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Working Paper 22

# How do you Evaluate a Mental Revolution?

Wicked Problems and  
Economic Development in Indonesia





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Economic Development in Indonesia

Written by:  
**Fred Carden**

June 2017

## How do you Evaluate a Mental Revolution?

Wicked Problems and Economic Development in Indonesia

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# Abbreviations and Acronyms

**OECD** : Organisation for Economic Co-operation and Development

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**TVET** : Technical, Vocational Education and Training

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# Executive Summary




Source: [www.revolusional.go.id](http://www.revolusional.go.id)

**P**resident Joko Widodo called for a ‘mental revolution’ among the Indonesian people and institutions to address structural weaknesses in the economy, the declining authority of the state and the rise of intolerance and sectarian conflict. Through this call, which is articulated as the Nawa Cita, or the nine development priorities of the state, he recognises that Indonesia’s economic development rests on the ability to change mindsets, attitudes and behaviours to redress structural weaknesses in the economy. This paper argues that given the complexity of governance and economic development issues, knowledge and evidence are central to that change and central to sensible policy decisions. After a promising beginning, the mental revolution appears to be stagnating. Here we argue that achieving the mental revolution calls for, among other things, continual exposure to evidence on how things are moving, and changes in attitudes and behaviour in the face of evidence on progress (or lack of it) in achieving the changes being sought.

This paper explores the role of evaluation in providing that evidence. The practice of evaluation emerges from a focus on the effectiveness and impact of particular projects and programs. It has not been strong in the evaluation of the kinds of complex social change called for here – or ‘wicked problems,’ problems that are difficult to grasp, are complex, politically contentious and resistant to resolution. Some methodologies are emerging that grapple with this challenge amidst an increasing awareness of the systemic (and sometimes global) challenges we face.

Building on Realist Evaluation and Outcome Mapping, two approaches to evaluation concerned with understanding social change, this paper develops a framework for evaluating a mental revolution. These two approaches are concerned not only with evaluating the final outcomes of interventions, but at evaluating stages along the way – essential in understanding a complex, long-term,



social process. A framework is presented to guide thinking about the evaluation of a mental revolution that can be applied to other complex social change process evaluations. It concludes with the point that evaluating change takes commitment and time for reflection along the way; it is not achieved by outside evaluators alone, but calls for active engagement

by the team. It does not happen without clarity of purpose and intent, a strong understanding of the context and clear monitoring to assess progress. Done well, a learning-based approach to evaluation can make a difference and strengthen economic development in Indonesia.



# Introduction

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## Revolusi Mental

Oleh JOKO WIDODO

**I**ndonesia saat ini tengah diuji oleh para pelaku politik yang memusatkan perhatian pada para pemimpin nasional. Setelah 16 tahun melaksanakan reformasi, bangsa menyuarakan kita bertumbuh kembali dan bukannya tambah hancur, atau dalam istilah anak-anak sekarang semacam gila-gilaan?

Ditanya bagaimana oleh orang-orang antara 1998 dan 2019, anda dan di Rafika, 121 Mahasiswa UIN Ar-Raniry Sukarejo, Bogor pada tanggal 10 Desember 2019. Indonesia telah mencapai berbagai kemajuan di bidang ekonomi dan politik. Meski konsep di bawah ini adalah reformasi yang dilakukan oleh pemerintah yang diarahkan untuk bangsa yang demokratis.

Ekonomi sudah berkembang dan masyarakat hidup yang lebih baik. Banyak yang sudah mulai menikmati kehidupan yang lebih baik. Banyak yang sudah mulai menikmati kehidupan yang lebih baik. Banyak yang sudah mulai menikmati kehidupan yang lebih baik.

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### Dari mana ini

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Source: [www.revolusimental.go.id](http://www.revolusimental.go.id)

This paper was created out of a one-day conference on the Indonesian President's policy priorities (also called Nawa Cita). Briefly, the Nawa Cita is designed to address what the President describes as the three major issues facing the country: 1) the declining authority of the state (its ability to ensure the safety of all citizens and uphold strong law enforcement and human rights for all); 2) structural weaknesses in the economy that are reflected in rising levels of inequality and declining economic growth; and 3) intolerance and the essential importance of building national character that is not impeded by sectarian conflicts.

I was asked to speak about evaluating progress on achieving the goals of the Nawa Cita. While preparing for the presentation, I recalled President Joko Widodo's campaign and his call for a mental revolution in the country. For me, the Nawa Cita is the articulation of President Joko Widodo's call for

a 'mental revolution'.<sup>1</sup> When introducing the idea into mainstream thought,<sup>2</sup> President Widodo said, "Nation building will be impossible to advance if we rely on institutional reforms without reforming the mindset of the people or the attitudes of those who run the system."<sup>3</sup> The President recognises that the economic development of Indonesia rests on the ability to change mindsets, attitudes and behaviours

1 A revolution is a "sudden, extreme, or complete change in the way people live, work, etc." (Miriam-Webster: <http://www.merriam-webster.com/dictionary/revolution>). The most common understanding is the idea of revolution being sudden. But it is usually only sudden in its final stages. Often a revolution comes out of a long effort to either create change or to stop change (e.g. Russian Revolution, French Revolution). Many interventions are at play long before the complete change happens and the meaning here in a mental revolution reflects that rather longer process of building the conditions so that change takes place.

2 The term was also used by President Sukarno in a speech on 17 August 1956, according to Karlina Supelli, in notes for a (undated) talk given around May, 2014.

