need to know to undertake rigorous valid MEL. To avoid this resource becoming a tome, a bibliography of additional reading and a glossary of terms are provided in the final sections.

#### **Bibliography**

Many of the articles and resources listed in the following section are free of charge and available online, together with a few recommended book chapters and books.

#### **Glossary of Terms**

The following Glossary of Terms succinctly defines many important concepts and aspects of MEL and related research methods. For example, it provides short simple descriptions of:

- Reliability in research;
- Validity of research and findings;
- Baselines and benchmarks;
- Primary data;
- Secondary data;
- Probability;
- Sampling methods;
- and much more.

#### **Appendices**

In addition to Appendix 1, the 'Taxonomy of Methods, Metrics, and Indicators', there are two other appendices provided in this document and available as downloadable PDF, PPTX, or Word files. These are:

- A program logic model template for creating a program logic model listing planned inputs, activities, outputs, outcomes, and impacts and identifying relevant metrics and indicators for each stage similar to Figure 16 (PPTX file or Ms Word table);
- 10-Steps for MEL-Based Strategic Communication poster (PDF in A4 or A3 format), which
  presents a one-page overview of 10 key steps in planning and implementing a strategic public
  communication project or campaign incorporating best practice MEL.

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# **GLOSSARY OF TERMS**

Term	Meaning
Activity	In public communication refers to an undertaking or series of undertakings such as writing, graphic design, arranging events, etc. (See Input and Output)
Analysis	In research a range of statistical analysis methods are used in quantitative approaches (e.g., descriptive, inferential, and predictive) and interpretive analysis methods are used in qualitative approaches (e.g., textual analysis)
Analytics	The systematic computational analysis of data. For example, website traffic can be analyzed using Google Analytics. The results of automated media analysis is also referred to as analytics
Baseline	The level of a factor or element, such as awareness, attitude, or behaviour before a planned activity or intervention begins (see Intervention)
Benchmark	A measure taken at a point in time. A measure taken before an activity begins is the <i>baseline</i> . Later benchmarks can help track progress
Campaign	A series of activities undertaken within a specific time frame with a common target audience and objective (typically to create awareness or change attitudes or behaviour). Communication campaigns include paid media advertising, or a combination of paid, earned, shared, or owned media (PESO). (See Paid media, Earned media, etc.)
Causation / causality	Identification of the cause of a change or effect. In MEL, this requires evidence, not assumptions
Clickthrough	Clicking a hyperlink in a Web page or social media post that accesses more detailed information or engagement. The percentage of viewers of links who clickthrough to more information is referred to as the clickthrough rate (CTR)
Communication	The dissemination (one-way) and ideally exchange of information (two-way) that leads to the creation and sharing of meaning and understanding
Communications	The transmission of signals such as electronic signals in computing and telecommunications. It is important to understand that <i>communications</i> do not necessarily create <i>communication</i>
Conversion	Progress of an online visitor to an e-commerce page, or to register, subscribe, or take some other action. Conversions usually involve clickthroughs
Cut through	The capacity of activities or messages to be noticed and capture audience attention amid the clutter of available information
Descriptive	A type of statistical analysis that reports visible characteristics in a data set such as counts and percentages (See also Inferential and Predictive)
Duration	The length of time a viewer remains on a web page or viewing a video. Very short duration indicates lack of interest. YouTube counts views of 30 secs or more; Twitter, Facebook, and Instagram counts views of 3 mins or more. LinkedIn, Reddit, and Pinterest count only video views of 50% of the full length
Earned media	Media space or time gained at no cost because of the news value or human-interest value of the content (e.g., editorial publicity). (The E in PESO)
Engagement	While the term is used loosely, engagement is a psychological state involving both <i>cognition</i> (thinking about) and <i>affect</i> (emotional connection), leading to some form of <i>participation</i> or action, such as joining, subscribing, etc.
Evaluation	Making an assessment or judgement about the value or significance of something (usually within a context or against goals or objectives)
Formal	In MEL and research generally, formal refers to scientific and social science methods such as surveys, structured interviews, focus groups, etc.
Formative	In education and evaluation, formative refers to assessment <i>before</i> a program begins that informs design and planning ( <i>See</i> Summative)
Frequency	The number of times a message or item appears in print or is broadcast
Generalize / generalized	Making inferences or predictions or giving explanations related to a whole group or category (a 'population' in research terms) based on statistical analysis of data derived from a sample of the group (See Population)

