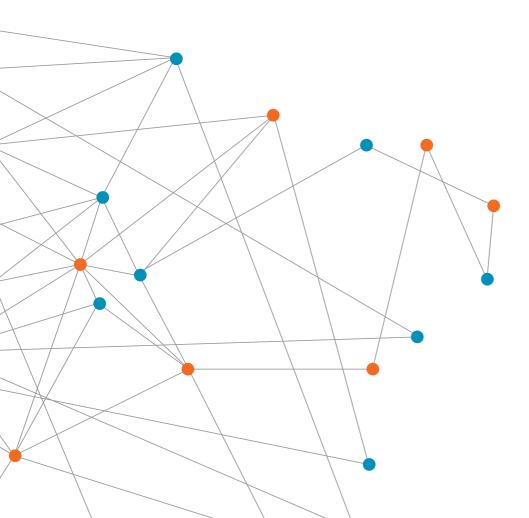




Government Innovation Framework





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Mohammed bin Rashid Centre for Government Innovation

This framework is brought to you by Mohammed bin Rashid Centre for Government Innovation. We believe innovation in government should be an everyday practice. Our vision is to be among the most innovative governments in the world.

We do this by experimenting with new approaches, enabling people with the right capabilities, networks and resources, thereby enriching our culture of innovation.



Experiment

A world-class multi-functional space for testing, creating and spurring innovation.



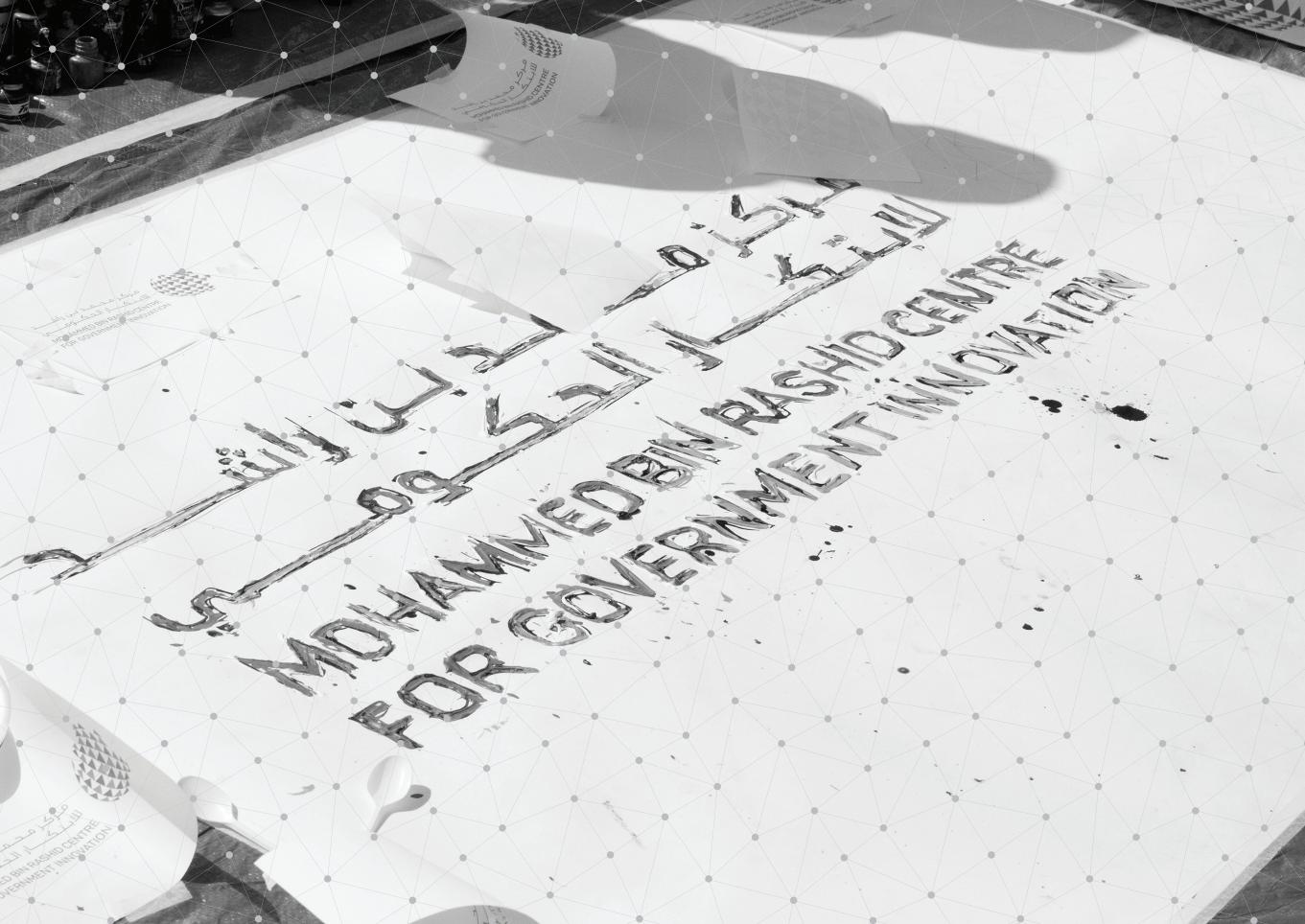
Enable

A highly skilled and well connected community of innovators with access to knowledge and practice that is impactful.



Enrich

Innovation is everyday practice in the UAE government and is recognized globally.



"In a strong and safe union, knowledgeable and innovative Emiratis will confidently and ambitiously build a competitive and resilient economy. They will thrive as a cohesive society loyal to its identity and will enjoy the highest standards of living within a nurturing and sustainable environment."

