Preface

Government of Mauritius is committed to provide citizen-centric, timely and efficient public services to the population. In this context, the Ministry of Public Service, Administrative and Institutional Reforms (MPSAIR) is spearheading the Public Sector Business Transformation Strategy (PSBTS), adopted in February 2017, to support Ministries and Departments in their transformative journey in attaining the set objective.

The PSBTS is premised on ten Implementation Pillars. Each of these Pillars has corresponding actions and deliverables. These also represent the benchmarks for measuring progress, performance and results.

The implementation of Smart (lean) processes in the public service is an integral part of the recommendations made in the PSBTS. The actions and deliverables under Implementation Pillar 5 (Smart Process) are:

- Simplify and automate business processes to be forward-thinking, rapid, responsive and efficient;
- Ensure that the process chain, system or network adds value and results in shorter decision cycles;
- Remove unnecessary or poorly designed regulations and develop mechanisms to minimise red tape;
- Use objective-oriented systems and processes that reflect emerging trends and the needs of the public, clients and employees (process becomes goal-oriented, not task-oriented);
- Relentlessly focus on the highest and best use/optimisation of process and resources to reduce overlap and duplication; and
- Continuously review business process to eliminate duplication and low value work so that scarce resources can be reallocated to high priority areas.

The need for Smart Processes also termed as Business Process Re-engineering has been underlined as pre-requisite under Directive No. 53 of 2020 from the Procurement Policy Office and past National Audit Office Reports.

This Manual provides guidelines to be followed to adopt a ‘Smart Process Framework’ in public service.

This Manual is intended to be used in conjunction with a formal structured training programme.

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1 Source: Public Sector Business Transformation Strategy, Implementation Guidelines, 2017
Table of Contents

Preface ........................................................................................................................................... 1

Table of Contents .......................................................................................................................... 2

Abbreviations .................................................................................................................................. 3

List of Figures .................................................................................................................................... 4

1. Introduction to the Manual ........................................................................................................ 5
   1.1. Purpose, scope and applicability ............................................................................................ 5
   1.2. Using the Manual .................................................................................................................... 5

2. Smart Process ............................................................................................................................... 6
   2.1. Definition ............................................................................................................................... 6
   2.2. Characteristics ....................................................................................................................... 6
   2.3. Benefits .................................................................................................................................. 7

3. Getting started ............................................................................................................................. 8
   3.1. Guiding principles .................................................................................................................. 8
   3.2. Approaches to Smart Process Improvement ......................................................................... 8
   3.3. Critical Success factors ....................................................................................................... 10
      3.3.1. Leadership ...................................................................................................................... 10
      3.3.2. Communication ............................................................................................................. 10
      3.3.3. Coordination .................................................................................................................. 10
      3.3.4. Change management ..................................................................................................... 11
      3.3.5. Performance Measurement ............................................................................................ 11
      3.3.6. People and empowerment .............................................................................................. 11
   3.4. Getting organised for smart process improvement ................................................................. 11
      3.4.1. Structure ......................................................................................................................... 11
      3.4.2. Logistics ........................................................................................................................ 11
      3.4.3. Capacity Building ......................................................................................................... 11
      3.4.4. Process Selection .......................................................................................................... 12

4. Smart Process Enablement Methodology ................................................................................... 12
   4.1. The 6-step methodology ....................................................................................................... 12
      4.1.1. Step 0: Preparation Phase ............................................................................................... 13
      4.1.2. Step 1: Understand the customer ..................................................................................... 13
      4.1.3. Step 2: Understand the process ....................................................................................... 13
      4.1.4. Step 3: Analyse the process ............................................................................................. 14
      4.1.5. Improve the process ....................................................................................................... 14
      4.1.6. Pilot the process ............................................................................................................. 14
      4.1.7. Implement and monitor the process ............................................................................... 15
      4.1.8. Tools and techniques for the Smart Process Enablement Technology ......................... 15

5. Coordination and collaboration ................................................................................................... 16
   5.1. Coordination and planning amongst various Ministries/ Departments ................................ 16
   5.2. Public Sector Business Transformation Bureau (PSBTB) .................................................... 16

