RESPONSIVE

Investments

Quadrants of importance

Safer commuting in 2025-2026

SMART Ward Field Book

SMART CITIES

the acceleration of smart city projects

SMART PLANNER

SIGNATURE AREAS

Code of Conduct

Innovation & Improvement

Assistive Analytics
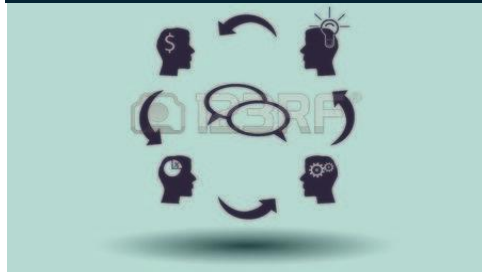
Lateral Thinking

Green Thinking

STANDARD OPERATING PROCEDURE

Operations Research

Learning, Knowledge

Case Studies
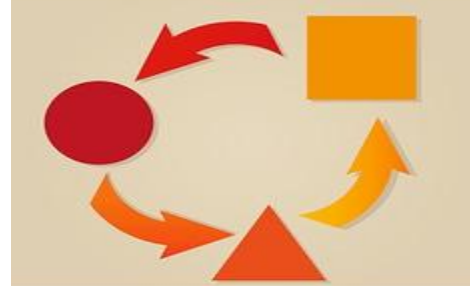
Right to Education

Supportive Assessment

End of lifecycle

SOCIAL ACCOUNTABILITY

SA 8000

Trends and Investment Cycle

Social Patterns

Care & emergence

Operations Research Problems (OP-R) and Responsive Thinking

Visualizing Belief and Conceiving furtherance

OP-R emergence

lifetime

EnABLErs

Proportionate problem solving and assistive analytics for signature areas

the focal point

SMART Ward Field Book

A. Vision for SMART Wards

1. To design SMART concepts like Safer Commuting in a ward, we must consider the underlying issues in the ward's systems or foundation and thereon consider gaps, possibilities and conditions that are known to cause problems or risks to people.

2. To design SMART wards with integrated functions, we must identify the systems & elements that are part of a ward like the road infrastructure, systems & traffic engineering, the electricity transmission, distribution and management and/or utilization systems, the water supply and management and/or utilization systems, the sewage & drainage networks, the waste demarcation, collection systems and disposal and/or landfill sites, the homes, facilities, industries and factories, the community development and service networks, the disaster management and emergency response systems, the presence of agricultural sites, forests, parks & gardens, the presence of river systems, lakes, ponds, wells, borewells, the location of super markets, markets, shopping and retail outlets etc.
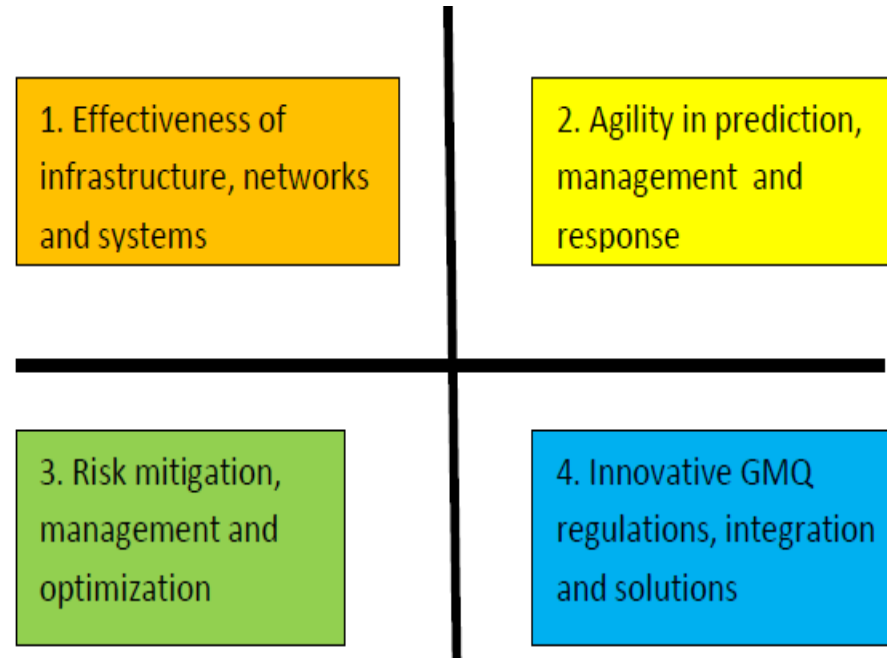
SMART Ward Field Book

A. Vision for SMART Wards

3. This document includes all these systems & elements in a SMART Ward Portfolio and then divides them into small manageable components that need innovative engineering solutions and cyber-physical systems, and a concept called Drawing to Life systems.

4. The SMART Ward and its framework permits the condition monitoring, predictive monitoring, data integration and optimization of its systems and elements to make them compliant, predictive, responsive and reliable, where the main focus is to reduce downtime, problems and risks. .

SMART Ward Field Book

The following quadrants illustrate what is needed in a SMART Ward in terms of Governance, Management and Quality of experience (termed as GMQ).

