



# Digital Transformation

# of TVET and Skills Development

# Systems in Africa

Guidelines for countries to undertake a strategic planning framework



The ideas and opinions expressed in this publication are those of the author; they are not necessarily those of the Pan African Initiative's secretariat and its partners.

If you have any comments, suggestions or ideas about how we can improve the guidelines, please contact [info@digitalafrica.org](mailto:info@digitalafrica.org)

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# Acknowledgement

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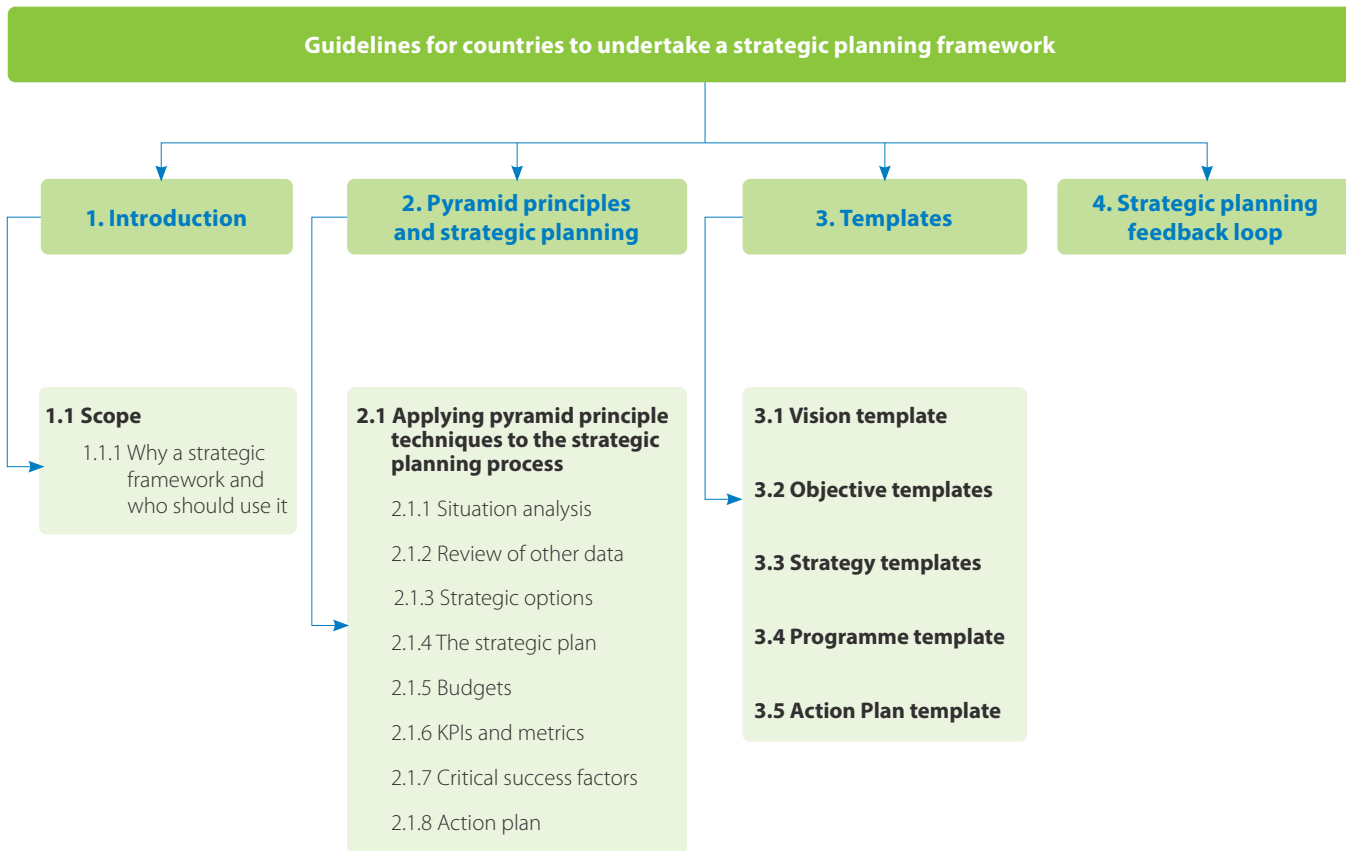
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# Structure of the guidelines



# 1. Introduction

The **Pan African Initiative for the Digital Transformation of TVET and Skills Development Systems in Africa** ('the initiative') was launched on 9 March 2021<sup>1</sup>. The initiative's **overall objective** is to create an **ecosystem**<sup>2</sup> that will enable and accelerate the digital transformation of TVET and skills development systems in Africa.

The initiative is dependent on the establishment of an ecosystem in participating countries that will allow more innovators to develop and implement solutions to digitally transform TVET and skills development in Africa, ideally optimising the collective benefit and multiplier effects<sup>3</sup>. Ultimately, the initiative aims to contribute to the goal of the African Union's vision 2063: "A prosperous Africa based on inclusive growth and sustainable development".

The initiative consists of three components:

- **Component 1:** Support in setting up national networks to accelerate the digital transformation of TVET and skills development systems. Under this component, online and face-to-face trainings will be offered to leaders and practitioners in the field.
- **Component 2:** Support for the national network in formulating an action plan. Under this component, countries will produce three main outputs: 1) a situational analysis, 2) a strategic plan, and 3) an action plan.
- **Component 3:** Support for the national network in implementing the action plan. This component focuses on mutualisation as well as on knowledge and experience sharing.

<sup>1</sup>The UNESCO Multisectoral Regional Office for West Africa in Dakar has partnered with the African Union, the African Institute for Economic Development and Planning (IDEP) of the United Nations Economic Commission for Africa, the Institut de la Francophonie pour l'éducation et la formation (IFEFF), the African Development Bank (AfDB), the African Union Development Agency of the New Partnership for African Development (AUDA-NEPAD), and GIZ with a long-term vision to create an ecosystem that will enable and accelerate the digital transformation of TVET and skills development systems in Africa. It builds on two existing continent-wide strategies, the Education 2030 Agenda and the Continental Education Strategy for Africa (CESA), with a focus on the capability of technologies to reach marginalised and disadvantaged groups.