6. Best practices in Smart process implementation ........................................................................ 18

References ......................................................................................................................................... 19

Part 2 - Implementation Workbook

Part 3 - Case Studies
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSBTS</td>
<td>Public Sector Business Transformation Strategy</td>
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<tr>
<td>BPR</td>
<td>Business Process Re-engineering</td>
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<td>ICT</td>
<td>Information and communication technology</td>
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<td>CRM</td>
<td>Citizen Relationship Management</td>
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<td>PDSA</td>
<td>Plan-Do-Study/Check-Act</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
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<tr>
<td>PSBTB</td>
<td>Public Sector Business Transformation Bureau</td>
</tr>
<tr>
<td>NPCC</td>
<td>National Productivity and Competitiveness Council</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1: Ten implementation pillars of PSBTS ................................................................. 5
Figure 2: Process classification ......................................................................................... 6
Figure 3: Characteristics of a smart process ................................................................. 6
Figure 4: Approaches to smart process improvement ................................................... 8
Figure 5: PDCA approach ............................................................................................... 9
Figure 6: Lean Six Sigma Approach .............................................................................. 9
Figure 7: Design thinking approach ............................................................................. 10
Figure 8: Critical Success Factors .................................................................................. 10
Figure 9: Facilitating Change Management ................................................................... 11
Figure 10: Getting organised for improvement ............................................................. 12
Figure 11: The 6-Step Methodology ............................................................................. 13
Figure 12: Step 0- Preparation Phase ........................................................................... 13
Figure 13: Step 1- Understand the customer ................................................................. 13
Figure 14: Step 2- Understand the process ................................................................. 13
Figure 15: Step 3- Analyse the process ....................................................................... 14
Figure 16: Step 4- Improve the process ...................................................................... 14
Figure 17: Step 5- Pilot the process .............................................................................. 14
Figure 18: Step 6- Implement and Monitor the process ............................................... 15
Figure 19: Tools used ..................................................................................................... 15
1. Introduction to the Manual

1.1. Purpose, scope and applicability

Implementation Pillar 5 of the Public Sector Business Transformation Strategy (PSBTS) makes it necessary to have a well-defined framework for ‘smart process’ projects.

![Figure 1: Ten implementation pillars of PSBTS](image)

This Manual provides a roadmap to guide management in the public sector to embark on a ‘smart’ process journey. More specifically, it intends to:

1. Provide a structured approach to improve existing processes or incorporate new ones to achieve excellence in governance and service delivery;
2. Create an understanding on the roles and responsibilities of public officers in handling process improvement projects.

The guidelines can be applied to any Ministry/Department and can be utilised to improve processes that interface between public and private service providers.

Relevance to ISO 9001: 2015

One of the key principles of the ISO 9001:2015 standard is continual improvement. Processes need to be improved to consistently provide products or services that meet customers’ requirements. This manual provides a structured approach on how this can be done to be compliant with the development and maintenance of ISO 9001:2015 standard.

1.2. Using the Manual

The Manual will be useful to any staff involved in smart process project implementation. It is highly recommended that some form of formal introduction/training be conducted for concerned officers before they start the re-engineering exercise. This Manual may thus have to be supported by appropriate, structured capacity-building and induction programmes. The Manual is structured as follows and should be used complementarily:

**Part 1** provides an overview of the key steps to build smart processes.

**Part 2** consists of an implementation workbook that walks users through various steps with useful tools, techniques and templates.

**Part 3** showcases case studies and examples of smart processes.

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2 Includes Public Sector Organisations
2. Smart Process

2.1. Definition

A process is a series of progressive and interdependent steps by which an end result is attained. It is characterised by an input or trigger, a series of steps and a defined output or end result. See Part 3 of the manual for more details on process and associated terms.

A **smart process is lean, effective, efficient, shares the right information at the right time to provide a better quality of government service thus enhancing citizens’ welfare.**

A ‘best-in-class’ or ‘world-class’ process is smart. A world class process is recognised as its functional best and becomes a benchmark for others (figure 2).