UAE Vision 2021

Introduction

The UAE government's vision is to become one of the most innovative governments globally by 2021. Emphasizing the importance of the country's innovation agenda, UAE President His Highness Sheikh Khalifa bin Zayed Al Nahyan declared 2015 the Year of Innovation. In line with this directive, H.H. Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice-President, Prime Minister and Ruler of Dubai, launched various initiatives to promote innovation, including the National Innovation Strategy, which focuses on seven sectors: renewable energy, transport, education, health, technology, water and space. His Highness also launched the Mohammed bin Rashid Centre for Government Innovation in September 2014 to encourage and motivate innovation in the public sector. Furthermore, a new position was created in the federal government- that of the Chief Innovation Officerduring the 3rd annual Government Summit in February 2015.





Defining Government Sector Innovation

Government sector innovation involves creating, developing and implementing innovative ideas that achieve a public benefit.

This might be a new product or service, an updated process, a suggested policy or it can involve approaching a challenge in a new way, or stopping a practice that isn't working anymore (such as outdated or unnecessary functions). Effective government sector innovation is based on the principle of continuous development, which takes into consideration the government services from the stakeholders' point of view and it relies on the partnerships between the

government and the citizens to come up with appropriate solutions to improve government services. The challenge is to integrate these new ideas into other existing systems and processes, and monitor the results in the long term to find out what works. Innovation also involves people, resources and systems and is a practice that must be encouraged at all government levels, as everyone has the ability to be innovative.

Types of Innovation

There are several types of innovation in the government sector. Examples include but are not limited to:





Adding challenges to the list of government procurement options to reduce costs and to tap into non-conventional sources of expertise (e.g. US government challenge.gov).





Boston's "Government on Wheels" mobile service brings public services to where citizens live, rather than expecting them to go to government buildings.











New York City`s "I-Zone" is a clear example of achieving radical transformation in the education sector. It focused on the principle of customized learning plans for students depending on their particular skills and interests.



Seoul's "Shareable City" policy for shared services

businesses focusing on

the sharing economy. It

complements traditional

citizens with spare rooms

government service

delivery. (e.g. elderly

can share their homes with young students. In addition, carpooling schemes have been

introduced.

has fostered new













In reality most innovations come as a result of a disciplined, planned and managed process. This means that innovation is to be approached like any project: setting objectives, defining phases and timelines, evaluating effectiveness, and providing the necessary human and/or financial resources.



The Innovation Process

Usually people tend to associate 'innovation' with creativity and flashes of inspiration, however, in reality most innovations come as a result of a disciplined, planned and managed process. This means that innovation is to be approached like any project: setting objectives, defining phases and timelines, evaluating effectiveness, and providing the necessary human and/or financial resources.

Traditionally, policy development has often been a linear process of analyzing problems in an abstract way and developing plans to tackle them as defined by a limited group of experts at a certain entity. The complex challenges of our modern world call for a different approach to policy making, which is more agile and experimental.

Today, citizens are placed at the heart of the policy, process and service development operation; they are the main stakeholders and they are involved at the beginning of the process so they can contribute to finding the appropriate solutions through their expectations and experiences.

The Innovation Process

When you look closely at innovation, you can discover that it includes more aspects than just a new idea. Creating something new involves different kinds of activities, particularly when it comes to tackling complex, inter-linked and inter-dependent issues.

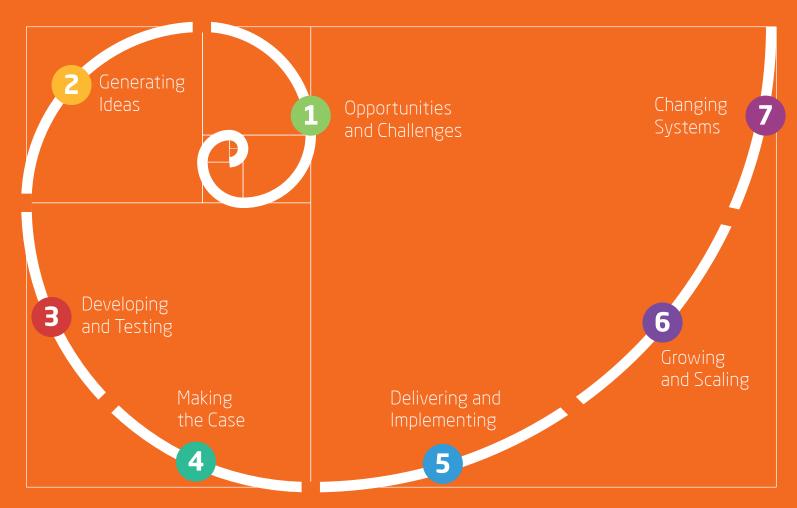
In this case, innovation involves running multiple, parallel, safe-to-fail experiments because by definition no single solution can be identified upfront. It also involves a diverse group of people, with different skills, capabilities and qualifications.

The innovation process usually passes through the following seven stages:



Stages of Innovation

The stages are explained in further details below. An innovation toolkit is available for you to use at each stage.