Impact	The flow-on results of an action or condition, particularly the broader implications and downstream effects
Impressions	Some use the term as a synonym for $reach$ (see Reach), while others calculate impressions as reach ( $r$ ) multiplied by frequency ( $f$ ) – i.e., the number of times that an audience has been exposed to content (e.g., an advertisement exposed to an audience of 500,000 x three times = 1.5 million impressions). However, note that impressions is a hypothetical number based on print media circulation, broadcast audience ratings, or average website visits in a period.
Indicator	A sign or information that shows a level or condition in non-numerical terms (e.g., positive comments or statements)
Inferential	A type of statistical analysis that draws generalized conclusions from a data set (See Descriptive and Predictive)
Informal	In MEL and research generally, this refers to non-scientific methods such as verbal and written feedback, unstructured discussion groups, etc. See Formal
Inputs	What goes into a process or program such as budget, planning, organizing, and preparation as well as formative research and information gathering
Intervention	In a communication context, an intervention is an activity designed to change awareness, attitude, or behaviour such as an event, publication, etc.
Interview	A qualitative research method that asks questions of participants face-to-face or via telephone or video conferencing. Interviews can be structured, semi-structured, or unstructured (i.e., open-ended)
Key informant interviews	Purposively selected interviews with key stakeholders who have an informed perspective on an issue and who can often reflect the views, needs, etc. of a constituency (See also Stakeholder interview)
KPI	Key performance indicator (can be quantitative or qualitative)
Learning	Acquiring insights, understanding, skills, and knowledge in a field
Measurement	The taking of measurements (e.g., counts, scores, percentages, etc.)
Metric	A quantitative indicator (i.e., a number representing a measure of volume, frequency, proportion, rating on a scale, etc.). See Indicator
Monitoring	Observing and checking the progress or quality of something; keep under systematic review. Maintain regular surveillance over something <sup>63</sup>
Non-probability sample	A term used to describe a sampling method in which not every member of a population has a chance of being included and, thus, findings cannot be generalized as occurs in quantitative research. However, non-probability samples can be used in qualitative research to obtain in-depth findings about particular groups or situations
Objectives	Brief statements of what an activity or campaign is intended to achieve developed as part of planning (see SMART objectives)
Opportunities to see (OTS)	Another term for impressions (See Impressions)
Outcomes	What occurs as a direct result of an activity (i.e., what <i>comes out</i> of actions taken). See also Impact
Outputs	What an individual or organization puts out, such as information in publications, web pages, social media posts, or traditional media
Out-takes	A term used in some evaluation frameworks for immediate and short-term outcomes (i.e., what audiences take out of communication)
Owned media	Communication channels owned and controlled by an organization, such as its website, intranet, newsletters, etc. (The O in PESO)
Paid media	Media space or time purchased as advertising or as part of a sponsorship or media partnership (the P in PESO)
PESO	An abbreviation for paid, earned, shared and owned media (see Paid media, Earned media, Shared media and Owned media)
Population	In research, population refers to the total group or category from which a sample is drawn (e.g., women under the age of 50)
Prescriptive	A type of statistical analysis that makes generalized predictions based on data derived from a sample. (See Descriptive and Inferential). (See also 'Analysis Types and Methods' in Part 1.)