<sup>2</sup>Ecosystem' is a nuanced term meant to describe a community network of interactions between organisms and their environment. In the case of TVET and skills development systems, it refers to the transfer of information and resources in order to transform ideas into reality: to the production and distribution of knowledge-intensive digital products and services. A well-functioning TVET ecosystem for digitalisation is supported by an enabling government, flexible local support systems, and digital technologies that foster inclusion and innovation.

<sup>3</sup>The initiative's ecosystem is planned to be created through five key components: the Pan African training programme; a national network for digital transformation; ICTs and digitalisation in a TVET day established in African countries; regional centres of excellence on digital transformation in each regional economic community (REC); and knowledge-sharing and monitoring mechanisms on the state of advancement of the digital transformation of TVET in Africa (platform, continental report, national reports). See <https://pefop.iiep.unesco.org/en/activities/pan-african-initiative-digital-transformation-technical-and-vocational-education-and>

While recognising that each country participating in the initiative has a unique political, economic, social and technological context, it is expected that the implementation of each national strategy by the relevant ministry in charge of TVET will contribute to achieving a set of results commonly found in countries that have engaged in the digital transformation of their TVET and skills development systems. The initiative identified a minimum of ten targets that need to be achieved at a continental level to demonstrate that a viable ecosystem is in place in Africa. These have been fine-tuned after UNESCO organised a set of training workshops with policymakers and TVET practitioners in 2021-22, listed in **Table 1** below:

Target	Description
<b>T1</b>	Set up a fully functional <b>national network</b> (comprising leaders, managers and practitioners of the ecosystem), with members working in synergy as ambassadors to support and promote the digital transformation of the national TVET and skills development system
<b>T2</b>	Designate and establish a <b>national committee</b> or a department/institution of the ministry in charge of TVET to coordinate the national agenda on digital transformation of the national TVET and skills development system
<b>T3</b>	Produce a <b>national report on the state of digital transformation of TVET and the skills development system</b> , and set up a mechanism to ensure its regular update
<b>T4</b>	Develop an <b>ICT and digital policy for TVET</b> setting the national agenda on digital transformation of the TVET and skills development system, and set up a mechanism to ensure its regular update
<b>T5</b>	Create a <b>national generic guideline</b> on how to introduce/reinforce ICT and digitalisation in a TVET programme, and set up a mechanism to ensure: (i) its regular update and (ii) that all the official accredited TVET programmes follow the guidelines
<b>T6</b>	Set up a roster of <b>national experts/trainer of trainers</b> in the main issues of digital transformation of TVET and the skills development system as well as a mechanism to ensure its regular update
<b>T7</b>	Equip a <b>critical mass of young people and adults</b> (including those who have completed school and adults in the informal sector) with <b>basic digital skills</b> relevant to the labour market or <b>specialised skills in the field of digitalisation and ICT</b>
<b>T8</b>	Train a <b>critical mass of teachers, instructors and practitioners</b> of the ecosystem in mainstreaming digital and ICT skills necessary for their day-to-day work
<b>T9</b>	Celebrate an <b>ICT and digital day in TVET</b> and develop a mechanism to ensure its annual celebration
<b>T10</b>	Institutionalise and/or accredit a <b>national centre of excellence for the digital transformation</b> of TVET and skills development system

| Table 1: Targets for the Initiative



The overall objective is for these targets to have been adopted by 50% of nation states on the continent by 2030.

These guidelines follow the publication of **Digital Transformation of TVET and Skills Development Systems in Africa - Guidelines for countries to undertake a situational analysis** ('the Situational Analysis Guidelines').

In concert with the situation analysis guidelines, these guidelines are based on primary research commissioned by UNESCO and the ILO (2020) and ILO's 'five building blocks' conceptual framework for TVET and skills development systems (2021). In practice, many of the elements in the

building blocks are inter-dependent: a framework involves complex interactions between individual learners, workers and the labour market as well as a range of institutions and stakeholders in the public and private sectors. These institutions include education and training providers, regulatory bodies and intermediaries such as public and private employment services, business support services, and local and regional authorities. There are complex financing and data flows, assessment and certification systems and interactions with different policy domains where the politics of skills formation impact the programmes and policies that are in operation.



| Figure 1: Building blocks for the situational analysis guidelines

## 1.1 Scope

This document addresses **component 2** of the initiative: support for the national network in formulating an action plan.

It is based on a set of assumptions related to a country participating in the initiative:

- A first attempt has been made to conduct a situation analysis.
- The situation analysis guidelines have been followed or served as a guide for a participating country to conduct a situational analysis, before proceeding with the process to develop a strategy.
- The participating country has accepted that achieving the ten targets is fundamental to participating in the initiative, and to its ultimate success.
- The participating country is committed to the implementation of the change initiative in a strategic manner. This means an investment in in-house resources, starting with an in-house team, potentially supported by UNESCO and external consultants<sup>4</sup>.

### 1.1.1 Why a strategic framework and who should use it

These guidelines are designed as a **non-prescriptive tool kit** to assist participating countries in Africa in delivering a situational analysis that will determine their level of preparedness for the digitalisation of TVET and skills development systems. Every country has a unique political, economic, social and technological context. There is not one single framework or standard approach to inform the digital transition necessary in a country. Each context is different – and context and culture matter a lot for the successful implementation of a change programme.

Nevertheless, a strategic approach is needed to guide the actions required to achieve the targets of the initiative. Formal strategic planning with its modern design techniques was first introduced in business contexts in the mid-1950s. Within the context of the initiative, strategic planning is a creative, practical planning process for change: the digital transformation of TVET and skills development systems in Africa.

Successful strategic planning requires people with the right preparation, execution and follow-through. Members of the strategic planning team should have a set of cross-cutting competences relevant for professionals working in policymaking or science for policy. Competences are not just a set of skills and knowledge, but the attitudes and mindsets necessary to perform tasks well, often under pressure, within prescribed timeframes. **Figure 2** identifies a set of competences that address not only the **what** but also the **how** of policymaking. In practice, it is not possible that an individual professional has developed capacity across all competences and up to the highest level to perform well. Rather, these collections of competences are meant to provide insights, guidance and a sense of how to progress to teams, e.g., units, project teams, directorates etc., comprising different roles within the team conducting strategic planning.

<sup>4</sup>This is extensively documented in the guidelines to the situational analysis.