![Figure 2: Process classification](image)

2.2. Characteristics

- Consistently delivers good end-results
- Is lean, bereft of wastes and can be adapted to different situations
- Provides timely inputs for its effective management
- Facilitates Citizen Relationship Management (CRM) effectively
- Reduces the need for manual intervention and/ or associated controls
- Can be easily automated

![Figure 3: Characteristics of a smart process](image)
2.3. Benefits

Smart processes enable Ministries and Departments to provide more value to citizens, employees and other stakeholders. In a nutshell, some of the benefits are:

- Citizens reap the benefits of government policy and action which start reaching them consistently and faster. This helps in fostering a positive public image within a short span of time;
- Resource efficiencies and overall productivity gains are acquired;
- Unnecessary bureaucracy and non-value adding steps are eliminated;
- Reduced workload provides opportunities to employees to contribute to the improvement of the work processes; and
- Results are better managed, thus creating a strong sense of ownership in the organisation.
3. Getting started

3.1. Guiding principles

Prior to embarking on a smart process improvement journey, the following principles should be adopted:

1. **Appreciation of a system**

   An organisation is a system. Actions in one part of the system will have effects in other parts. Thus, it is important to assess the impact(s) of the improvement activity on the whole organisation.

2. **Variation**

   Variation is part of our daily lives. Everyday is not the same. There are always variations between people, in outputs, in service and in products. It is important that we distinguish between a normal situation and an abnormal one.

3. **Theory of knowledge**

   No theory is ever proved. There is a loop of continuous planning, testing, implementation and failing until success is met. The Plan-Do- Study- Act (PDSA) cycle is a systematic approach for improving processes. It has been adapted as the basis of process improvement in the public sector. See Part 2 of the Manual for more details on PDSA.

4. **Human Psychology**

   No improvement activity is successful without people. It is essential to recognise that each staff brings extraordinary talents, skills and abilities to the organisation. Management should leverage on the knowledge of psychology to better understand what motivates them and take appropriate measures.

3.2. Approaches to Smart Process Improvement

Process improvement initiatives require a framework and a systematic methodology. Various frameworks have been developed, adapted and used over the years. Some common examples are shown in figure 4 below:

![Figure 4: Approaches to smart process improvement](image)

**Total Quality Management (TQM)**

TQM is management style for improving business processes that includes customer, strategy, people, data, quality processes etc.
PDCA

The PDCA is one of the oldest problem-solving methodologies since the 1930s. It is commonly known as the Deming circle. PDCA is known for its customer focussed quality driven culture.

![PDCA Diagram](image)

**Figure 5: PDCA approach**

Lean

Lean is defined as a process improvement strategy that focusses on improving the speed of the process and respond to the customer needs by eliminating wastes from the process.

Six Sigma

Six sigma is defined as a continuous improvement strategy that focusses on improving quality and reduce variability by using statistical methods.

Lean and Six Sigma

Lean and Six Sigma is a combined methodology that can improve the service, product quality and speed by using statistical and non-statistical methods. It focusses on maximising the value delivered to the customers. It adopts the systematic approach of Define Measure Analyse Improve Control (DMAIC) as shown in figure 6 below.

![Lean Six Sigma Diagram](image)

**Figure 6: Lean Six Sigma Approach**

Design Thinking

Design thinking is the newest problem-solving methodology. It is a human centric approach integrating people, processes, business, leadership and technology. It is an iterative process in nature. It is a way to think and ideate on a solution to address the problem or better meet the customer need. It is a
A smart process is a means to attain the objectives set by an organisation. Continuous and effective management of processes are crucial. Successful process improvement efforts involve the following key elements which collectively support the development of a continuous improvement culture.

### 3.3.1. Leadership
Supportive leaders always inspire confidence and enthusiasm to their team which are vital to make concrete improvements. Top management should take critical steps to support process improvement initiatives and actively engage process improvement teams.

### 3.3.2. Communication
An effective communication strategy is needed for any change initiative. Without consistent supportive messages from top management, process improvement efforts are unlikely to succeed.