3 Widodo, Joko, President of the Republic of Indonesia. in Kompas, 10 May 2014.

in order to redress structural weaknesses in the economy. In thinking about how to evaluate progress, I build on the idea that knowledge and evidence are central to making that change, that given the complexity of governance and economic development issues, both within Indonesia and in a globalising world, it is impossible to make sensible policy decisions without knowledge and evidence. This mental revolution, or shift to a knowledge-based economy, calls for changes in both thinking and action to address the three major issues highlighted by the Nawa Cita. If, as I suggest here, the mental revolution is a prerequisite to the Nawa Cita, how can we assess progress in achieving this revolution? While it is possible to evaluate progress on each policy or program in the Nawa Cita, will that help us understand the fundamental changes underway in society?

In a 2014 article about his concept of a mental revolution, President Joko Widodo described it as the need to expand reform efforts beyond reforming the institutions of development to a reform of the “paradigm, mindset, or the culture of politics in Indonesia in the context of nation building. Nation building is not likely to succeed if it only works on revamping the institutions but misses the chance to renew the people or change the ways of those who run the system.”<sup>4</sup> In a more recent article in the Jakarta Globe, Desi Anwar described a mental revolution as acquiring the “ability to change one’s dearly held beliefs. . . as well as act with the greater and long term good in mind.”<sup>5</sup> So a mental revolution is a fundamental change in attitudes that affect how we behave and what we do to develop a new perspective and approach. I would take it a step further and argue that this new perspective and approach is about building a knowledge-based economy and that this is key to overcoming the middle-income trap.

4 Widodo, Joko. 2014. “Indonesia Mental Revolution,” in The Establishment Post, 20 May. [www.establishmentpost.com/indonesia-mental-revolution](http://www.establishmentpost.com/indonesia-mental-revolution).

5 Desi Anwar. 2014. Desi Anwar: A Mental Revolution. Jakarta Globe.

What is described here – the implementation of the Nawa Cita – is a ‘wicked problem’. The Australian Public Service Commission defines wicked problems as problems that are highly resistant to resolution. They are difficult to define; they have many interdependent elements; they are unstable because of the many interrelated elements; they are socially complex rather than technically complex; they can seldom be solved by one policy actor; and they require changes in behaviour by both citizens and policy makers (Australian Public Service Commission. 2012). In the same vein, Andrews et al. describe wicked problems as, “simultaneously logistically complex, politically contentious, have no known solution prior to starting, and contain numerous opportunities for professional discretion” (Andrews et al. 2015, p 126). In a recent study published in the Harvard Business Review, Edmonson described the characteristics of successful efforts to address wicked problems: fostering an adaptable vision, enabling psychological safety, facilitating the sharing of expertise, and promoting execution-as-learning (Edmonson 2016). While these are not surprising in themselves, the devil is in the detail of their implementation and the ability of the teams involved to both trust each other and exchange information and ideas freely. The Nawa Cita fits this description well. The changes called for are socially complex, no one knows how to make the transition, and they call for many different actors and organisations to work together.

Before addressing the evaluation of the mental revolution that the Nawa Cita calls for, the following are some of the key changes needed in the evaluation process if we are to address major social change processes, such as those implied in the Nawa Cita. These reflect the need for a shift in evaluation practice, from a focus on projects and programs



to a focus on the theories behind the programs. The next section contains a short (incomplete) overview of the context in which this shift is being implemented, as evidence suggests that in order to look at changes in systems, it is essential to build context into the evaluation process, not treat it as an external variable.

First this paper will look at why building a knowledge-based economy is critical to achieving success in the Nawa Cita, and the context within which change is happening; second, a review of the changes that are needed in evaluation practice to usefully evaluate progress; and finally some thoughts on evaluating progress in creating the mental revolution, and by extension, contributing to progress in the agenda of the Nawa Cita.

# Building a Knowledge-based Economy in Indonesia



Source: [www.sg-insight.com](http://www.sg-insight.com)

At a 2015 graduation ceremony at the Prasetiya Mulya Business School, the Minister of Communications and Informatics (Kementerian Komunikasi dan Informatika) strongly supported a call for strengthening the e-commerce industry, describing it as the sector with the greatest potential to boost the country's economic development. At the same event, respected economist Djisman Simanjuntak urged the same, noting however that Indonesia is far behind, both in educating the population to develop this economy and in building capacity to create the infrastructure for an e-economy.<sup>6</sup> These two speakers were calling for a more knowledge intensive economy, because economic growth and national development depend on it.

The intent here is to avoid the middle-income trap. In an article for the World Bank's Poverty Reduction

and Economic Management Network,<sup>7</sup> Agenor and colleagues present their findings on a set of issues that need to be addressed to build a knowledge-based economy and avoid the middle-income trap that tends to promote low quality products and high income disparities: 1) access to advanced infrastructure (high speed communications and information infrastructure), 2) enforcement of property rights (including intellectual property), and 3) labour market reforms. (Agenor et al. 2012). As they note, these changes are all about increasing the capacity to innovate and create (rather than imitate) the forces that shift a middle-income economy to a high-income economy. As the team reviewing the Research Excellence Framework for British universities noted, "Whilst creativity, ideas and questioning are of value in their own right, economies and societies which invest more in research generally show faster rates of growth in

<sup>6</sup> The Jakarta Post. 16 December 2015. p.2.

<sup>7</sup> The study is based on data from 101 countries identified as middle income in 1960, and looks at their trajectory to 2005.

output and human development” (Department for Business, Energy & Industrial Strategy 2016, p6).

These are calls for a much stronger knowledge base and stronger educational system, as such an economy requires a knowledgeable and skilled labour force. Stronger capacities are needed at all levels of the system in light of the decentralised nature of Indonesian governance. Agenor et al. (ibid.) argue that there is a “two-way causality between education and innovation” (p. 5). That is, building a path to a high-income economy and the capacity to address the priorities outlined above is premised on a strong education system and national investment in research and development. They point out that the transition of the East Asian economies of Japan and Korea from middle-income to high-income status “was their ability to push the technological frontier and move from imitating and importing foreign technologies to innovating technologies of their own” (ibid. p 5).