Figure 2: Clusters and competences of innovative policymaking  
Source: Schwendinger et al. (2022)

A strategic planning framework must be understood within the context of policymaking by participating countries. These guidelines do not suggest the mix or level of competence needed to conduct a strategic plan. The implementation of each national policy/strategy associated with the initiative is likely to be led by the ministry in charge of TVET or a ministry interested in the digital transformation of their TVET and skills development systems. Beyond their skills, therefore, individuals in the strategic planning process are embedded in a social context, and they must be able to communicate, cooperate and establish social connections with other individuals and groups.

It is likely that a participating country will seek the support and expertise of external consultants to conduct the exercise. However, the strategic planning process needs to be clearly 'owned' at the outset by policymakers and key officials in the public sector in the participating country. The political commitment to the delivery of the overall change initiative needs to be evident at the outset if the planning cycle is to lead to a set of relevant, underlying programmes which can be implemented within a prescribed timeframe.

## 2. Pyramid principles and strategic planning

The pyramid principle<sup>5</sup> proposed for the strategic planning framework was first introduced by corporate writing consultant and former McKinsey consultant Barbara Minto as a framework for communicating ideas clearly and succinctly. It has since been adapted as a persuasive communication tool to attract the attention of readers who are time-poor with a simple yet compelling and memorable 'story'. It is particularly useful to process and structure large amounts of information to convey a story, message or presentation without omitting important details.

The mind automatically sorts information into distinctive pyramidal groupings. However, if any group of ideas is arranged into a pyramid structure in the first place, not only will it save valuable time and effort to write, but it will also take even less effort to read and comprehend it.

**A strategic plan is primarily a communication tool.** It is a means of synthesising often complex ideas into a structure and format that can make these ideas clearly and quickly comprehensible to third parties who may not necessarily be familiar with the subject area and underlying topics.

**The pyramid principle can be applied for the development of coherent strategic plans.** It has proved to be particularly useful for policymakers and change agents working at the intersection of the public sector and private-public partnerships. Over the past twenty years, it has been used in iterative processes to structure many policy documents and strategic plans and ensure that they contribute to the clear communication of ideas.

**The pyramid principle is primarily a framework for structured thinking.** It explains how to:

- Think creatively, reason lucidly and express ideas with clarity;
- Define complex problems and establish the objectives of any document;
- Assess ideas and recognise their relative importance;

- Structure reasoning into a coherent and transparent argument by grouping, summarising and ordering content; and
- Analyse an argument to confirm its effectiveness, validating it through supporting arguments.

Pyramid principle techniques can help planners set out complex ideas in the clearest terms by inviting them to work through a two-part process.

The first part is to synthesise and structure the argument. This requires a bottom-up approach, gathering relevant information and data. For example, if a participating country is looking to scale up its TVET organisations and adopt Industry 4.0 technologies, the planner needs everything that can be mustered about the market, organisations and stakeholders that already operate there. Then the material can be sorted into more coherent groups of ideas or insights. That might involve discarding less relevant or extraneous material. As the data is grouped, common themes will start to emerge – and the main idea, insight or recommendation might also start to become clearer. This is where one of Minto's key concepts comes in: MECE, the rule that ideas or groups of ideas should be **“mutually exclusive and completely exhaustive”**. Taking this approach will lead us to the core, synthesised idea – and an easier message to understand and communicate.

**Figure 3** illustrates how planners can work bottom-up to marshal an argument and then top-down to plan the communication.

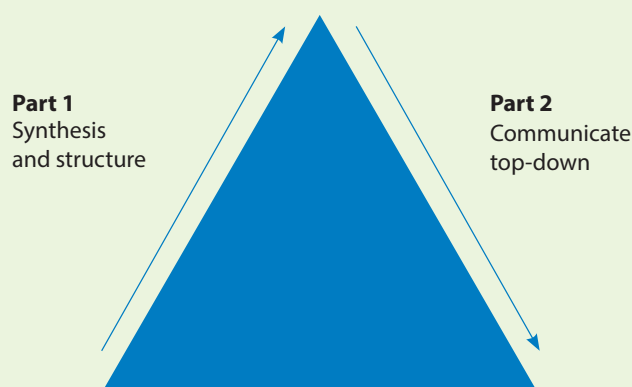


Figure 3: The two elements of the pyramid principle

<sup>5</sup>Also known as the Minto pyramid principle. There is a large amount of literature that applies the pyramid principle to different paradigms, including change management contexts.

Through the process of sorting, synthesising and structuring, the planner can start to organise data, insights and arguments into Minto's pyramid structure, forming a hierarchy that supports the big idea, outcome or goal. **Ideas at any level in the pyramid must always be summaries of the ideas grouped below them.**

With the pyramid structure in place, the planner is now in a position to address the second part – to communicate ideas by moving back down the pyramid with a top-down structure that inverts the more traditional or indirect structures that present facts before arriving at a conclusion.

In practice, the process of moving up and down the pyramid helps identify and validate answers, as opposed to accepting the status quo or the as-is.

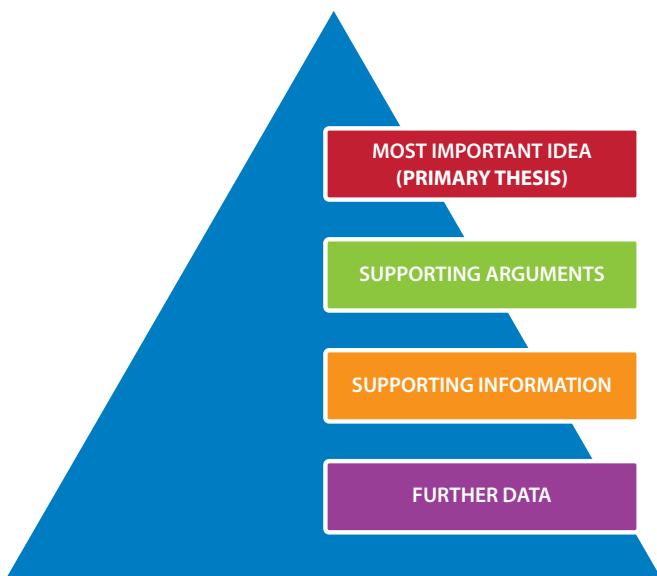
When applying the pyramid principle, the planner will:

**1 Lead with the answer or actionable point first.** This provides the key idea, recommendation or takeaway at the outset. Our introduction will briefly describe the situation and question to be addressed and provide a solution. The most important part of the pyramid principle is to make your recommendation(s) right away.