### 3.3.3. Coordination
Once an organisation has adopted process management as a strategic direction, with process improvement projects underway, a synergistic approach and consistency within the organisation will be essential to ensure maximum benefits. A set of process directives and agreed guidelines are needed within the organisation to draw people together and prevent different parts of the organisation pulling in different directions.
3.3.4. Change management

Processes are executed either by people and/or supported by technology. It is only people who can make or break the implementation of a smart process improvement project. It is of utmost importance to get them ‘on board’ to support the project, otherwise, chances of failure are high. Project teams need to spend time and effort on human change management. The people aspects of every process change and activity must be assessed and acted upon in an understanding and empathetic manner. See Part 2 of the Manual for more details on change management strategy.

![Figure 9: Facilitating Change Management](image)

3.3.5. Performance Measurement

“If You Cannot Measure It, You Cannot Improve It.” Key Performance Indicators for each process must be defined, measured, analysed and monitored for improvement.

3.3.6. People and empowerment

People are significantly impacted by process improvement projects. Their roles may change quite dramatically with changing tasks and activities. Yet, they are key to implementing new process designs. Process management is a system that breaks down barriers among frontline staff and management teams. It empowers frontline staff to take the lead on problem-solving. They need to be provided with relevant training and tools to identify and solve problems.

3.4. Getting organised for smart process improvement

3.4.1. Structure

Ministries and Departments need to develop the structure to manage and foster a culture of process improvement in the organisation.

3.4.2. Logistics

Facilities should be made available for project teams to meet and discuss, e.g., meeting place, flip-charts, markers amongst others.

3.4.3. Capacity Building

Ministries and Departments should ensure staff members are trained to undertake process improvement projects. In addition, it is useful to build the capacity of staff in problem-solving and identifying inefficiencies as part of their daily work practices. This allows process improvements to be embedded into the organisation’s fabric.
3.4.4. Process Selection
Selecting the right processes for improvements can have a tremendous impact on a Ministry/Department. Generally, management of Ministries and Departments identify problem areas and select processes to be investigated. They should regularly consult officers working directly in different processes for their inputs and suggestions. They should also listen to the ‘voice of the customer.’

Prior to selecting any process for improvement, management should understand the Ministry’s/Department’s vision, mission, goals, strategic intent, objectives, implementation strategy, etc. They should ensure that process improvement projects have a clear link to the organisation’s strategy and add value to it. Process improvement can also be triggered due to new government policies/procedures, legislations, technological advances, market demand etc.

Wherever applicable, the Transformation Implementation Committees (TICs) should set up a Steering Committee for Smart Processes in Ministries and Departments. The Steering Committee will report to the Accounting Officer on a regular basis until completion of smart processes in areas identified.

See Part 2 of the Manual for more details on getting organised.

![Figure 10: Getting organised for improvement](image)

4. Smart Process Enablement Methodology
4.1. The 6-step methodology
The 6-step methodology below is highly recommended for smart process enablement. It is based on a combination of the various approaches mentioned in section 3.2 (Approaches to Smart Process Improvement).

See Part 2 of the Manual for more details on the 6-step methodology, tools, techniques and templates.
4.1.1. Step 0- Preparation Phase
During this phase the team should align the process with the strategic objectives of the Ministry/Department, define the scope of the smart process, identify the key stakeholders and their requirements.

Output of this step: The scope of the process is defined.

4.1.2. Step 1: Understand the customer
Effective process improvement puts the customer at the centre-stage. Customers decide if an action, service or product represents value to them. In this phase, the requirements and expectations of the customer is understood.

Output of this step: Process effectiveness is understood.

4.1.3. Step 2: Understand the process
In this phase, the process is mapped and measured to understand the efficiency of the process.

Output of this step: Process efficiency is understood.
4.1.4. Step 3: Analyse the process
In this phase, the non-value-added activities (wastes) are identified. Data is also collected and analysed to determine the root causes of the wastes.

![Step 3: Analyse the Process](image)

- 1. Display the data for analysis
- 2. Measure the deviation from the target
- 3. Question the deviation(s)
- 4. Walk the process and identify wastes
- 6. Analyse root causes of the wastes

**Figure 15: Step 3- Analyse the process**

**Output of this step:** Root causes of the problem are identified.

4.1.5. Improve the process
Special causes are eliminated, the process is streamlined and the obsolete components in the process steps are redesigned.