There are several components to a strong knowledge base. Technical, Vocational Education and Training (TVET) is an important part of building a strong human resource base for economic development. TVET is concerned not only with vocational skills, but also “a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life.”<sup>8</sup> This in itself is a key part of the mental revolution. But it cannot succeed in isolation. Building a strong research base and a capacity for innovation is equally important. Without leadership, creativity and innovation, the economic base that will employ well trained workers will not develop. Building a strong vocational and technical base must be accompanied by attention to creativity and innovation in the industrial and service sectors that will innovate and thereby create the jobs and opportunities that citizens have been prepared for

through TVET and other educational programs. As argued below, the role of the bureaucracy in these developments is also important.

Eko Prasajo, Professor in the Faculty of Administrative Sciences, University of Indonesia and former Deputy Minister of Bureaucratic Reform, has argued that the mental revolution requires leadership from the bureaucracy. In two separate posts, he says that even though bureaucratic reform is presented as a priority in the Nawa Cita, the Government has not yet enacted legislation that would stimulate a more performance-based and transparent civil service that could lead to changes. He argues that an entrenched bureaucracy mitigates against bureaucratic reform and the mental revolution without significant legislative change and expectation from the senior leadership of the country.<sup>9</sup> He went further in January 2016 to say, “Bureaucratic reform as a collective change in various ministries and institutions as well as local governments... is declining in both orientation and motivation.”<sup>10</sup>

If we are to evaluate the Nawa Cita and the mental revolution, these are all issues to consider. These are large-scale and long-term changes. They will not happen quickly and there are many stages along the way. Therefore, evaluating the Nawa Cita means finding ways to evaluate not only the final outcomes of these efforts, but even more importantly finding a way to define the changes that will happen along the way and evaluate those so we have an ongoing record of whether or not the changes are succeeding. As a wicked problem it is unstable, and evolving as we test out solutions; and because of the interaction of events and actors, causality, a hallmark of evaluation, is not easily identified.

8 UNESCO, Technical Vocational Education and Training <http://www.unesco.org/new/en/newdelhi/areas-of-action/education/technical-vocational-education-and-training-tvet/>

9 Eko Prasajo. 17 November 2015. *Revolusi Mental Birokrasi*. <http://ekoprasajo.com/2015/11/17/revolusi-mental-birokrasi/>

10 Eko Prasajo. 7 January 2016. *One Year On: The Turning Point of Bureaucracy Reform*. <http://ekoprasajo.com/2016/01/07/one-year-on-the-turning-point-of-bureaucracy-reform/>



## 2.1 The point of departure

Understanding change means understanding the contexts in which change is taking place. The point of departure for exploring this issue is the context of Indonesia today, a country that has been a democracy for 18 years, is celebrating 70 years of independence, but that also builds on centuries of rich history and tradition.<sup>11</sup>

However, the mental revolution now appears to be stagnating. Economic slowdown, pockets of resistance to freedom of expression and debate (among others the 2015 cancellation of sessions at the Ubud Writers and Readers Festival)<sup>12</sup>, the desire for re-centralisation in some quarters,<sup>13</sup> continued weakness in the education system,<sup>14</sup> the lack of significant headway on bureaucratic reforms as outlined above, the consumption- rather than production-oriented nature of the economy,<sup>15</sup> and weak local governance capacity, all contribute to this condition. Indonesia's democracy is young – only 18 years – and the country has multiple histories. Its many rich and varied cultures, the influence of colonialism, as well as political experimentation since Independence, add to the challenge. The Nawa Cita is setting the guideposts for this country about changes it has to make to take true

advantage of *Reformasi*, to build a strong economy and strong nation. This is very much a broad-brushstroke picture. It does not reflect the richness and variety that can be seen from Aceh to Papua, in geography, economy and religion. These are all factors to consider when addressing the specifics of interventions.

Much of what is called for in the mental revolution and the shift to a knowledge economy were not part of the New Order, the 32-year authoritarian winter under Soeharto. The New Order created a path of dependency that has to be overcome to allow space for the innovations needed to achieve the goals of the Nawa Cita. This suggests the depth of change and learning that is needed. The shift that is required in Indonesia is about building a knowledge economy,<sup>16</sup> something that was alien to the New Order and so has only been conceivable in the last 18 years. A knowledge economy is an economy that is based on intellectual capital and information for its development and growth. It is the basis of developed economies. A knowledge economy will also include production and agriculture, but its development is fuelled by the intellectual capital of its workforce and the development of a robust service sector.

A knowledge economy suggests many changes, among them: 1) the decentralisation of decision-making through the element of building from the periphery; 2) building a civil service that is assessed on merit and draws strong talent; 3) building a civil service that embraces debate and contestation, using evidence as part of its repertoire; 4) strengthening human resource capacities at the local level to support development from the periphery; 5) adjusting national legislation to permit adaptation to different local conditions in the periphery; and 6) the three issues raised by Agenor earlier: advanced infrastructure, property rights and labour reforms. It also suggests democratising and improving the quality of education by building a system from grade school to the doctoral level of high quality education for all. High quality education need not

11 Among others, the Srivijaya Kingdom that thrived in the 8th century and continued for many centuries thereafter; and in the 8th-10th centuries, the Mataram Kingdom that led to the construction of the temple at Borobudur, until very recently the largest Buddhist Temple in the world; and the Majapahit Kingdom that began in the late 13th century and lasted 200 years.

12 ABC Newswire. 25 October 2015. "Ubud Writers and Readers Festival Cancels Events on the 1960s Massacres after Pressure from Indonesia." See link in the references section.