**2 Summarise the arguments that support the answer** to prove evidence and arguments supporting the statement. These are the details that have already been sorted and summarised into the pyramid, bearing in mind the MECE principle. The main takeaways from the analysis that support or even challenge recommendations are synthesised.

**3 Back key insights up with detailed data, analysis and evidence.** The supporting arguments are summarised. These back-up pages will include much of the analysis that is performed first, and summaries of the evidence gathered. Supporting ideas are ordered logically, by time order (if there is a sequence of events that form a cause–effect relationship), by structural order, or in order of importance. Together, these arguments create the storyline that leads the planner to conclude that the answer is true.

**Each level of the pyramid supports the level above** (see **Figure 4**). Ideas at any level in the pyramid must always be summaries of the ideas grouped below them. Evidence supports arguments and arguments support answer. If a fact does not support the answer, then it is removed.



High-level insights are grouped, summarised and ordered logically. They explain **WHY** the primary thesis is important – through a qualitative or quantifiable approach.

Arguments are further grouped, summarised and ordered logically to back up the arguments. They explain **HOW** the supporting arguments are validated and implemented.

Further insights are provided through facts, analysis and evidence. They answer questions relating to **WHAT/WHERE** and **WHEN** the arguments and supporting information can be activated.

Figure 4: Pyramid principle as a tool for making persuasive arguments

## 2.1 Applying pyramid principle techniques to the strategic planning process

The development of strategy has much to do with the iterative process of moving from 'big ideas' and arguments to the development of tangible solutions and action. The application of pyramid principle techniques to the strategic planning process has much to do with the value they bring to the end product – to employ a rigorous, structured approach that may enable the planner to take stock, sharpen arguments, communicate better, and resolve problems.

When applying pyramid principle techniques, high-level ideas can be structured in this format:

- 1 Situation (What is the current state of affairs?)
- 2 Complication (What is changing to make the situation complicated?)
- 3 Question (What do the situation and complication demand?)
- 4 Answer (What is the solution?)

These guidelines to the strategic planning framework are to be used immediately after the conclusion of a first attempt at a situational analysis.

**Figure 5** summarises the eleven primary components of a strategic planning framework, which are briefly tabulated in the remainder of this section.



Figure 5: Components of a strategic planning framework

### 2.1.1 Situation analysis

The process to conduct a situation analysis has been documented in some detail in the situational analysis guidelines. A situational analysis cannot be developed in a vacuum. By inference, it is understood that a situation analysis would have included meetings with internal and external stakeholders and that information from these meetings would have been part of an essential feedback loop which both contributes to and validates the situation analysis.

### 2.1.2 Review of other data

By its very nature, the initiative will require planners to review official documentation. This is likely to include relevant legislation, policy documents, reports and other forms of market intelligence. The data reviewed in the early stages of the strategic planning process is likely to indicate the state of readiness of a participating country to commit itself to fostering the meaningful digital transformation of its TVET and skills development system.

### 2.1.3 Strategic options

Even at an early stage – either during or after conducting the situation analysis – the participants in the strategic planning process will start to identify ideas and potential projects that may eventually crystallise into the components of the strategic plan as objectives, strategies or underlying programmes.

The business model canvas<sup>6</sup> is one of several models that may be considered by the project team to identify the ‘low-hanging fruit’ or strategic options for consideration by the team developing the strategic plan. The most innovative component of the business model canvas is its focus on ‘value propositions’: within the context of strategic planning, it is a salutary reminder for policymakers of the need to create and implement value for others and for the public good. The strategic options being considered by the team developing the strategic plan should be framed within the context of value to be delivered to citizens; the problems which the strategy will help solve; the bundles of services and products potentially being offered to citizen/stakeholder segments; and the citizen needs that the strategy is attempting to address.

The use of the business model canvas also prepares the strategy team for the use of a set of templates to achieve the end goal, namely a clear, succinct strategic plan that can secure the attention of policymakers and decision-makers in the participating country.

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<sup>6</sup>Also see <https://www.strategyzer.com/canvas>