Pre-test / pre-testing	Evaluating a mock-up or idea with a sample of the intended audience before committing to production or implementation
Primary data	Data collected from original research or analysis. (See Secondary data)
Process (evaluation)	Evaluation undertaken during the process of communication, such as monitoring, reviewing feedback, and use of tracking statistics
Probability	The likelihood that observed results in statistical analysis occurred other than by random chance. Measured as <i>p-values</i> (e.g., a <i>p-value</i> of .05 means there is a 5% chance that the observed results occurred by random chance). Therefore, quantitative research seeks low p-values such as <.05
Probability sample	A mathematical term used in quantitative research to describe a sample in which every member of a population has a chance of being included based on random selection or another probability sampling method. (See Sample). Findings from probability samples have a high probability of accurately representing the population (see Population; see also Non-probability sample)
Program	A series of inter-related activities. The term is used in many fields for what is referred to as a project or campaign in public communication
Reach	The number of people who are potentially exposed to communication (e.g., the audited circulation of print media, audience of a TV program, average viewers of a website, or followers of a social media account). See Impressions
Recall	The percentage of those reached who can recall communication. Usually applied to measuring recall of brand names or messages (most commonly measured using post-exposure surveys)
Reliability	Refers to the degree to which the result of a measurement or calculation is statistically accurate. Reliability is achieved in quantitative research in which statistical analysis is conducted to generalize findings to a population (a category or group of people) with a high degree of <i>probability</i> .
Results	Outcomes achieved from a program or campaign. Also referred to as effects in media research. In MEL, most models use the term outcomes
Sample	A group of people or cases drawn from a group or category (a 'population' in research terms) selected randomly or by another sampling method such as systematic or stratified (probability methods), or non-probability methods such as purposive. (See Probability)
Secondary data	Data drawn from existing sources, such as internal or external databases or records, published literature, etc.
Shared media	A term used for open social media platforms (the S in PESO)
SMART objectives	SMART is an acronym for specific, measurable, achievable, relevant and time-bound objectives developed as part of early planning
Stakeholder interviews	Interviews with those involved in or affected by a decision, policy, or issue as part of qualitative research (see also Key informant interviews)
Summative	In education and evaluation, summative refers to assessment after a program to summarize what was achieved and/or learned
Survey	A structured quantitative research instrument that asks a series of questions of a selected sample of participants. Survey questions are mostly closed ended (e.g., scales, ranking, multiple choice), with some open ended
Validity	Refers to how accurately and appropriately a quantitative or qualitative method measures what it is intended to measure. Even the most statistically reliable measure is invalid if it does not measure what it purports to measure. For example, 'substitution error' results in invalid findings
UX	An abbreviation for user experience. Sometimes referred to as CX (customer experience)

## **APPENDIX 1.**

## Taxonomy of Methods, Metrics, and Indicators by Program Stage [Thumbnail below]

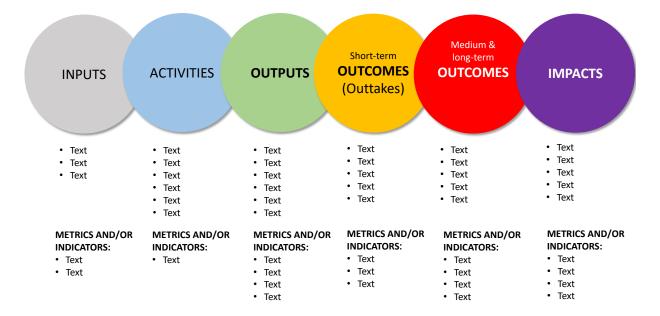
Download this taxonomy as <u>A4 here</u> or <u>A3 poster here</u> or contact the author. Creative Commons Licence – Attribution 4.0 International (CC by 4.0)