13 See for example, "Megawati Mulls End to Regional Autonomy", in Jakarta Post, 23 November 2015, p.4. This is part of the ongoing learning process about democracy in Indonesia. Some would argue that decentralisation went too far when it was first introduced; even today, some express reservations about the capacities of villages to manage the resources they are being given.

14 As reported in the Jakarta Post on 6 December 2013, Indonesia not only has low scores on the international education standard (second lowest of the 65 countries included in the PISA ranking), it has lower scores than it had in 2006. Maillizar, Jakarta Post, 6 December 2013, p.13. In August 2016, Lant Pritchett commented on the Centre for Global Development blog that the data from the recent OECD PIACC scores show extremely low literacy proficiency of tertiary education graduates in Indonesia, on average similar to the scores of Danes who have completed lower secondary school.

15 [Indonesia Investments](#) calls consumption 'the traditional pillar of Indonesia's economic growth'.

16 This was a key argument of the November 2015 conference on the Nawa Cita in Bandung.



only be for those who can afford private schools and foreign universities – the Berkeley Mafia approach to higher education that characterised the New Order is insufficient. International exchange should complement a strong system, not be the motor it is now in higher education (Nugroho et al. 2016). Being internationally competitive means having the knowledge and skills to innovate products that people want and having the knowledge and skills to meet the standards of international markets in both production and marketing – reflecting the enforcement of property rights, labour market reforms and development of the advanced infrastructure mentioned earlier. None of these can be achieved without a mental revolution that provides a new set of attitudes, behaviours and skillsets in the civil service.

Addressing these issues is carried out in the context of the nine priorities of the Nawa Cita.<sup>17</sup> These are:

1. National security and identity as a maritime nation;
2. Consolidation of democracy and increasing public confidence in government;
3. Strengthening rural areas and building from the periphery;
4. Building a corruption-free state system;
5. Strengthening citizens through improved education, health care and land reform;
6. Improving productivity and economic competitiveness in the global marketplace;
7. Achieving economic independence;
8. Strengthening the sense of national identity; and
9. Strengthening appreciation of the value of diversity and dialogue for social restoration.

Achieving the mental revolution that the challenges of the Nawa Cita calls for encompasses a number of changes:

- First, it embodies a change in perspective

on what is important;


- Second, it calls for significant improvements in skills and knowledge, particularly at the local level and especially in implementation (not only policy formulation) to achieve these changes and to make them sustainable;
- Third, it calls for continual exposure to evidence on how things are going: are we moving towards the changes we seek to achieve?
- Fourth, it calls for political will because many of these challenges call for changes to deeply rooted practices habits; and
- Finally, it calls for changes in attitude and behaviour in considering evidence, including new forms of evidence on progress in achieving the goals of the Nawa Cita.

All of these changes are about the behaviours, actions and activities of public, private and civil society actors and organisations that are involved. Evaluating this mental revolution then means being able to treat this as a wicked problem – or perhaps a series of wicked problems – and monitor and evaluate changes along these dimensions. Additionally, it calls for a recognition that change does not happen evenly. Interventions to create change do not work the same way for all people, organisations and systems. What evaluation can provide is a framework for assessment that takes these contexts and factors into account.

These changes need to be considered in the context of the Nawa Cita. All nine components of the Nawa Cita call for a much stronger knowledge base, and an economy built on knowledge, not just on labour for production and services. Increasingly, strong economies around the world generate wealth and growth through a strong and vibrant knowledge sector.

This is both a major shift in thinking and a major shift in doing. We are talking about a complex, multi-pronged, long-term agenda. We are talking about major shifts in policy that will be needed – and we need knowledge and evidence to make those policy

<sup>17</sup> This rough translation is based on a posting on 30 September 2014 on *The Establishment Post*: [www.establishmentpost.com/jokowis-nine-priorities-agenda-nawa-cita/](http://www.establishmentpost.com/jokowis-nine-priorities-agenda-nawa-cita/) original source consulted Joko Widodo and Jusuf Kalla (2014) *Jalan Perubahan Untuk Indonesia Yang Berdaulat, Mandiri dan Berkepribadian*. Government of Indonesia.



changes. Beyond policy formulation we also need to evaluate the capacity for implementation at all levels of the system. This means not only local capacities, but a better understanding at the national level of how local variation affects policy implementation. We do not know how it will unfold exactly, so there is much uncertainty. While efforts have been made since President Sukarno declared Indonesia's independence, no one has yet succeeded in building a modern country of 17,000 islands from the periphery. So there are no models for much of what needs to be tried – as a wicked problem, there is no known answer, we have to test out options and adapt as we learn. There will be contestation in this process because there are multiple paths forward. This contestation should be welcomed because it is through considering a range of perspectives and solutions that a stronger approach is likely to emerge.



# A Framework for Evaluating a Mental Revolution



Ray Pawson notes that:

*“...social and behavioural change happens slowly and painstakingly, that a whole sequence of measures is required to bring about profound and lasting change, and that methods of evaluation research are not always up to scratch in being able to identify the crucial concatenations”* (Pawson 2014, p 115).

**P**roject and program approaches to evaluation are not well equipped to evaluate a mental revolution. When we are dealing with long slow processes of change, it is important to also identify changes along the way and especially to be able to identify the mechanisms that are behind these changes. What programs are increasingly realising (and where evaluation is falling behind) is that responding to complex problems is built on understanding complex connections. For example, programs such as the Global Road Transportation Safety Program (Bliss and Breen 2019), show that

road safety is not created solely through better drivers; it is created through a multitude of social and technical interventions (driver behaviour, new vehicle technologies, roadway design changes, new traffic management technologies, as well as innovations in legal frameworks). Different mechanisms are at play and are the subject of a variety of parallel and complementary evaluation activities in each of these aspects, all of which contribute to the goal of reducing death and injury from road accidents.