The Business Model Canvas		Designed for:	Designed by:	Date:	Version:																								
<p><b>Key Partners</b></p> <p>Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?</p> <p><b>MOTIVATIONS FOR PARTNERSHIPS</b></p> <ul style="list-style-type: none"> <li>• Optimisation and economy</li> <li>• Reduction of risk and uncertainty</li> <li>• Acquisition of particular resources and activities</li> </ul>	<p><b>Key Activities</b></p> <p>What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?</p> <p><b>CATEGORIES</b></p> <ul style="list-style-type: none"> <li>• Production</li> <li>• Problem solving</li> <li>• Platform/Network</li> </ul>	<p><b>Value Propositions</b></p> <p>What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?</p> <p><b>CHARACTERISTICS</b></p> <ul style="list-style-type: none"> <li>• Newness</li> <li>• Performance</li> <li>• Customisation</li> <li>• "Getting the job done"</li> <li>• Design</li> <li>• Brand/status</li> <li>• Price</li> <li>• Cost reduction</li> <li>• Risk reduction</li> <li>• Accessibility</li> <li>• Convenience/Usability</li> </ul>	<p><b>Customer Relationships</b></p> <p>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they?</p> <p><b>EXAMPLES</b></p> <ul style="list-style-type: none"> <li>• Personal assistance</li> <li>• Dedicated personal assistance</li> <li>• Self-Service</li> <li>• Automated services</li> <li>• Communities</li> <li>• Co-creation</li> </ul>	<p><b>Customer Segments</b></p> <p>For whom are we creating value? Who are our most important customers? Revenue streams?</p> <ul style="list-style-type: none"> <li>• Mass market</li> <li>• Niche market</li> <li>• Segmented</li> <li>• Diversified</li> <li>• Multi-sided platform</li> </ul>	<p><b>Key Resources</b></p> <p>What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?</p> <p><b>TYPES OF RESOURCES</b></p> <ul style="list-style-type: none"> <li>• Physical</li> <li>• Intellectual (brand patents, copyrights data)</li> <li>• Human</li> <li>• Financial</li> </ul>	<p><b>Channels</b></p> <p>Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?</p> <p><b>CHANNEL PHASES</b></p> <ol style="list-style-type: none"> <li><b>Awareness</b> How do we raise awareness about our company's products and services?</li> <li><b>Evaluation</b> How do we help customers evaluate our organization's Value Proposition?</li> <li><b>Purchase</b> How do we allow customers to purchase specific products and services?</li> <li><b>Delivery</b> How do we deliver a Value Proposition to customers?</li> <li><b>After sales</b> How do we provide post-purchase customer support?</li> </ol>																							
<p><b>Cost Structure</b></p> <p>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?</p> <p><b>IS YOUR BUSINESS MORE</b></p> <ul style="list-style-type: none"> <li>• Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)</li> <li>• Value Driven (focused on value creation, premium value proposition)</li> </ul> <p><b>SAMPLE CHARACTERISTICS</b></p> <ul style="list-style-type: none"> <li>• Fixed costs (salaries, rents, utilities)</li> <li>• Variable costs</li> <li>• Economies of scale</li> <li>• Economies of scope</li> </ul>			<p><b>Revenue Streams</b></p> <p>For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?</p> <table border="0"> <thead> <tr> <th>TYPES</th> <th>FIXED PRICING</th> <th>DYNAMIC PRICING</th> </tr> </thead> <tbody> <tr> <td>• Asset sale</td> <td>• List price</td> <td>• Negotiation (bargaining)</td> </tr> <tr> <td>• Usage fee</td> <td>• Product feature dependent</td> <td>• Yield management</td> </tr> <tr> <td>• Subscription fees</td> <td>• Customer segment dependent</td> <td>• Real-time-management</td> </tr> <tr> <td>• Lending/Renting/Leasing</td> <td>• Volume dependent</td> <td></td> </tr> <tr> <td>• Licensing</td> <td>• Licensing</td> <td></td> </tr> <tr> <td>• Brokerage fees</td> <td>• Brokerage fees</td> <td></td> </tr> <tr> <td>• Advertising</td> <td>• Advertising</td> <td></td> </tr> </tbody> </table>			TYPES	FIXED PRICING	DYNAMIC PRICING	• Asset sale	• List price	• Negotiation (bargaining)	• Usage fee	• Product feature dependent	• Yield management	• Subscription fees	• Customer segment dependent	• Real-time-management	• Lending/Renting/Leasing	• Volume dependent		• Licensing	• Licensing		• Brokerage fees	• Brokerage fees		• Advertising	• Advertising	
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• Brokerage fees	• Brokerage fees																												
• Advertising	• Advertising																												

Figure 6: Business model canvas template  
Source: Strategyzer.com

### 2.1.4 The strategic plan

The strategic plan is developed as part of a **process**. It is dependent on the planning team having conducted a situational analysis and related activities.

The implementation of pyramid principle techniques means that the strategic plan consists of a set of **hierarchical building blocks**. Specifically:

- The vision is a stand-alone statement.
- The objectives must support the vision.
- The strategies must support the objectives.
- The programmes must support the strategies.

The building blocks/components of the strategic plan should be numbered to facilitate ease of reference. The order in which ideas are presented does not imply a sequence in the acquisition process or a hierarchy: no one element comes first, and none of them is overall more important than the others. Conversely, the order in which content is presented is important in securing the attention of policymakers. The communication process remains 'top-down'.

The optimum timeline for a strategic plan varies from one context to another. As a general guideline, the timeline for a strategic plan for the initiative should ideally not be longer than 36 months, with the additional caveat that there needs to be a commitment by the participating country to conduct an annual review of the plan. Establishing a meaningful timeframe and review cycle would ensure that the strategic planning process is subject to a set of 'checks and balances': the plan remains responsive to potentially disruptive technology as well as socio-economic changes; and policymakers are obliged to have a review processes in place, increasing the chances of ownership and accountability of the plan by government.

### 2.1.5 Budgets

In principle, this should be the sum total of the cost of the individual programmes identified in the strategic plan plus a contingency (normally a percentage of the budget) for inevitable variances. Ideally, the government should allocate public resources in a strategic and accountable way. It is important to link the programmes to relevant, existing initiatives and projects funded by international donors and the private sector to ensure that the sustainability of the programmes in the strategic plan and the existing initiatives and projects continues to grow. The mapping should be completed during the situational analysis process.

### 2.1.6 KPIs and metrics

KPIs, or key performance indicators, are measurable values that show progress toward an intended result or goal. Essentially, they provide the means for the planning teams and policymakers to track progress towards the initiative's stated goals and overall objectives.

KPIs are measurements of progress that often go beyond a number or metrics. There are various types of KPIs which add value and direction to strategy. **Quantitative** KPIs are the ones that can be objectively measured as a fixed unit or value. They are often the most common type and reveal clear, concise, data-based insights about a business' performance. Although quantitative KPIs stand out most in a report, relying on these alone may leave significant knowledge gaps that could lead to bad decision-making. They are most frequently reported as a number, cost or percentage. Examples include customer churn rate, lead to customer conversion rate, customer lifetime value, or cost per lead.

**Qualitative** KPIs consist of opinions, attitudes or characteristics, often involving human interpretation. This type of KPI is much more subjective in nature than quantitative KPIs and is more difficult to measure. A common example of a qualitative KPI is customer or employee satisfaction surveys. The survey itself can be given in the form of quantitative data, e.g., 'On a scale of 1 to 10, how would you rate your experience?' So, although the answer will be given as a numerical value, the measure itself is based on the subjective interpretation of a person's opinion.

### 2.1.7 Critical success factors

Critical success factors (CSFs) are synonymous with a risk assessment, which needs to accompany a strategic planning process. CSFs are the decisive test for the viability or otherwise of the strategy, and they ground the plan in the reality of the context of the participating country. Identifying and communicating CSFs within the strategic plan is essential to ensure that the project team remains focused on what needs to be done to achieve success. 'Success' within the context of this document is tantamount to the programmes being developed through the pyramid principle approach.

CSFs may sometimes also be colour-coded (red/amber/green) to indicate the likelihood of risk for a specific programme.

### 2.1.8 Action plan

The action plan is synonymous with a road map.