![Step 4: Improve the Process](image)

- 1. Use the value stream map to improve
- 2. Identify quick wins
- 3. Redesign, repair or replace the process
- 4. Select the best Business Process Re-engineering method

**Figure 16: Step 4- Improve the process**

**Output of this step:** Improved process is ready for testing.

4.1.6. Pilot the process
Test the process before launching.

![Step 5: Pilot the process](image)

- 1. Document the new process
- 2. Install test changes
- 3. Conduct a simulation test
- 4. Pilot the new process
- 5. Analyse the impact on operation
- 6. Check if the set goals are met

**Figure 17: Step 5- Pilot the process**
Output of this step: Smart process is ready to roll-out.

4.1.7. Implement and monitor the process
Implement the new process, monitor results, troubleshoot problems and track trends.

Step 6: Implement and monitor the process

1. Select implementation team and strategy
2. Set implementation priorities
3. Develop action plan
4. Manage changes
5. Set an implementation monitoring system
6. Standardise the process
7. Monitor the process
8. Track developments
9. Review Customer Satisfaction
10. Review, improve as needed

Figure 18: Step 6- Implement and Monitor the process

4.1.8. Tools and techniques for the Smart Process Enablement Technology
The smart process enablement involves the use and application of tools and techniques wherever required to speed up the creation of an improved process in a systematic manner. Some of these tools are given below. See Part 2 of the Manual for more details on each tool.

Several software can be used to facilitate business process re-engineering. Some examples are:

1. IBM Business Process Manager (IBM Blueworks Live);
2. Microsoft Visio;
3. Minitab and
4. Oracle Business Process Management
5. Coordination and collaboration

5.1. Coordination and planning amongst various Ministries/ Departments

Each Ministry and Department is responsible to deliver on the Implementation Pillar 5 of the Public Sector Business Transformation Strategy, that is, ‘Smart Process.’ Some processes cut across different organisational structures and arrangements. It is therefore essential to identify collaborative arrangements needed upfront.

5.2. Public Sector Business Transformation Bureau (PSBTB)

The Public Sector Business Transformation Bureau (PSBTB) which operates under the aegis of the Ministry of Public Service, Administrative and Institutional Reforms has been set up in line with recommendations made in the Public Sector Business Transformation Strategy following approval by Government in October 2017. The Bureau has been entrusted with the mandate to drive, coordinate, evaluate and monitor the Business Transformation programmes, initiatives and processes in the Public Sector.

The Bureau also advises and supports the High-Powered Committee on Public Sector Business Transformation, the National Planning and Results Committee and the Transformation Implementation Committees set up at the level of each Ministry and Department. In pursuance of its stated Mission and Objectives that closely supports smart process enablement, the scope of its role in the context of this Manual is summarised hereunder:

Role and Responsibilities of Public Sector Business Transformation Bureau

1. Ensuring relevance of the Manual

The Public Sector Business Transformation Bureau (PSBTB) shall:

- Ensure that the latest version of the Manual is available in Ministries and Departments. A document control system shall be maintained to enable this;
- Ensure that all updates, corrections and revisions originate from the Bureau; and
- Undertake periodic and timely reviews of this Manual through the support of the National Productivity and Competitiveness Council (NPCC). This, inter-alia, will include two types of reviews:
  i. Ad hoc or as and when needed – the guidelines provided are based on the existing structures, imperatives and strategies. Reviews might be required to keep pace with emerging needs.
  ii. Planned periodic reviews - once every two to three years to assimilate experience gained and to align with National Strategies and Plans.

2. Training and capacity building programmes

- Identify training, learning and skills development requirements in the Public Service to support the Smart Process Enablement;
- Facilitate and coordinate capacity building programmes for smart process enablement for Ministries/ Departments with organisations such as the Civil Service College Mauritius, NPCC and experts appointed in this regard.