The Australia-Indonesia Partnership for Pro-Poor Policy: The Knowledge Sector Initiative (henceforth, the Knowledge Sector Initiative)<sup>18</sup> is another example. The program looks at strengthening the capacity to use evidence in public policy by addressing needs for change in the supply of research (research quality and research capacity), the demand for research (by government and intermediaries who attempt to influence the policy process), and by looking at barriers in the enabling environment

<sup>18</sup> See [www.ksi-indonesia.org](http://www.ksi-indonesia.org)

(institutional, legal, political and practical barriers). So it is looking across a whole system, including its enabling environments, building synergies and connections that support all aspects of building a strong knowledge sector.

Evaluation has not kept up with these evolutions in programming and with their experimental and complex nature. As Pawson notes in the above quote, evaluation is good at many of the pieces (and the pieces remain important), but less good at the connections. Evaluation thinking needs to catch up to program thinking by understanding and evaluating the connections and relationship between interventions, their contexts and the outcomes being sought. This is what we are looking at in evaluating a mental revolution.

In refocusing evaluation for the purpose of evaluating a mental revolution, or the shift in thinking that builds a knowledge economy, three main sources stand out. *Outcome Mapping* (Earl et al. 2001) provides the focus on behaviour change – because it is people who create change by doing things differently; *The Science of Evaluation* (Pawson 2013) presents an articulation of realist evaluation and the importance of evaluating the theories of change rather than the project *per se*; and *Knowledge to Policy* (Carden 2009) presents an illustration by looking at how evidence influences public policy. This is only one aspect of a mental revolution, but it illustrates the potential of the framework.<sup>19</sup>

*Outcome Mapping* argues that most interventions do not cause impact. There is usually a final step that leads to the change, to an impact, but as Pawson notes, change happens slowly and painstakingly

over time. Despite our perception of revolutions as being sudden, they are not; rather they are built on many small events and changes that finally connect in that moment we call revolution. So what Outcome Mapping argues is that it is important to address defining and measuring the contribution of all those smaller changes along the way. Essentially, this is about the changes in how people behave and what actions they take. Outcome Mapping proposes an approach to developing a theory of change to help define these changes and how to approach them. Context plays a key role because Outcome Mapping pushes for clarity on who will be influenced and how that will contribute to the desired change. In its approach to measurement, Outcome Mapping argues that single measures are an inappropriate tool for monitoring and assessing progress. Outcome Mapping proposes the use of ‘Progress Markers’ to indicate more significant change over time. It is in looking at these markers as a set that we can understand the progress (or lack thereof) over time. It is in knowing more about the progression of change that we can learn from the interventions, about what we should do more of and what we should do less of to achieve the change we seek. (Related to this is Cartwright’s concept of ‘thick causal concepts.’ She makes the point that ‘cause’ – which is what we are seeking to understand in evaluation – is a highly unspecific term. Thick causal concepts are much richer and more specific about what is caused, concepts such as ‘compression’ or ‘attraction’ (Cartwright 2007).

*The Science of Evaluation* goes a step further and argues that evaluation needs to operate at the level of theory. By that, Pawson means that the unit of analysis needs to be the theory of change and the mechanisms at play to foster the change. The argument here is that theories are repeated; they are repeated in similar fields of work; they are also repeated in different fields of work where a similar change is being attempted. So while each context is unique and has its own features and subtleties, at the level of theory there are many commonalities. The core elements of Realist Evaluation (Pawson

<sup>19</sup> In more recent developments, building on his Developmental Evaluation (2010) approach, Michael Patton has been working on the concept of [blue marble evaluators](#) (2016), or evaluators who evaluate global issues such as climate change – issues that cross national boundaries and cannot easily be understood from a national or programmatic perspective because of the wide range of initiatives and geographies involved. This is a broader perspective than is relevant to this paper, but it demonstrates the innovations occurring in evaluation to make it more relevant to wicked problems.

2006), on which *The Science of Evaluation* builds, are context, mechanism and outcome. In this way, Realist Evaluation brings context explicitly into the evaluation process and focuses especially on the relationships between these elements. If we evaluate at this level, then we can learn from various experiences how the theory has played out, where it has been successful (and with whom) and what was going on in the socio-political environment. This can inform the mechanisms we use the next time we apply this theory. The example in Box 1 illustrates a situation where, by looking across a number of similar events, a police chief was able to identify the mechanism that triggered a change – in this case an undesirable change.

Pawson makes the point that theories are re-useable and need not be created anew in every project or program. We are not limited to evaluating our own program, but should build a databank of projects and programs that have used the same or very similar theories so that we refine them for everyone's use over time.

In the context of building this framework, the important point in *Knowledge to Policy* case studies is that they highlighted the critical importance of context for change to happen successfully – in this case policy change. It uncovered two key dimensions to context that should be considered in design, both the overall context (which is further detailed around issues of governance, capacities, economy and others), as well as the decision context, or openness of decision makers to information and evidence.