CHANNEL	METRICS & INDICATORS	METHODOLOGY	METHOD	STAGE
Advertising	Placement	Quant	Media buying schedule	Activity
	Reach	Quant	Media circulation / ratings	Output
	Impressions	Quant	Media circulation / ratings	Output
	Frequency	Quant	Media buying schedule	Output
	<ul> <li>Clickthrough rate – CTR (e.g., to website)</li> </ul>	Quant	Website statistics	Outcome (short-term)
	Awareness of ads	Quant	Survey – market / audience	Outcome (short-term)
	Relevance of ads / liking ads	Qual	4	Outcome (short-term)
	Recall of brand / message	Qual	{	Outcome (short-term)
	Awareness of message     Intention to act on message	Qual	1	Outcome (short-term) Outcome (medium-term)
	Subscription / registration for more information	Quant	Database records	Outcome (medium-term)
	Inquiries re product or service	Quant	Database records	Outcome (medium-term)
Publicity	Media releases / statements issued	Quant	Internal activity report	Activity
,	Number of Interviews / Journalist contacts	Quant		Activity
	Number of articles / Items placed in media	Quant	Media content analysis	Output
	<ul> <li>Reach (net audience based on circulation/ratings)</li> </ul>	Quant	1	Output
	<ul> <li>Impressions (total audience)</li> </ul>	Quant		Output
	Share of voice (%)	Quant		Output
	Messages placed	Qual	1	Output
Makadia.	Sentiment / tone	Qual		Output
Websites	Content created	Quant	Internal activity report	Activity
	Page views     Mideo views	Quant	Website statistics (e.g., Google Analytics)	Output
	Video views     Duration	Quant	Coogle Atlanyuos)	Output
	Bounce rate	Quant		Output
	Downloads	Quant	1	Output
	Return visits	Quant		Outcome (short-term)
	Subscription / registration for more information	Quant	1	Outcome (short-term)
	Inquiries	Quant / Qual	Database records	Outcome (short-term)
Social media	Impressions (total views)	Quant	Social media analysis	Output
	Sentiment	Qual		Output
	Follows	Quant		Outcome (short-term)
	• Likes	Quant	_	Outcome (short-term)
	Retweets	Quant	4	Outcome (short-term)
	Shares	Quant	4	Outcome (short-term)
	Clickthroughs (e.g., to a website)	Quant	4	Outcome (short-term) Outcome (short-term)
	Comments     Content produced	Quant	Internal activity report	Activity
	Views online	Quant	Website statistics	Output
	% of video viewed online	Quant	Website statistics	Output
	Views at screenings / events	Quant	Registrations / attendance	Output
	<ul> <li>Viewer satisfaction (e.g., comprehension;</li> </ul>	Qual	Viewer panel	Outcome (short-term)
	usefulness)	Qual	Survey	Outcome (short-term)
Publications	Circulation / distribution	Quant	Database records	Activity
	Readership	Quant	Survey - Readers	Output
	Reader satisfaction (e.g., usefulness)	Qual	4	Outcome (short-term)
Events &	Recall of content / messages	Qual Quant	Internal activity report	Outcome (short-term) Activity
Presentations	Number arranged     Number of attendees	Quant	Registrations / attendance	Output
riocontationo	Attendee satisfaction (e.g., usefulness)	Qual	Survey of attendees	Outcome (short-term)
CAMPAIGNS &	Total audience reach and/or impressions	Quant	Media circulations/ratings	Output
OVERALL	Awareness of campaign	Quant	Survey - Audience/market	Outcome (short-term)
MEASURES **	Awareness of messages	Quant		Outcome (short-term)
	<ul> <li>Intention to act on messages</li> </ul>	Quant	1	Outcome (medium-term)
	Subscriptions / registrations	Quant	Database records	Outcome (medium-term)
	<ul> <li>Comments (positive, negative, neutral)</li> </ul>	Qual	Media content analysis	Outcome (medium-term)
			Survey – open ended Q	Outcome (medium-term)
	Employee satisfaction / Voice of Employees (VOE)	Quant	Survey – Employee Sat	Outcome (long-term)*
	Customer satisfaction / Voice of the Customer	Qual Quant	Focus groups Survey - Customer Sat	Outcome (long-term)* Outcome (long-term)*
	(VOC)	Capacitic .	Survey - Customer Sat	Outcome (long-term)
	Net Promoter Score (NPS)	Quant / Qual	Survey - NPS	Outcome (long-term)*
	Stakeholder satisfaction / support	Quant	Survey - Stakeholders	Outcome (long-term)*
	"	Qual	Interviews - Stakeholders	Outcome (long-term)*
	<ul> <li>Partner or public satisfaction, engagement, etc.</li> </ul>	Qual	Key Informant Interviews	Outcome (long-term)*
	Trust level	Quant / Qual	Survey (e.q., Edelman)	Outcome (long-term)*
	Reputation rating or score	Qual	Survey - Reputation	Outcome (long-term)*
	Public opinion change / support	Quant	Survey – Public Opinion	Impact
	Behaviour change (e.g., vaccination; cancer	Quant	Public records; customer	Impact
	screening; change brands; vote; etc.)	Ouant	database; surveys	Impact*
	Increased investment, tourism, donations; etc.	Quant	Financial data	Impact*
	<ul> <li>Increased recycling; public transport use, etc.</li> </ul>	Velidi II.	Public data	Impact*
		Ouant / Oual	Dublic health data	Impact*
	<ul> <li>Improved public health (e.g., reduced disease)</li> </ul>	Quant / Qual	Public health data  Policy records	Impact*
		Quant / Qual Qual Quant	Public health data Policy records Sales data	Impact*