Source: Nesta

1. Opportunities and Challenges:

Exploring and identifying the scope of innovation



2. Generating Ideas:

Creating many new ideas to identify potentially useful ones



3. Developing and Testing:

Practically testing and improving ideas



4. Making the Case:

Gathering evidence that prove the effectiveness of the innovation



5. Delivering and Implementing:

Planning and organizing the implementation of the innovation



6. Growing and Scaling:

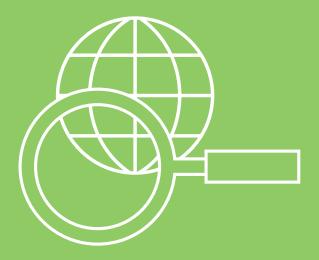
Growing, scaling and spreading innovation on a large scale



7. Changing Systems:

Influencing the wider system the innovation operates in



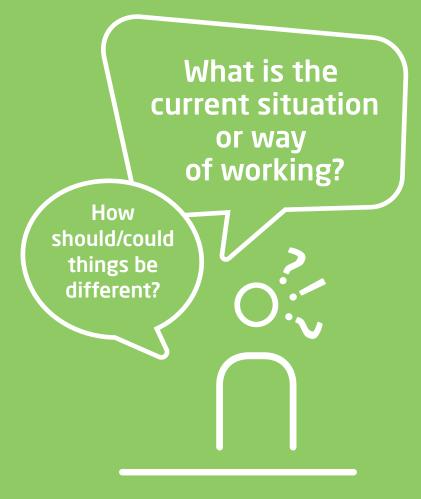


Opportunities and Challenges

Investing time at an early stage in conducting adequate research and getting a full understanding of the issue helps identify the opportunities and challenges that must be focused on. Responding to opportunities and challenges through the appropriate innovation requires in-depth research into the roots of the problem.

The innovative ideas come from analyzing problem at the first place. Critical elements should be considered during the research phase; raising the correct questions rather than jumping to conclusions, and showing flexibility in dealing with the various options.

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Where to Find Innovation Enablers

Monitoring market trends and stakeholders behavior contributes to recognizing innovation opportunities, e.g. spotting the potential use of new technologies.
 The best ideas might be captured from outside the entity. By adopting an open and collaborative approach to innovation, they can be accessed and exploited.
 Shaping future and long-term vision can help develop new ways of thinking, e.g. understanding stakeholder's behavior helps in developing innovative ideas.



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How to Identify Opportunities and Challenges

Allowing enough time to identify the opportunities and challenges requires an open-minded and flexible approach. It is possible to reconsider the area of focus and to be prepared to change direction in response to research insights.
Consulting with many people (from experts to stakeholders) and reviewing available literature are important elements in the early phase of the research
Developing good questions to identify the root cause of the problems or the challenges will help in framing the research and determining subsequent steps.
Activities mapping provides a helpful and clear visual presentation of the opportunities or challenges, and may help in finding possible solutions





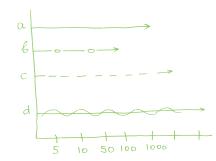
Working with Stakeholders to Generate Feedback

Engaging with and understanding existing and poter stakeholders are vital activities to focus on solutions that increase success whilst ensuring that these innovations meet their needs and expectations.
Compared to traditional methods (such as surveys an interviews), observing and taking notes of stakehold behaviors and opinions during research is a more powerful way of gaining an overall understanding of their behaviors and characters.
Journey mapping is a technique that can give a clear picture of the user or stakeholders' experience and can highlight problems in the current design of policies, services or processes.
Actively involving users or stakeholders in gathering and analyzing data, for example by using trained researchers who gather stakeholders' data, can also be a useful approach in exploring opportunities or challenges.
Relationships built during these stages are valuable and useful to the innovation process and must be nurtured and developed.

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Generating New Ideas



Generating new ideas is a central part of the innovation process and their development is essential. In fact, the ideas can be found everywhere and are easy to generate, replicate, modify and change. The best approach is to generate many ideas and to discard the useless ones.

The challenge is, therefore, how to spot the ones with high potential, how to develop them and how to transform them into real projects.



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Using Creative Thinking Tools and Techniques

- Disregarding criticism and judgment is so critical in the process of generating new ideas. It is important to cast off the usual constraints to be able to think creatively and keep an open mind on all the possibilities.
- Generating new ideas should be a collaborative process. Many methods can support effective teamwork.
- There are many available tools and techniques for creative thinking. A selection of these tools is available on the Mohammed bin Rashid Centre for Government Innovation's website. However, one size does not fit all and the most appropriate tool should be chosen for each task.



Fast Idea Generator

"I want to generate new ideas by thinking differently"



The Approach	(->	The Normal Rule	-\$	Bending, Breaking & Stretching the Rule
Inversion	Turn common practice upside down		Doctors treat patients		What if patients become doctors?
Integration	Integrate the offer with other offers		People access a range of services in different locations	\Longrightarrow	What if different local services had one point of access?
x Extension	Extend the offer		Schools provide learning opportunities to children and young people during the day	\Longrightarrow	What if schools also offered sports and recreation, and community learning after hours?
3 Differentiation	Segment the offer		There is a 'one size fits all' approach	\Longrightarrow	What if a service was personalised and differently segmented?
+ Addition	Add a new element		Supermarkets deliver groceries	\Longrightarrow	What if supermarkets delivered groceries and also provided hot meals to older people in their homes?
Subtraction	Take something away		Prisons are critical for an effective criminal justice system	\Longrightarrow	What if you had to close three prisons?
† Translation	Translate a practice associated with another field		Hospitals and airports are different kinds of operations	\Longrightarrow	What if airport management practices were applied to hospitals?
9 Grafting	Graft on an element of practice from another field		Teaching and coaching are seperate practices		What if coaching was introduced as part of secondary school education?
Exaggeration	Push something to its most extreme expression		Schools support children and young people to learn, but only within designated times and in a designated space		What if students could access learning, anytime and anywhere they chose?

Source: http://diytoolkit.org

Collaboration Between Individuals and Entities

- The opportunities and challenges that prompt us to innovate are usually complex that it is unlikely any small group of people will hold all the knowledge needed to understand all aspects of the problem or will have all the expertise necessary to find a solution. Collaboration between entities and individuals is one method of bringing people together to discuss a specific opportunity or challenge.
- The idea generation meetings are based on the principles of coordination and collaboration. Examples include open space events, conferences, hackathons, open seminars and social innovation labs.
- This type of collaboration should be chosen based or the development stage the project has reached, i.e. whether ideas are being generated or developed.