3 The NPCC collaborated with PSBTB to author this manual
3. **Focal point**
   - **Facilitator:** Whenever respective Ministries/Departments decide to re-engineer a given process, PSBTB shall be informed. It shall
     - Revert with relevant guidance in accordance to the Manual;
     - Support in identifying collaborating entities;
     - Share relevant know-how; and
     - Facilitate the training of the improvement team as required.
   - PSBTB will extend additional support to Ministries/Departments in line with its mandate.
   - In the event Government decides to revamp public services across various Departments for better efficiencies as part of an overall strategic policy and transformational initiative, PSBTB shall spearhead and coordinate this initiative.

4. **Best practices**
   - Maintain a repository of all processes across Ministries/Departments that impact citizen services and are pertinent to smart process enablement as the case may be. The repository shall be shared with Ministries/Departments to promote best practices.
   - Constantly remain in the lookout for best practices and latest technological advances in the public sector in other countries for possible adoption locally.

In line with the above roles, PSBTB shall also periodically review its capacities to be able to fulfil these obligations.
6. Best practices in Smart process implementation

In this section, good practices in smart process implementation are listed. The compendium of good practices comes from organisations, both in private and public sector, and will be useful to be adopted for the current purposes:

- Understanding customer perception is vital for smart process enablement. A good process is defined as one which consistently delivers the end results to its customers.
- Citizen value is key to success of smart process project. What people at large perceive as value is more relevant than what the service provider feels.
- Process innovation happens in two ways. Seeking ideas from those who manage the process steps and ‘smart’ adoption of information and communication technologies. Some Information Technology (IT) packages come with built-in best practices. NOTE: Never automate an existing low performing process, re-engineer it first.
- While applying best practices to the current situation use iterative, experience-based approach to re-engineer. Plan for change management in the early stage. The biggest challenge always comes from people not willing to change.
- Set performance targets for the process owner and give him/her the freedom to make changes to the process.
- Information sharing and communication about the intent and progress of the on-going smart process implementation project, especially with the stakeholders, is vital. This promotes better involvement and helps cope with the change management challenges.
- There is no great purpose served in making every process smart. But greater advantages can be realised by making the entire end-to-end process smart.
- Keep it straight and simple. Ensure that all the steps are followed. Pause when you have to review results before moving on. This helps in avoiding rework and repairs to work undertaken.
- All possible opportunities for improving the process must be considered in one go. If something must be changed, it should be changed now.
- The process should be kept agile to keep pace with changing technology, customer needs, breakthrough ideas from the market, or key policy changes.
- A smart process is as smart as it is managed. This is often the case as new processes will need new management styles and approaches.
References

1. Understanding Organization as Process.  
   http://www.untagsmd.ac.id/files/Perpustakaan_Digital_2/ORGANIZATION%20The%20Hernes_Understanding%20Organization%20as%20Process-The%20For%20Tangled%20World_04154.pdf


   https://dl.uswr.ac.ir/bitstream/Hannan/141382/2/9783662565087.pdf

   https://repository.dinus.ac.id/docs/ajar/Fundamentals_of_Business_Process_Management_1.pdf

5. Understanding the Customer: Examining the Perceived Value.  
   https://odr.chalmers.se/bitstream/20.500.12380/257362/1/257362.pdf


7. Outstanding customer service: the key to customer loyalty.  

8. What customers want?  
   http://www.untagsmd.ac.id/files/Perpustakaan_Digital_1/CUSTOMER%20RELATIONSHIP%20WHAT%20CUSTOMERS%20WANT.pdf


    https://en.wikipedia.org/wiki/Change_management

    https://en.wikipedia.org/wiki/Change_management

14. Learning to see: Value Stream Mapping – to create value and eliminate muda, Mike Rother and John Shook, 1999.  
    https://perso.crans.org/fortineau/ressources_maxence_nouchet/Mike%20Rother%20Learning%20to%20See%20Version%201.2%20(Kanban)_Value%20Stream%20Lean.pdf


39. What is PDCA? https://asq.org/quality-resources/pdca-cycle

40. PDCA (Plan Do Check Act) - Continually Improving, in a Methodical Way. https://www.mindtools.com/pages/article/newPPM_89.htm