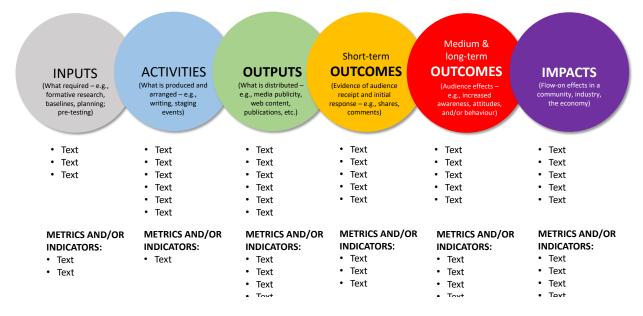
## **APPENDIX 2.**

#### Templates for Creating a Program Logic Model Incorporating MEL [Thumbnails below]

These files with two options are available in PPTX or Microsoft Word table format (landscape). Contact the author for copies. *Creative Commons Licence – Attribution 4.0 International (CC by 4.0)*.



#### With brief descriptions of each stage included in each sphere:



## APPENDIX 3.

## 10-Steps of MEL-Based Strategic Communication [Thumbnail below]

This file is available as a poster in vertical A4 or A3 PDF format. Contact the author. Creative Commons Licence – Attribution 4.0 International (CC by 4.0)

Identify the ORGANIZATIONAL	What needs to be achieved, and by when? This stage can be aided by:
OBJECTIVE/S OR PROBLEM to be addressed <sup>1</sup>	a) Situation analysis, or what some call landscape analysis; and     b) Audience / stakeholder mapping
Develop a THEORY OF CHANGE and a PROGRAM LOGIC MODEL for communication applying a logical framework approach (LFA)	<ul> <li>a) Working backwards from the desired change (awareness, attitudin behavioural), what are the steps or conditions that need to be or (the results chain) to achieve that change – your theory of change</li> <li>b) When the theory of change is considered achievable,<sup>2</sup> deveroperam Logic Model to identify inputs needed, activities propoutputs to be produced, and outcomes that will lead to the dimpact/s. This illustrates the theory of change in a more detailed not active.</li> </ul>
Set SMART OBJECTIVES for communication	What are the Specific, Measurable, Achievable, Relevant, and Time to (SMART) objectives of communication that will create or contribute to outcomes and impact/s identified in the program logic of (Communication objectives should not simply be outputs)
Identify relevant METRICS and INDICATORS that can be collected	How will I know if communication is achieving the objectives set?  a) Identify metrics and indicators that can be collected within your beand access. Identify some at each stage for progressive evaluation  b) Select key ones as Key performance indicators (KPIs)  c) Identify the methods by which these can be obtained and responsibilities (e.g., to internal staff members, units, or agencies)
Identify BASELINES (ex-ante metrics and indicators to be collected as part of formative evaluation)	What is the current status in terms of the organizational objective problem (e.g., current awareness, attitudes, or behaviour)?  a) Collect metrics and indicators of awareness, attitudes, and beha before communication activities are conducted  b) Formative evaluation also can include identifying the audience's n concerns, and preferred channels of communication
PRE-TEST if possible (part of formative evaluation)	How do you know proposed activities will work? Test proposed acti and outputs on a sample. If response is not positive, revise planning
Implement ACTIVITIES and OUTPUTS with process evaluation (i.e., monitoring)	Apply relevant process evaluation to key activities and outputs su media monitoring and analysis to track publicity and social media co website statistics (e.g., using Google Analytics), etc. This stage can OUTPUTS and some short-term OUTCOMES (e.g., shares and comment
ADJUST and FINE-TUNE	Make adjustments and fine-tuning to activities and outputs if reclassed on learning from process evaluation (i.e., monitoring)
Conduct SUMMATIVE EVALUATION (ex-post)	What was effective in achieving outcomes and impact? What was not?  a) Identify OUTCOMES of communication (e.g., audience engage such as shares and comments; increased awareness; changed attit such as increased trust; and/or increase in desired behaviour) 3
	b) Identify causation or contribution to organizational IMPACT <sup>4</sup>
Apply LEARNINGS AND INSIGHTS to inform future strategy	What can we do better? How can we be more effective?  a) Report learnings (positive and negative)
	b) Incorporate learnings into the next planning cycle
Some organizational objectives cannot be achieved usually the result of multiple influences. See Step 3 for Developing a theory of change should include identi approach (also referred to as a logframe) is then illustr	

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