An action plan is a checklist of the steps or tasks that need to be completed in order to achieve the goals that have been set. The action plan is an essential component of the strategic planning process and critical for teamwork planning. Having everything listed in one location makes it easier to track progress and prioritise tasks based on effort and impact.

Components of an action plan include:

- A well-defined description of the goal to be achieved;
- Tasks/Steps that need to be carried out to reach the goal;
- People who will be in charge of carrying out each task;
- When these tasks will be completed (deadlines and milestones);
- Resources needed to complete the tasks; and
- Measures to evaluate progress.

***The timeline for the Action Plan should not exceed 12 months. In many cases, action plans are reviewed on an ongoing or 'rolling' basis, ensuring that tasks are constantly monitored and corrective action taken as necessary. The 12-month timeline also highlights the need for a systemic, annual review of the strategic plan.***

## 3. Templates

This section proposes a set of templates for the consideration of teams that have completed a situation analysis and are proceeding to develop a strategic plan.

The scoping, definition, selection and grouping of the templates is an attempt to engage with the complexity and integrated nature of the underlying change processes that underpin the strategic framework. The templates apply the pyramid principle techniques described earlier in this document.

### 3.1 Vision template

Every strategic plan should be guided by a vision statement that reflects the overall aims, aspirations, interests, expectations, attitudes and philosophies of the team developing the strategic plan. It will inevitably lever on the planning team’s value system, where values are similar to attitudes but more stable and ingrained.

Individual values for a person represent a standard upon which basis important decisions may be made. In this case, the planners have to consider not only the ends that a person considers preferable to another state but also the preferred means to achieve them. Values are settled habits of regarding, and attitudes toward, events or phenomena.

The challenge in crafting a vision that is fit for the purposes of the strategic plan is that it has to reflect the common good and the aspirations of a number of stakeholders in the ecosystem, as opposed to merely the value systems of the people developing the plan. Again, perhaps inevitably: the value systems of these people have a significant influence on planning in any organisation that is tasked with the leadership of the planning process.

<b>Vision</b>	<b>The participating country should insert a clear statement that resonates within its specific political, economic, socio-cultural and technological context.</b>
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Focus on the feasibility of the initiative within the unique participating country context</li> <li>• Focus on core values which are relatable to policymakers</li> <li>• Focus on belief systems which are relatable to policymakers (including a consideration of ‘one should/one shouldn’t’ issues as an acid test of cultural contexts)</li> </ul>

### 3.2 Objective templates

The objectives in this framework are based on the initiative's set of ten objectives. The participating country may well choose to insert other objectives; however, the expectation is that additional objectives are not in conflict with the initiative's core objectives.

Objectives may be qualitative, quantitative or a mix of both.

Objective 1	Set up a national network for the initiative
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• Planners need to determine if the participating country can readily identify leaders, managers, practitioners and partners that may set up the requisite ecosystem and serve as its ambassadors. Once identified, these people need to work in synergy as ambassadors to support and promote the digital transformation of the national TVET and skills development system.</li> <li>• The emphasis on networks and ambassadors implies that the objective is to first identify individuals (as opposed to organisations) that may become advocates and multipliers for the initiative. The process to select and engage suitable individuals needs to be transparent. Participating countries should ensure that ambassadors' terms of reference are clear and made public to ensure that expectations are aligned.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• Number of target people to be contacted in an attempt to secure the requisite leadership, managerial, practitioner and networking competences</li> <li>• Number of organisations to be contacted that may provide the requisite number of people with suitable leadership, managerial, practitioner and networking competences</li> <li>• List of competences and skills sets that individuals targeted to serve as leaders, managers and practitioners in the ecosystem should ideally possess</li> </ul>

Objective 2	Designate or establish a national committee to coordinate the national agenda on digital transformation of the national TVET and skills development system
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The participating country should determine if the committee should be a new, stand-alone institution or an existing department/institution of the ministry in charge of TVET which is re-engineered for the purpose of the initiative.</li> <li>• The autonomy or otherwise of the committee from officially designated/established institutions should be established at the outset. Policymakers need to vest the committee and its leaders with the requisite authority if it is to successfully drive and coordinate the national agenda on digital transformation of the national TVET and skills development system.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• Number of organisations to be contacted</li> <li>• Target milestone for decision on whether to establish a new autonomous organisation or use an existing department/institution within a ministry</li> <li>• Target milestone for establishment of committee</li> </ul>

Objective 3	A relevant national report on the state of digital transformation of TVET and skills development systems
<p><b>Overview</b></p>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The relevance and importance of a report is very much dependent on the authority, social capital and expertise of its writers. These may well be external consultants.</li> <li>• The relevance of the report is also dependent on the propensity of policymakers and the TVET sector to take its recommendations seriously.</li> <li>• The objective also states that a ‘mechanism’ should be in place to ensure its regular update exists or is set up. This may be subject to various interpretations of what a mechanism should be in practice.</li> </ul>
<p><b>Metrics</b></p>	<ul style="list-style-type: none"> <li>• Target milestone for commissioning of report</li> <li>• Target milestone for publication of report</li> <li>• Clarity on the mechanism to be put in place for auditing of the state of digital transformation of TVET and skills development systems</li> </ul>

Objective 4	An ICT and digital policy for TVET
<p><b>Overview</b></p>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The objective calls for setting a national agenda on digital transformation of the TVET and skills development systems. This is dependent on the authority, social capital and expertise of the writers of the policy.</li> <li>• As is the case with objective 2, the relevance of the policy is also dependent on the propensity of policymakers and the TVET sector to take its recommendations seriously.</li> <li>• The objective also states that a ‘mechanism’ should be in place to ensure the policy’s regular update exists or is set up.</li> </ul>
<p><b>Metrics</b></p>	<ul style="list-style-type: none"> <li>• Target milestone for publishing of ICT and digital policy</li> <li>• Clarity on the mechanism to be put in place for auditing of the state of digital transformation of TVET and skills development systems</li> </ul>