Openness in Ideation

contacts and networks. Openness in ideation process means getting new ideas from a wide range of people, through a range of means.

Approaches such as competitions, prizes, challenges and open approaches can attract new kinds of innovators and harness fresh thinking.

Although sourcing ideas from the stakeholders is not new; advanced digital technology companies are changing the nature of collaboration by offering crowdsourcing opportunities that strengthen the way organizations generate ideas with their staff, stakeholders and with the society.



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Developing and Testing

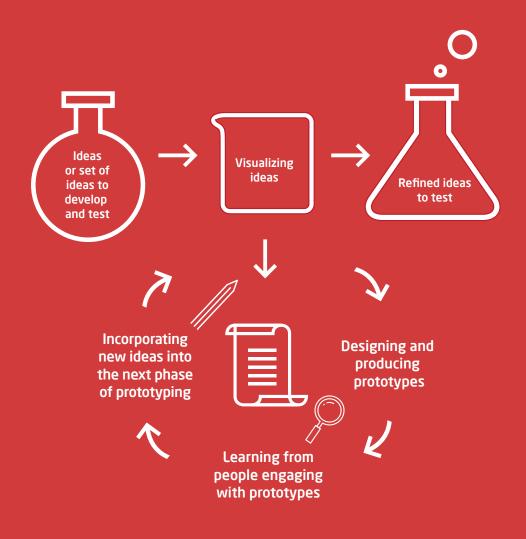


The development and practical testing of ideas are crucial parts of the innovation process. They involve investigation, learning, and iteration, by focusing on the idea that will be developed and selected. This process is unlikely to be linear and may involve looping back to earlier phases in order to reframe the area of focus on the ideas.

Involving a wide range of stakeholders (including stakeholders, users and investors, and anyone who might be involved in operations and delivery) will ensure having the chance to review and assess the idea and to further shape it. In turn, this will build more support for the idea and will increase the chances of successful implementation. It may also be helpful to work with design and development specialists who can support innovation.

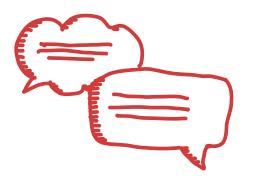
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Ideation Principles



New ideas are always vague even though the development of new ideas is about exploring ideas in-depth and developing their details. This process also requires a safe and motivational environment where risk-taking and experimentation are permitted and supported. Development is an iterative process; we rarely move from problems to solutions in a straightforward way. Therefore, it is helpful to view the development phase as comprising of a number of activities that may be repeated. Beta testing is one way of trying the idea before launching it. It is useful for innovators to note down comments and opinions, even criticism; this prompts the reshaping of ideas. Involving other people, especially potential users and stakeholders, is essential within this context. The development of new ideas involves two important kinds of processes: considering all possibilities and making the right decisions. Creativity and openness are critical, yet evaluation and decision-making are also needed in this phase.

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Ideation Methods

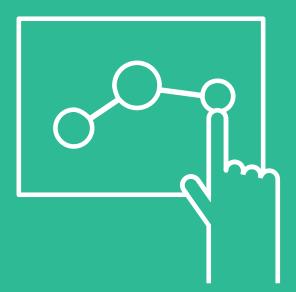
There are many creative and non-traditional ways to bring ideas to life through the design of services, products, processes or policies. They include visualizing ideas, building business models and mockups, and role-playing scenarios.
Prototyping is an approach to developing, testing and improving ideas on a small scale, prior to any significant investment.
Experimental prototypes can be used in the early stages to test the viability of an idea, real prototypes relate to later stages, when the product or service proposition is clear but needs further development.
Prototyping and piloting are not the same thing. In general, prototyping occurs before, or in preparation for a pilot. Piloting occupies the sharper, more refined end of the development process - the final testing stages are to smooth out minor issues, put in the finer details, and formally measure outcomes.

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Making the Case

It is important to plan the strategy for gathering evidence at every possible stage of the innovation process and to be prepared to adapt the approach as the idea develops.

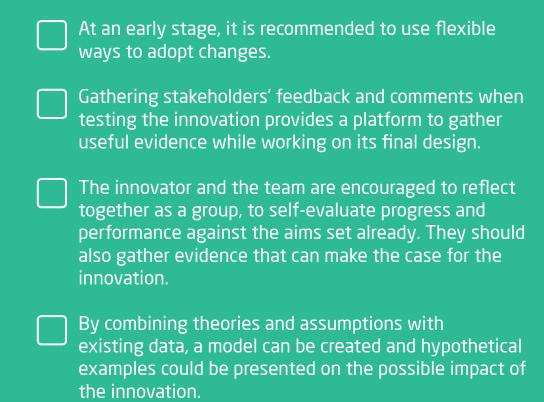
There is a range of methods for gathering evidence, and the approach adopted at the earlier stages will differ from the one adopted when the idea is more developed. As the innovation develops, the focus of evidence gathering will shift from helping refine the idea towards helping to convince others to support the innovation, and purchase or adopt what is being offered.

A robust evidence base will help in developing a feasibility study. This is an important document to make the case for the innovation when it is presented to the key stakeholders, investors and funders.