The framework to evaluate a mental revolution which is proposed in this paper brings these three sources together to suggest a framework for evaluating broader social and cultural changes, such as a mental revolution or a knowledge to policy process. It is based on the view that, while each situation is unique, at the level of theory there are some overlaps. How the mental revolution will happen in terms of building national identity as a maritime nation has some similarities to other key aspects of the mental revolution, such as strengthening the sense of national identity and dialogue for social

### ***An example of using theory and mechanisms to problem solve***

*A police chief (in Iraq) dealing with too-frequent demonstrations that turned into riots collected the video recordings from a number of different riots. After examining the recordings in some detail, he was able to identify the mechanisms that were part of going from protest to riot. What he found was that all the riots built in the same way. First, the demonstrators gathered as they heard about the protest; others who wanted to protest on that issue also joined; eventually an audience built up; food vendors collected to take advantage of a market; someone would start chanting; it would get more active; eventually someone would throw a rock and the violence would escalate. Based on his review of the video footage, the police chief asked the mayor if he could keep the food vendors away. At the next demonstration, there were no food vendors, and once people realised that, crowds started to disperse and the demonstration was over within a few hours, without turning violent (O'Reilly 2016).*

This case is based in a specific context where this was an effective mechanism. The mechanism in Indonesia could be quite different – even opposite. The point is to identify and implement the mechanism that will help create the change you want to see. This requires both careful analysis of the data you have about the problem as well as creative thinking about potential solutions.

### **Box 1. Focus on the theory of change to identify the mechanisms that trigger change**

restoration. In this way, the learning we generate about progress is shared across the priorities; it is not isolated priority by priority. As the priorities are implemented and assessed, the learning from evaluating the theories of change will inform further change.

To return to a point made earlier, a mental revolution calls for changes in perspectives, political will, and importantly, behaviour among key actors. Evaluating progress therefore means choosing an approach that identifies and assesses not only what changes in perspective and behaviour are needed, but also whether and how progress is being made toward these changes.

Several caveats are important. First, it is a framework not a tool, so in itself it is not a solution; rather it points to the issues that need to be addressed and the work that needs to be done in order to build an evaluation for the Nawa Cita. Each of the elements of the framework usually has several steps.

Second, how these steps are undertaken is not prescribed, however the sources for this design all contain tools and methods that would be appropriate and feasible. They are not a closed set; there may be other tools that do the job equally well or better, keeping in mind cultural context and the need to focus on emergent change, (that is, the changes that happen over time and give clues as to the direction in which we are headed). The framework focuses on the relationships between the parts that make the system function effectively; and they need to allow for contestation and adaptation on different time lines.

Third, this is dealing with systems change, and because it is a system, it is more than the sum of its parts (nasi goreng, an Indonesian dish based on rice, separated out into its ingredients is not nasi goreng). Patton et al. reference Ackoff when they explain that what is required is synthetic thinking, noting that “[T]he performance of a system is not the sum of the independent effects of its parts; it is the product of their interaction” (Gharajedaghi and Ackoff 1985). Synthetic thinking focuses on trying to understand the combination of behaviours and actions that make up the whole. It looks at the parts that make up a system, but more importantly it looks at the relationships among them. As a consequence, the tools that are used need to be tools that help synthesise, and look at the mechanisms, actions and relationships that connect the parts to make a whole system.

Finally, the framework is based on the idea that specific measurement cannot be defined in the abstract. Judgement is a central element of assessment, what Pawson calls the ‘trust-doubt ratio’. In contexts of change, one continues to work towards improvement while never coming to the ‘correct’ answer – the correct answer is elusive because situations change and new responses must be developed. So the process is a cyclical one as illustrated in Figure 1.