Objective 5	A national generic guideline for TVET programmes
<p><b>Overview</b></p>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The objective calls for guidelines to be made available on how to introduce/reinforce ICT and digital in a TVET programme.</li> <li>• The objective also states that (i) a ‘mechanism’ should be in place or should be set up to ensure that the guidelines are regularly updated, and that (ii) all the official accredited TVET programmes must follow the guidelines. This implies that the participating country is committed to auditing and enforcement procedures.</li> </ul>
<p><b>Metrics</b></p>	<ul style="list-style-type: none"> <li>• Target milestone for publication of guideline/set of guidelines</li> <li>• Clarity on the mechanism to be put in place for auditing of the guideline/set of guidelines</li> </ul>

Objective 6	A roster of national experts/trainer of trainers
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The objective calls for a mechanism to ensure the regular update of the roster of experts. This implies that the participating country is committed to auditing and enforcement procedures.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• Target milestone for publication of criteria for citizens to be accredited as national experts/trainer of trainers</li> <li>• Target milestone for publication of roster</li> <li>• Target number of national experts (presumably accredited)</li> <li>• Clarity on the mechanism to be put in place for auditing of the state of digital transformation of TVET and skills development systems</li> </ul>

Objective 7	A critical mass of young people and adults with basic or specialised digital skills
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• Planners should be clear about the set of skills that constitute 'digital skills'. Digital skills are often conflated with ICT skills, as opposed to digital competences or digital literacies, which tend to have a wider implication than ICT skills<sup>7</sup>.</li> <li>• The objective also requires people who have completed school and adults in the informal sector to be equipped with basic digital skills relevant to the labour market or specialised skills in the field of digitalisation and ICT. This has wide-ranging implications for policymakers and includes considerable risks when establishing metrics. The objective also implies a commitment to ongoing, regular waves of audit reports – say on an annual basis.</li> <li>• The objective calls for the availability of updated, quality training material which is relevant to the context within which it is to be deployed. This indicates that policymakers in participating countries need to collaborate with training providers and external partners.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• Target milestone for establishment of criteria to measure young people's and adults' digital skills</li> <li>• Target milestone for publication of a report that measures the digital skills of young people and adults in the participating country</li> </ul>

Objective 8	A critical mass of teachers, instructors and practitioners of the ecosystem are trained in mainstreaming digital and ICT skills necessary for their day-to-day work
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The objective calls for training programmes. This implies significant investment in resources (possibly external) that can train a large number of teachers, instructors and practitioners, in different parts of the country.</li> <li>• The objective calls for the availability of updated, quality training material which is relevant to the context within which it is to be deployed. This indicates that policymakers in participating countries need to collaborate with training providers and external partners.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• Target milestone for number of teachers, instructors and practitioners</li> <li>• Publication of annual reports with relevant statistics</li> </ul>

<sup>7</sup>For an introduction to digital competence frameworks, see the UNESCO-UNEVOC site at <https://unevoc.unesco.org/home/Digital+Competence+Frameworks>. For the first global standard for digital literacy, digital skills, and digital readiness see the DQ framework and underlying standards. DQ is a comprehensive set of technical, cognitive, metacognitive, and socio-emotional competencies that enable individuals to face the challenges and harness the opportunities of digital life. It is made up of three levels, eight areas, and 24 competencies composed of knowledge, skills, and attitudes and values. Standards are unique as overarching concepts that encompass the competencies of digital literacy, skills, and readiness, with a systematic structure built on the OECD's Education 2030 Learning Framework and by aggregating 25 leading global approaches, including UNESCO's Digital Citizenship Competency Framework, European Commission's Digital Competence Framework, US Common Sense's Digital Literacy Framework and Singapore's Skills Frameworks. See: <https://www.dqinstitute.org/global-standards/#contentblock1>

<b>Objective 9</b>	<b>An ICT and digital day in TVET is celebrated</b>
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The objective calls for a mechanism to ensure that an annual celebration is developed and presumably sustained.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• A date is set in the annual calendar for the ICT and digital day in TVET.</li> </ul>

<b>Objective 10</b>	<b>An accredited national centre of excellence for digital transformation of TVET</b>
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the objective, focusing on its relevance and feasibility in the participating country</li> <li>• The objective calls for the centre to be an institution that secures accreditation – presumably from a credible/recognised third-party national and/or international quality assurance authority.</li> </ul>
<b>Metrics</b>	<ul style="list-style-type: none"> <li>• Target date for establishment of institution</li> <li>• Target date for accreditation of institution</li> </ul>



### 3.3 Strategy templates

For the purpose of the initiative, the building blocks for the situation analysis can, de facto, be applied as components of the overall strategies. For the sake of completeness, the strategy templates simply replicate the building blocks. There are likely to be other strategies which are specific to the participating country, and particularly after the completion of the situation analysis process and related activities, including the strategic options available to the planning team.

Strategy 1	Provide policies, structure and resources for skills development
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the strategy, focusing on its relevance and feasibility in the participating country</li> <li>• Leadership, vision and commitment to change</li> <li>• Policy development</li> <li>• Governance and regulatory frameworks</li> <li>• Digital infrastructure and enabling technologies</li> <li>• Funding and financing</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Identify objectives supported (by number)</li> </ul>

Strategy 2	Anticipate, plan and monitor skills development
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the strategy, focusing on its relevance and feasibility in the participating country</li> <li>• Technology to facilitate information gathering, analysis and publishing</li> <li>• Systems to match supply and demand for skills</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Identify objectives supported (by number)</li> </ul>

Strategy 3	Develop, certify and recognise skills
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the strategy, focusing on its relevance and feasibility in the participating country</li> <li>• Digitalising delivery</li> <li>• Digitalising teaching processes</li> <li>• Digitalising learning pathways and guidance</li> <li>• Digitalising assessment, credentials and certification</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Identify objectives supported (by number)</li> </ul>

<b>Strategy 4</b>	<b>Improve access to skills development and the labour market</b>
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the strategy, focusing on its relevance and feasibility in the participating country</li> <li>• Policies for equity and access</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Identify objectives supported (by number)</li> </ul>

<b>Strategy 5</b>	<b>Provide skills for employability, decent work and productivity</b>
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Provide a full description of the strategy, focusing on its relevance and feasibility in the participating country</li> <li>• Digital skills frameworks</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Identify objectives supported (by number)</li> </ul>

### 3.4 Programme template

Inevitably, on the basis that the objectives and strategies are appropriated from the UNESCO documents, the programmes component of the strategic plan is where the planners in participating countries will focus their attention on specific initiatives which can be implemented within the political, economic, social and economic context.