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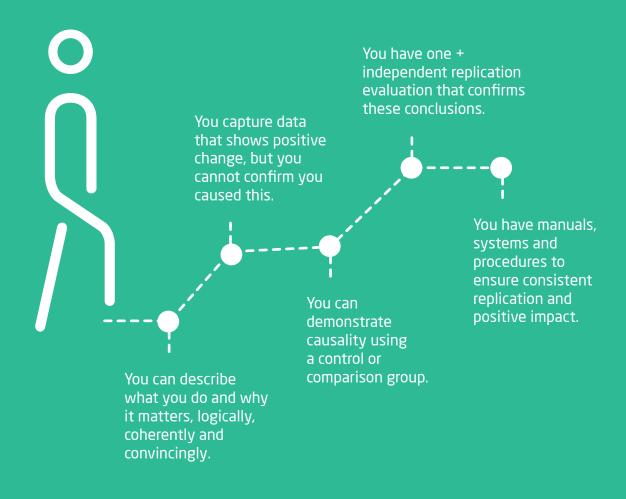
Making the Case

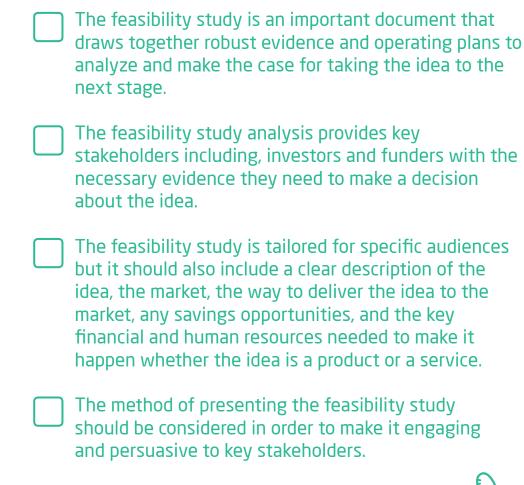


Finding Supporting Evidence

As the innovation reaches later stages of development, work will not only focus on evaluation and evidence gathering but will include rigorous testing of the idea to measure its impact. When presenting the innovation, the different audiences or stakeholders that are being convinced of the idea must be considered and the evaluation method must be adapted to focus on the information they are interested in. Experiment-based methods such as randomized control trials (RCTs, see glossary) can be used to gather more thorough evidence and identify the ideas that might succeed. Using the standards of evidence will help build confidence and demonstrate the impact of the innovation.

Developing the Feasibility Study



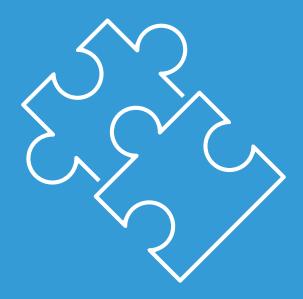


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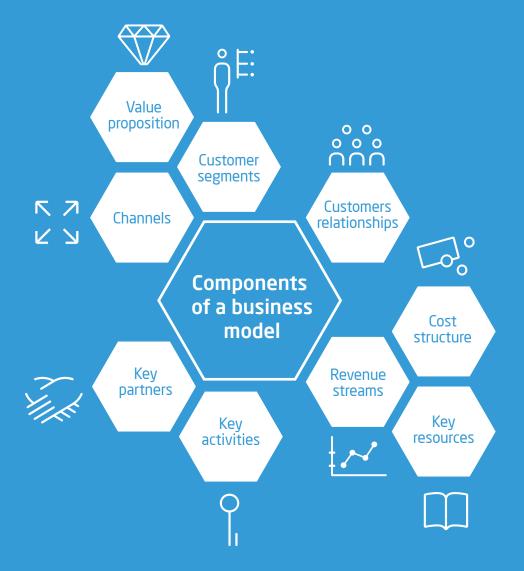


Delivering and Implementing

Implementation is the process of transforming an idea from concept to reality. In this phase, the attention will shift from designing the innovation to execution. This may involve the design of creative program, policy design or process.

Even the very good ideas can falter at this stage as the skills needed to develop and manage a process or service are quite different from those needed earlier in the innovation design stage. This is an intensive stage, where important decisions should be taken on the ownership of the innovation and the entity executing or sponsoring the idea.

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Developing the Model to Launch the Innovation

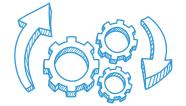
An effective and efficient business model is necessary to ensure the innovation fulfils its potential.
 Articulating the individual building blocks of the business model will help in refining the idea and turning it into a reality.
 The business model will form the spine of the business plan. Therefore, it must be continuously reviewed as the innovation matures and takes its final shape.
 Implementing an innovation within an existing entity poses different challenges, as the employees must be convinced of the need to change the existing models.

Source: Nesta 70

Preparing to Launch the Innovation

While preparing to launch the innovation, a decision must be made on its nature of and its relation to existing entities. The innovation could be implemented within the public or private sector or jointly between both of them.





Planning for Implementation

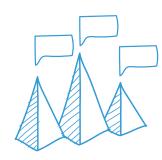
Setbacks or challenges and how to overcome the challenges that may hinder the execution of the idea must be taken in advance into consideration so the innovation is launched and implemented effectively.
 Establish groups or teams for the idea implementation, and engaging them at early stages. Spreading the idea to a wider audience will also be essential; therefore, it is important to develop a suitable communication plan.
 The innovation may also require legal authorization, so identifying what licenses or certificates may be required to bring it to life is essential.
 In case the implementation might not work as planned, a plan B should be in place to deal with any contingencies.



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Growing, Scaling and Spreading Innovation



Innovations take some time to reach their full potential; therefore, the focus is on the innovation and its development.

There are many ways to scale the innovation depending on its ownership.





Different Scaling Methods

The innovation's objectives must be identified before spreading it.
 There are many ways to scale an innovation for example: developing new legislation, building strategic partnerships, and achieving more growth in the entity. Each approach has its strengths and weaknesses that should be considered.
 Moving forward, you might face some challenges into your journey, so be flexible to accommodate any changes that might be required.