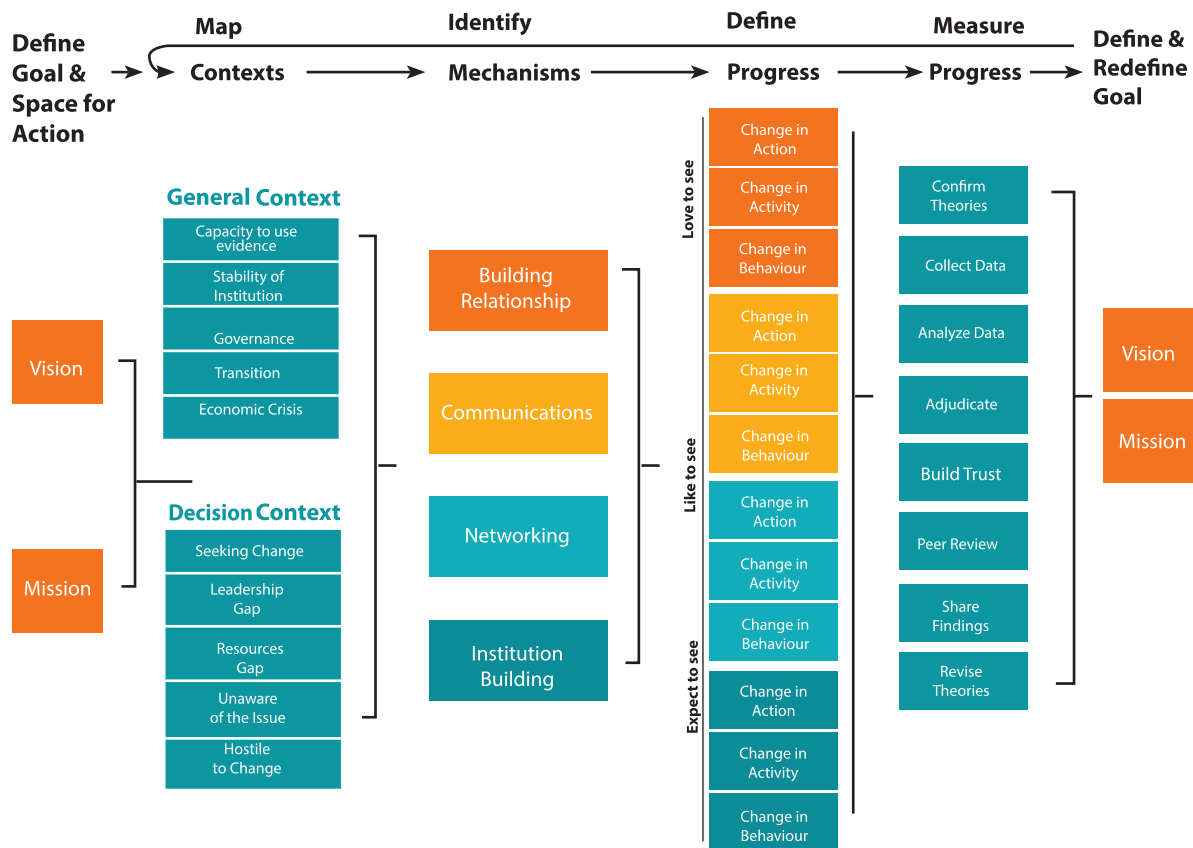


Figure 1. A Framework for Evaluating Systems Change

### 3.1 The framework explained

**Define your goal and space for action – vision and mission**

The key question being asked here is: *What do you want to achieve?*

Briefly put, the model (see Figure 1) starts from the identification of the goal or vision and the space for action the program will occupy, its mission or what part of the vision this program will address. A clear picture of the change you want to achieve gives a sound basis for understanding what changes need to happen to get there. As identified in *Outcome Mapping*, the model is concerned with changes in behaviours, actions and activities that will contribute to the vision. Who needs to be doing what differently for progress to be demonstrated? The vision and

mission then identify the outcomes you want to achieve and what key actions you will take to support that change.

**Map the context**

The key question you are answering here is: *What are the contexts that will affect success (the things you cannot control)?*

Critical to the three foundational works cited is the central importance of contexts. Evaluation is not conducted in a vacuum, but rather where people, organisations and systems work. Cultures play a key role and are often neglected in the analysis (See Ofir and Tarsilla 2016). The texts note that while culture is honoured in principle it tends to be honoured in word rather than in deed. They present several



articles which argue that incorporating cultural considerations leads to more actionable findings. As outlined earlier, we want to be able to understand what works for whom and in what contexts.

*Knowledge to Policy* found that contexts are important in policy change. The study identified five key aspects in the general operating context:

- Leadership capacity
- Political stability
- Governance model
- Political/economic transition
- Economic crisis versus stasis or growth

But it also found important differences in the capacity of the decision maker to act:

- Advice seeking
- Institutional capacity to act
- Resource capacity to act
- (Lack of) awareness
- Indifference or hostility

Understanding the contexts in which you are operating is critical to making choices about how to work and where to start.

### **Identify mechanisms**

The key question you are answering here is: *What will you do (the things over which you have some degree of control)?*

The realist evaluation model presented in *The Science of Evaluation* calls next for an identification of the mechanisms that are being used to shift behaviour and action. This is the process of articulating a theory of what you think will lead to the change you want to see – a theory of change. The essential question is around why you think the action you propose will lead to the outcomes you desire. Here is where we want to draw out the causal concepts we think will be important.

By looking across 23 case studies, the *Knowledge to Policy* study found four key mechanisms in successful research to policy initiatives:

- Relationships are key: building trust between

the researchers and policy makers played an important role

- The ability to communicate effectively to different audiences was central
- The ability to network with others to increase the voice evidence played a role in many successful efforts
- The ability to think about the institutional changes that would be needed for implementation was important and will remain so in the changes called for in the Nawa Cita.

By understanding how change happens at the level of theory, it is possible to exchange experiences across initiatives and learn from the experience of other efforts in many aspects of the Nawa Cita. In essence, while each intervention is unique and is affected by who is involved and where the intervention takes place, there are some similarities between interventions that allow for conversation and learning from different interventions within the same 'family'. What we are building here are thick causal concepts that are significantly richer in their description of what is intended.

This allows you to build models for different contexts and different groups to influence and test – and improve – these models with new initiatives.

### **Define progress**

The key question you are answering here is: *How will you know that you are making progress; that you are doing the right things and doing them correctly?*

Once you have identified the change you want to see, the contexts you need to take into account and the actions you plan to take, the next step is to identify how you will know progress is being made.

Because we are talking about long-term and complex initiatives, you want to identify progressive changes in the behaviours, actions and activities of the people and organisations with which you are working. Outcome Mapping suggests thinking about these in three stages:

- **Reactive changes** that reflect the willingness of your partners to go along with your ideas. These might have to do with a willingness to participate in training or consultations, making data available, etc. These are the changes you would expect to see if your initiative is working reasonably well.
- **Active changes** that reflect some recognition that engagement is valuable to them, it is not just about the resources you bring but about the changes they see as benefiting them long-term. At this stage, they seek out activities, start to seek out additional support and play a much more active role in the initiative. These are changes you would like to see if the initiative is resonating with and responding to the community's needs.
- **Proactive changes** that reflect the partner taking charge, becoming the leader and using the initiative as a resource connected with other resources. These changes reflect the sustainability of the change as leadership has been adopted by the actors involved – these are the changes you would love to see.

These measures of progress reflect change over time. They are not one-off indicators with which you can measure impact. Rather they reflect the reality that change often happens slowly and incrementally and that you need to capture movement along the spectrum if you are going to be able to assess progress over a long period of time. So it is important to look at them as a set and consider progress along a continuum.

### **Measure progress – and assess outcome progress**

The key question you are asking here is: *How well are we doing and should we be doing better?*

The vision and mission you identified at the launch of your initiative articulates the outcomes you want to achieve. The next step is to assess what progress

you are making so that you can adjust course as necessary - speed up, change course, adjust an element, etc. Because this is an active adaptive approach, you are doing this throughout the intervention, not just at the mid-point and the end.

Once you have the data from the achievements to date, the assessment can begin. It may be fraught, it may be contested, so there are some steps to take to ensure the data is allowed to speak to your progress. A formal process helps promote a more dispassionate consideration of the evidence but the values and beliefs of the users still play a role in final decisions and choices on the use of evidence.