Programme number	Insert programme title	
<b>Starts / ends</b>	Identify the timeframe for the programme	
<b>Overview</b>	<ul style="list-style-type: none"> <li>• Target date for establishment of institution</li> <li>• Target date for accreditation of institution</li> </ul>	
<b>Programme goals</b>	<ul style="list-style-type: none"> <li>• Identify and list the programme goals</li> <li>• Consider including a set of KPIs for each programme</li> </ul>	
<b>Supports</b>	Identify the strategy or strategies the programme supports	
<b>Metrics</b>	Identify and list a set of relevant metrics for the programme	
<b>Channels</b>	If applicable, identify the channels being used to implement the programme (in-person, online, hybrid, etc.), and whether these are paid, owned or earned	
<b>Resources</b>	Identify the resources to be deployed in support of the programme	Specify if these are internal/external/partners/consultants, etc.
<b>Budget</b>	<ul style="list-style-type: none"> <li>• Quantify the budget for the programme</li> <li>• Identify if the budget is readily available or dependent on third parties – in which case these should be identified</li> </ul>	
<b>Critical success factors</b>	Critical success factors for each programme could be listed in a template. Alternatively, critical success factors can be summarised under a risk analysis section of the strategic plan	

### 3.5 Action plan template

There are many action plan templates available to download. The following simple template is suggested for consideration by the planning team.

Action plan		
Programme	Programme manager	Strategy supported
Insert programme no. & name	Insert programme manager's name	Insert strategy no. & name which the programme supports

Task	Responsible	Priority	Status	Start	End	Notes
Task number and description	Insert person's name	High/ Medium/Low	Not started/ Ongoing Complete	Date	Date	Text
Task number and description	Insert person's name	High/ Medium/Low	Not started/ Ongoing Complete	Date	Date	Text

## 4. Strategic planning feedback loop

A strategic plan needs to be regularly monitored, reviewed and updated. It is essential that as the initiative starts to be implemented and surrounding circumstances change, the participating country must be prepared to revisit the core objectives, strategies and programmes and make corrective adjustments to meet the latest needs.

**Figure 7** illustrates a standard procedure for reviewing a strategic plan: its format is particularly pertinent within the context of the digitalisation of TVET and skills systems.

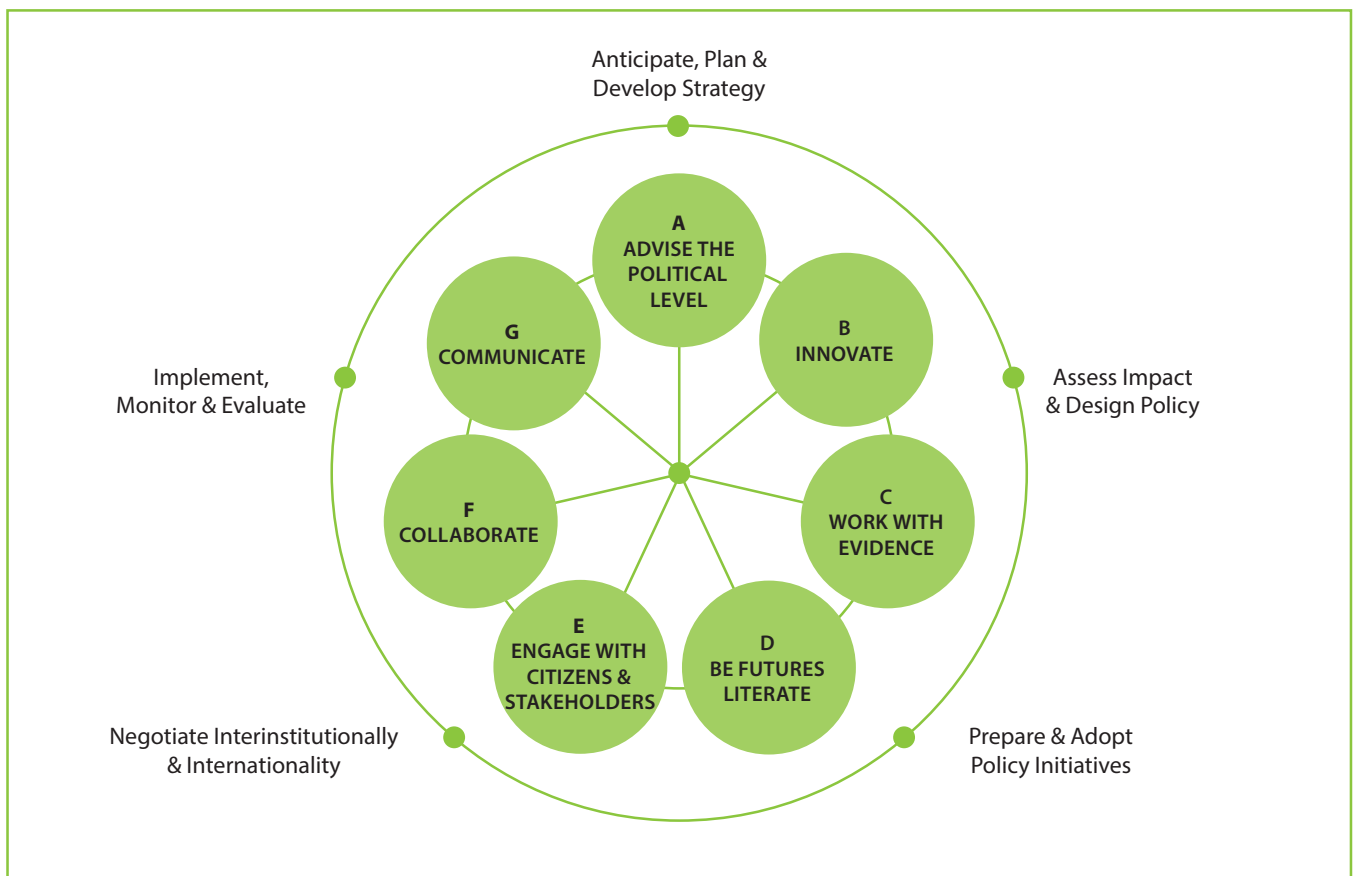


Figure 7: A strategic plan feedback loop  
Source: Schwendinger et al. (2022)

## 5. Further reading

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Sustainable  
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