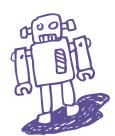
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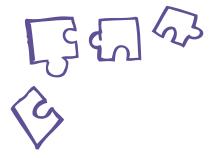


Spreading Innovation and Sharing Practice

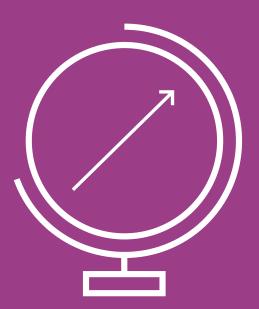
innovation will help in marketing the innovation and sharing practice on a wider scale.
Developing platforms for social communication and raising awareness about the idea will help spread it more widely.
It is best to simplify the idea and transform it into toolkits or other frameworks that can be replicated, used and adapted by others according to their needs.



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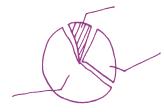
Changing Systems

System changes pose particular challenges; therefore, understanding the systems and their dynamics helps identify and adopt an appropriate leadership approach to change. The influence on the system changes largely depends on how knowledge and power are distributed within the system, and how the entity is structured.

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Understanding and Leading System Changes

- Mapping and understanding systems at different levels, whether on a federal or local level, helps visualize the dynamics that exist and identifies areas where efforts should focus to create change.
- Systems leaders have an important role to play in complex work environments to facilitate to the employees the understanding of this need to change.



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Incorporating Innovation at the Entity

Innovation does not simply happen. It requires structured and organized efforts to create opportunities, build skills and overcome any challenges. The seven guidelines below were set to embark on the entity's innovation journey:

2. Nurturing and recruiting innovative talent

Identifying the skills, competencies and culture needed for the entity to work innovatively, or recruiting the right capabilities and enhancing the employees' innovative skills.

1. Integrating innovation into the entity's strategy

Reviewing the entity's overall mission and objectives, and ensuring that opportunities for innovation are considered during the planning phase.

3. Creating a supportive culture and an enhanced innovative environment

Encouraging and rewarding innovation while giving staff the freedom to explore. Developing an enhanced innovative environment (specific areas or programs) where experimentation is allowed will help support the innovation process.

6. Measuring impact and sharing experience

Relentlessly measuring impact and quantifying success whenever possible, and sharing experiences across networks to improve the overall innovation process.

4. Engaging with stakeholders

Strengthen relationships with other non- government entities like the end users and external partners to tap into their innovative ideas and to benefit from their innovation capacity.

7. Openness / Transparency and access to information / data

Being transparent and providing easy access to data to build trust.

5. Building networks across and beyond government

Building networks of contacts sharing the same interests and building relationships across and outside the government sector, to share experiences and gain knowledge on innovation.

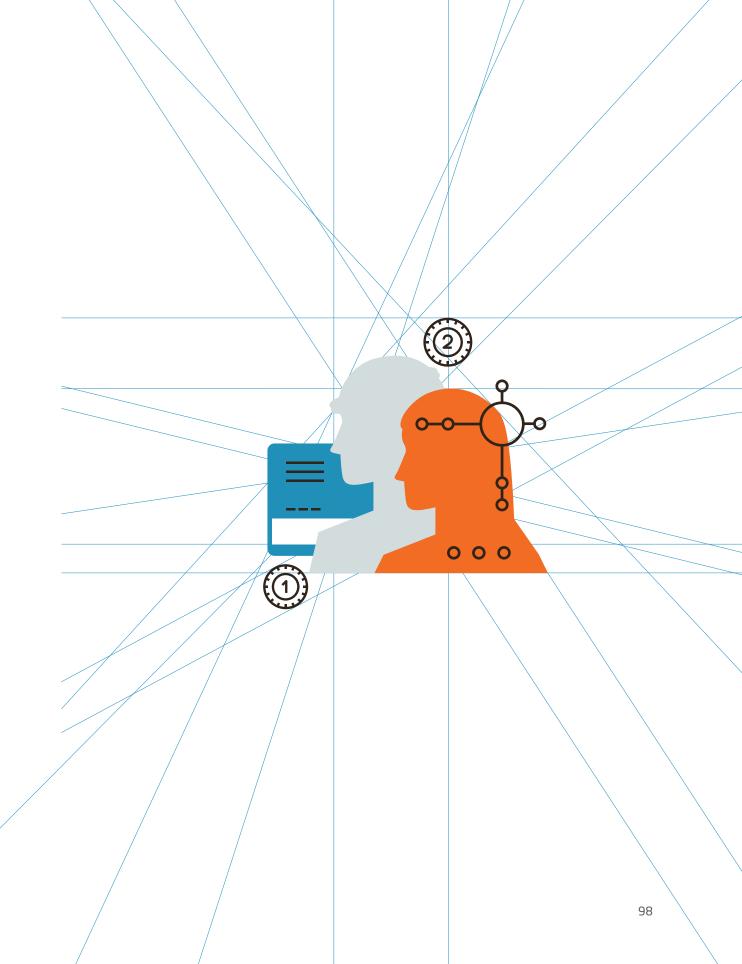
Funding Innovation

Despite the fact that many of the innovation activities can be undertaken as part of the existing activities. More often, additional financial resources are required to bring the innovation to life. Therefore, it is crucial to recognize the role that finance can play at each stage of innovation to enhance its success opportunities.