For this we propose the approach outlined by Pawson (2013) in *The Science of Evaluation*. Because we often have competing theories for the same thing, it is important to adjudicate between the theories, looking for the one that provides the better explanation (never the final explanation for the reasons outlined above), that as the situation changes, what is best also changes. Because there are usually competing truths (and sometimes parallel truths), the point here is to overcome the tendency to cherry pick the evidence that proves our preferred option, by explicitly building in a process of looking at the competing theories to see which provides the most solid evidence.

This leads to looking at the level of trust in the evidence. Drawing on Campbell, a key early evaluation methodologist, Pawson makes the point that for agreement to move ahead, there must be more trust than doubt in the evidence. Because disputes will inevitably remain, the role that evaluation plays is to present advice on the contingencies of program planning, never final answers.

The final step is to ensure that the solution is considered in some form of peer review: is it plausible to others who have an understanding of the methods and issues? Here, we are not concerned about which design and methods were used (though clearly quality of application is important), but rather about whether or not the conclusions are supported

by the evidence that is presented. This organised assessment of the findings of an evaluation is seldom applied but presents an opportunity to provide added assurance. (A Google search for 'positive bias in evaluation' returns 2.4 million references to the study of positive bias; a review of some of these indicates that there is strong evidence of positive bias, either through how we respond to what an evaluation says about medication, or how we present findings, often in a much more positive light than the data really suggest.) As well, a systematic process of peer review signals to the evaluators the need to be careful in following the evidence. It suggests a level of oversight that is used in science; applied to evaluation it increases rigor, hence confidence in the findings.

### **Define and redefine goals**

The key question you are answering here is: *Do we need to adjust our vision or our mission?*

The reflection (which may happen during or at the end of the intervention) is about looking at achievements against the vision and our level of confidence about progress. This may lead to some revisions to the vision; these would certainly lead to revisions of the mission. Even where the vision remains unchanged we may want to revise what we will be doing in order to increase the probability of success.





Too often evaluations ask for impressions and outputs – what did you learn? Do you think you will apply it? How many people were ‘trained’, or what capacities were built? Did you receive value from this program? These can only tell us so much. What we really want to know is about the outcomes of the program or the intervention and whether or not they seem to be heading for the change we really seek – the mental revolution the President of Indonesia is seeking in his country and his people. So instead of how much training is done or what capacities are built, what are you doing now that you were not doing before? Who are you reaching that you were not reaching before? What changes have you made in your own activities? That is a measure of change. It may not yet expose any impact on the system you are trying to influence, but the accumulation of many changes in action and behaviour by the actors in the system builds towards substantial change in the system. The idea is that big impacts in the system are stimulated by

changes in how people act in that system. They may only create small ripples initially but eventually many ripples collide and collude to bring about the more significant impacts we are all seeking. This is what we are seeking to evaluate, to know if we are making progress towards the new behaviours and actions that are called for.

Everything will not happen at once – a mental revolution will not be quickly and simply achieved and not every issue will be addressed in the first instance. A systems perspective does not mean doing it all right away. Rather it means there is awareness that your actions are part of a larger system of change that is occurring, and awareness that you will have to adapt as you go. The point here is to develop a learning-based approach to the change you are creating, so that you can adapt and adjust over time and keep moving towards the changes you seek.

These are some of the contextual issues we deal with when we think about how development is changing, but also how evaluation is changing. Most evaluation methods are not very good at uncertainty, complexity and intermediate change. They are not good at looking at wicked problems. They are good at looking at the end result of singular interventions, especially when we know what the results should be. The changes called for in the Nawa Cita are not simple, the pathways are not known, and most interventions will happen in concert (and competition) with other interventions. The interventions will be affected by other unforeseen events. As we do not completely know how to get there, we need to be able to learn as we go, so we need evaluation methods that help us look at interim progress more effectively. I argue this is what we need to evaluate President Joko Widodo's Mental Revolution.

Of course, we must remain vigilant to the possibility that we got it wrong, that we bet on the wrong networks, or we bet on the wrong actions. So we have to keep our eye squarely on the vision and whether it is getting closer or receding into the horizon.

This is a framework, not a prescription. Figure 1 does not show the feedback loops, but there is constant interplay across the framework. As we map the contexts (and also identify both the supports and the critical blockage points and people), we modify the mechanisms and we may modify our sphere of action, or the mission we think we can realistically achieve. As we identify the mechanisms we will use, we are constantly referring back not only to

the mapping, but also the vision of what we intend to achieve. How you carry out these steps has to be designed in each case – because each case is different so no mechanical designs will work.

This leads to a final note of caution. As noted by Baretto-Fernandes and Ndiaye (2006):

*Being busy creates a mindset that is not conducive to innovation and creativity. Without interaction there is no innovation. Time to discuss, reflect and generate new ideas is the ransom that outcome mapping demands for innovation (p. 28).*

The reality of a learning-based approach to evaluation, whether it is based on outcome mapping or another approach, is that it takes time. It does not happen effectively by using a consultant outside the group; and it does not happen quickly or without effort. It happens with the people involved, with time devoted to developing a good understanding of the mechanisms you are using, taking the time to collect and analyse the data and make the changes to your practice that the findings suggest. A mental revolution needs rigour in order to succeed. It will not happen without clarity of purpose and intent, strong understanding of the context and clear monitoring of the actions being taken to assess their efficacy and the progress that is being achieved. But done well, it can make a difference.

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The Knowledge Sector Initiative (KSI) is a joint program between the government of Indonesia and Australia that seeks to improve the lives of the Indonesia people through better quality public policies that make better use of research, analysis and evidence.

KSI is a consortium led by RTI international in partnership with Australian National University (ANU), Nossal Institute for Global Health, and Overseas Development Institute (ODI).



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