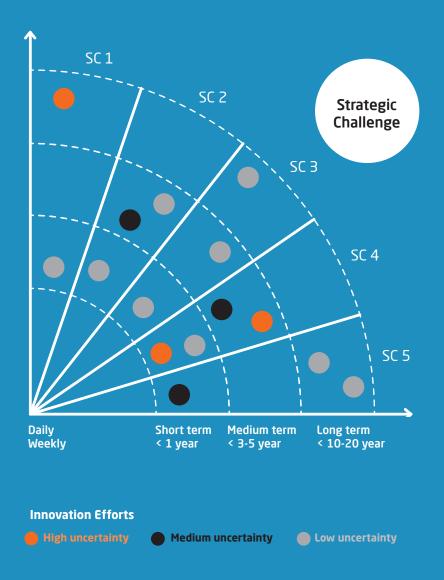
At the exploratory stage of innovation, funding can help in allocating sufficient time and resources to better understand the nature of the problem as well as the stakeholders' needs. At the stages of generating ideas, and testing and prototyping, funding can help in building prototypes of the ideas, while at the implementing and scaling stages, funding can help to turn initial ideas into effective solutions and a reality.

There are many ways to acquire funds for innovation. New ways can also be created to guarantee that individuals and teams get the chance to work on their innovations.

Motivational awards, such as the UAE Drones for Good Award, can be used to encourage people to solve a particular problem or to generate new technological ideas around a new technological opportunity.



Managing the Innovation Portfolio



Funding Innovation

To reiterate, innovation funding does not just mean purchasing technology. Innovation funding can be used for a range of activities; many of them have been outlined in this document. These include:

- ► Research activities, such as stakeholder's surveys and long term impact studies of policies and technologies.
- ► Design-led activities, such as service design, prototyping ideas, and piloting.

- ► Innovation training and skills development, attending conferences, seminars and formal training courses.
- ► Software development, such as apps and platforms.
- ► Open innovation incentives, such as awards and motivations.
- ► Evidence gathering and evaluation around a particular innovation.
- ► The scaling up of an innovation then proving its effectiveness.

Source: MindLab 100

Measuring the Impact

Innovation and shaping future are key criterion of the fourth generation of government excellence program recently launched by His Highness Sheikh Mohammad bin Rashid Al Maktoum, Vice- President and Prime Minister of the UAE and Ruler of Dubai. Based on this, each government will be assessed against its progress within its working environment.

Measurement and evaluation for innovation impact are crucial to demonstrate the value of innovative projects. In addition, they will be accountable to collaborate towards the achievement of the national KPIs that aim at making the UAE one of the most innovative countries in the world.

To achieve this KPI, an innovation plan should be developed at each entity so they can come up with an evaluation process to measure the impact of the innovation projects. This means that the entity should:

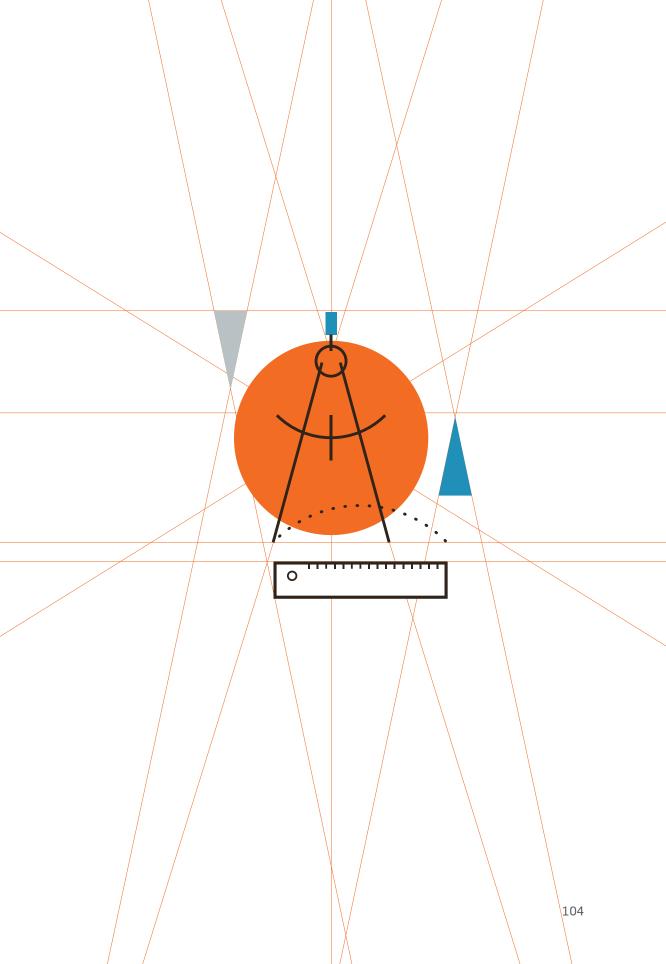
► Having a clear action plan based on a theory of change to achieve the desired objectives.

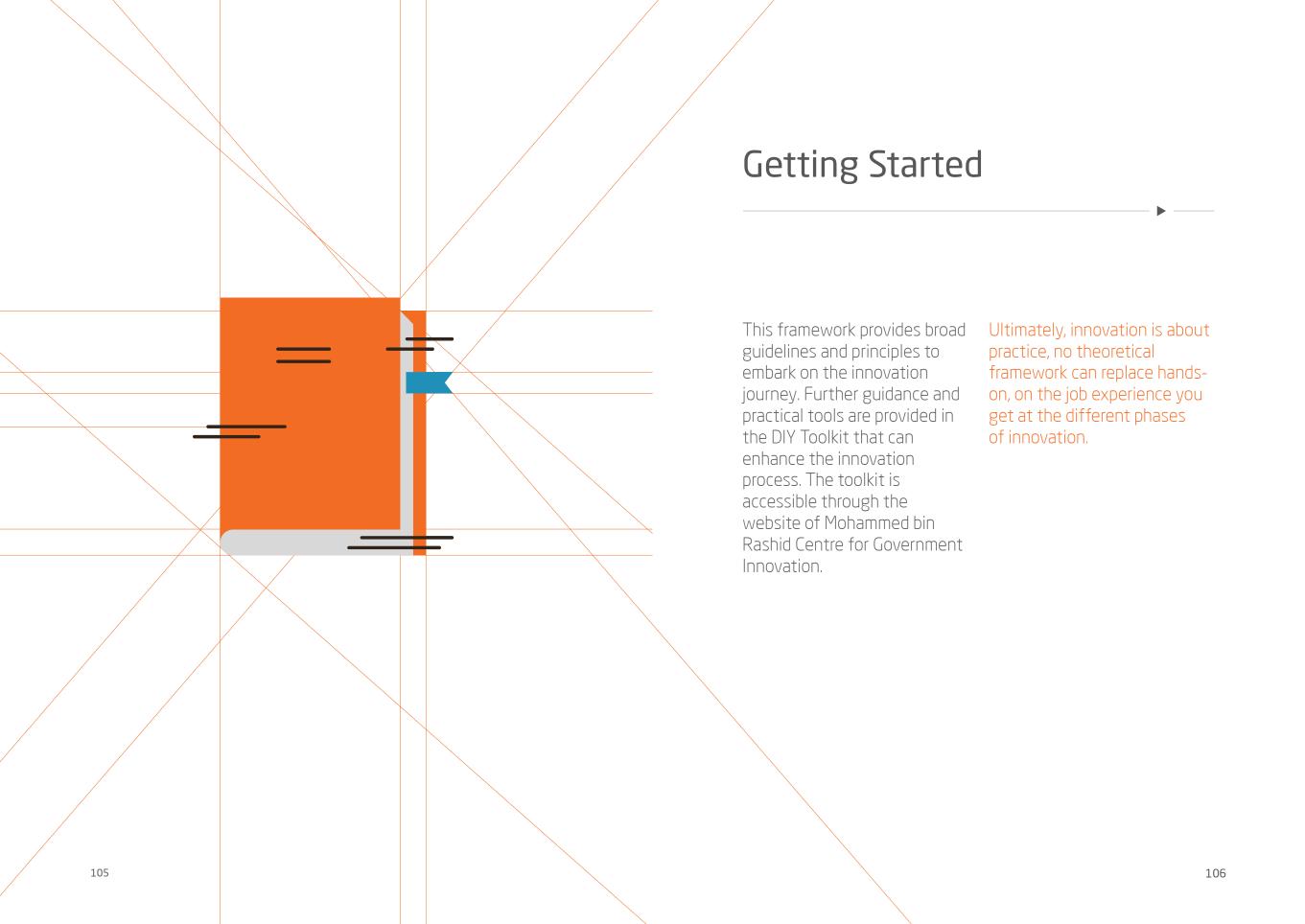
Measuring The Impact

- Adopting a flexible approach to measure the impact based on the size, scale and stage of different innovations.
- ► Evaluation criteria can be useful in ensuring that the evaluation is appropriate to the different stages of innovation, and to build confidence in the effectiveness of the innovation as it develops.

Ultimately, the success of an innovation should be measured according to the following criteria:

- ► Novelty: the degree to which the innovation has demonstrated a leap in creativity.
- ► Effectiveness: the degree to which the innovation has achieved tangible results.
- ► Transferability: the degree to which the innovation, or aspects of it, has shown promise of being spread or replicated by other government entities.
- ► Significance: the degree to which the innovation has successfully addressed an important problem of public concern in the government sector.
- ► Value: the degree to which the innovation has added value, saved costs or generated new revenues.





Glossary

- ► Beta testing: testing an innovation, product or service with users to assess its performance and gather feedback before the official launch.
- Challenge prizes: these are competitions that offer a reward to whoever succeeds in overcoming a challenge in the most effective way or to whoever overcomes the challenge first.
- ► Co-design: working with users to involve them in the design process and empower them to develop their own solutions.
- Cost-benefit analysis: a technique to compare and calculate the cost of an intervention against its proposed benefits.

- ► Creative thinking techniques: there are many methods to support creative thinking; visit the Centre for Government Innovation's website for a range of tools and techniques.
- ► Crowdsourcing: obtaining and curating a large number of inputs from a big group of people to generate valuable insights.
- ► Ethnography: a research method for understanding people and their motivations that helps design the innovation to better meet their demands.
- ► Foresight: an established set of techniques for using the future as a strategic planning tool, or as a way to inform innovative practices from policy development to service design.
- ► **Ideation:** the process of creating or generating new ideas

- ► Idea generation events: gatherings that bring people together to develop ideas collaboratively. Examples include open space events, conferences, hackathons, bar camps and social innovation camps.
- ► Iteration: the process of repeated trial and error in order to quickly test and improve on an initial idea.
- ► Open innovation: a process that allows collaboration on innovation with external as well as internal partners, thus sharing the risks and rewards.
- ► **Prototyping:** an approach to developing, testing and improving ideas on a small scale, prior to significant investment.
- ► Randomized Controlled Trials (RCTs): a way of testing the efficacy of an intervention

- by randomly assigning the intervention among members of a user population.
- ► Service design: the planning and structuring of a service to improve its quality and interaction between the user and provider.
- ► System mapping: a method for displaying the complexity of a system and visualizing the dynamics that exist in order to understand where to focus efforts to create change.
- ► Theory of change: a methodology to help outline the steps by which a plan is set to achieve goals.
- ► User journey mapping: a technique to give deeper insight into how a user experiences the service or product, and what issues or problems they might face while doing so.

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