1. Effectiveness of infrastructure, networks and systems	2. Agility in prediction, management and response
3. Risk mitigation, management and optimization	4. Innovative GMQ regulations, integration and solutions

5. The 4 quadrant approach will make it easier to define and develop TMS systems (Time Motion Scale study systems) to permit the architects of the SMART Ward to incorporate zoning and indices like:
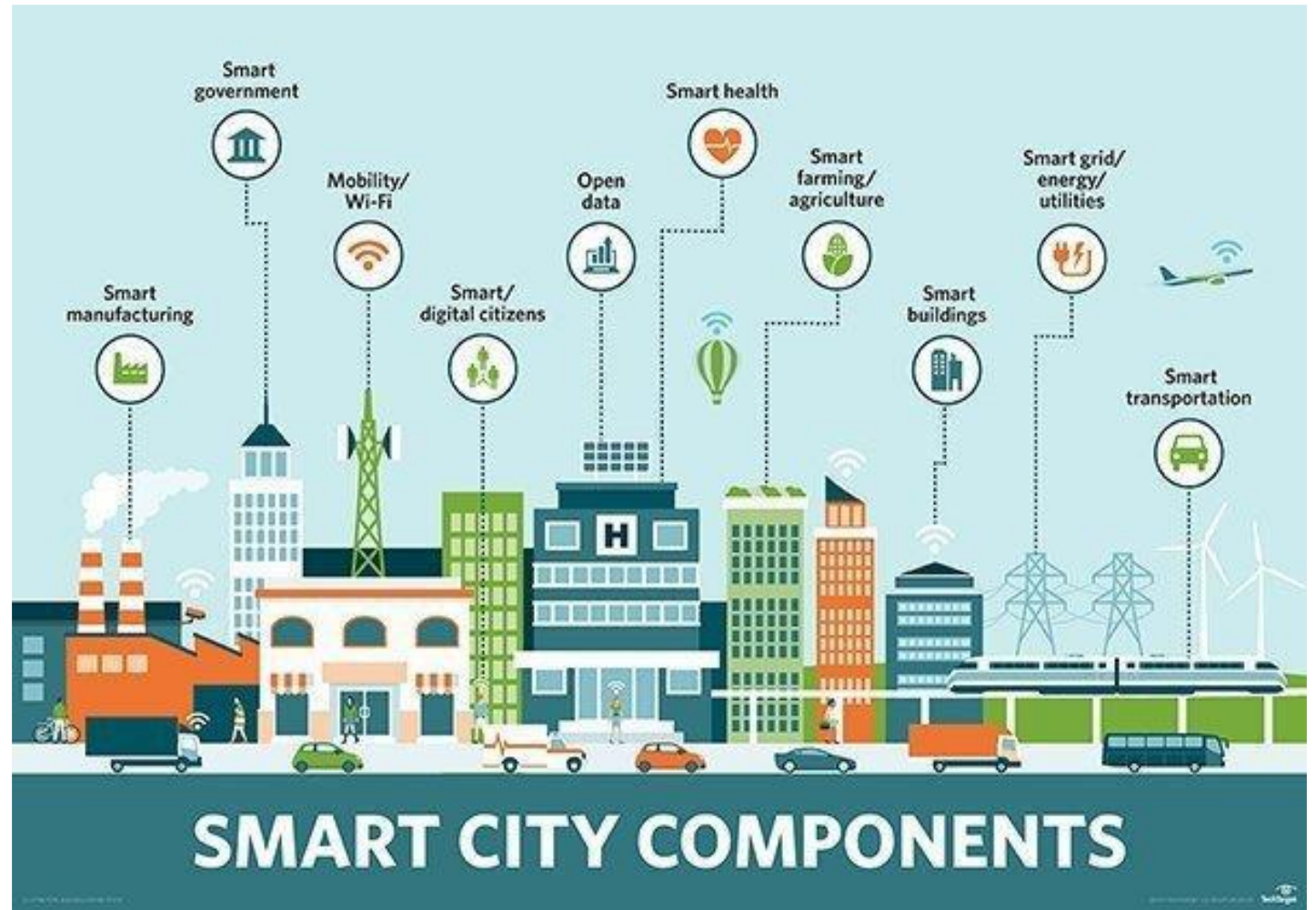
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a. KPI(s) for **SMART Compliance in Governance, Management and Quality of experience**

b. KPI(s) for **Risk Mitigation & Incidence Prevention and/or Correction**

c. KPI(s) for **Failure Mode Cause and Effects Analysis for events & incidences**

d. KPI(s) for **Root Cause Analysis for events & incidences**

For performance to scale (c*).

KPI(s) for the **Optimization in systems and elements for Quality of experience**


6. The quadrant approach will permit architects to plan for horizontal and vertical scale integration with the help of a SMART Ward Integration Centre (SWIC). Here horizontal scales represent zoning and vertical scales represent the range of systems and elements in the Portfolio.

SMART Ward Field Book

SMART CITY COMPONENTS

SMART Ward Field Book

7. Block diagram for the SWIC and its In-Time (GMQ) Support

TMS ANALYTICS PROVIDING CONTINUOUS IMPROVEMENT
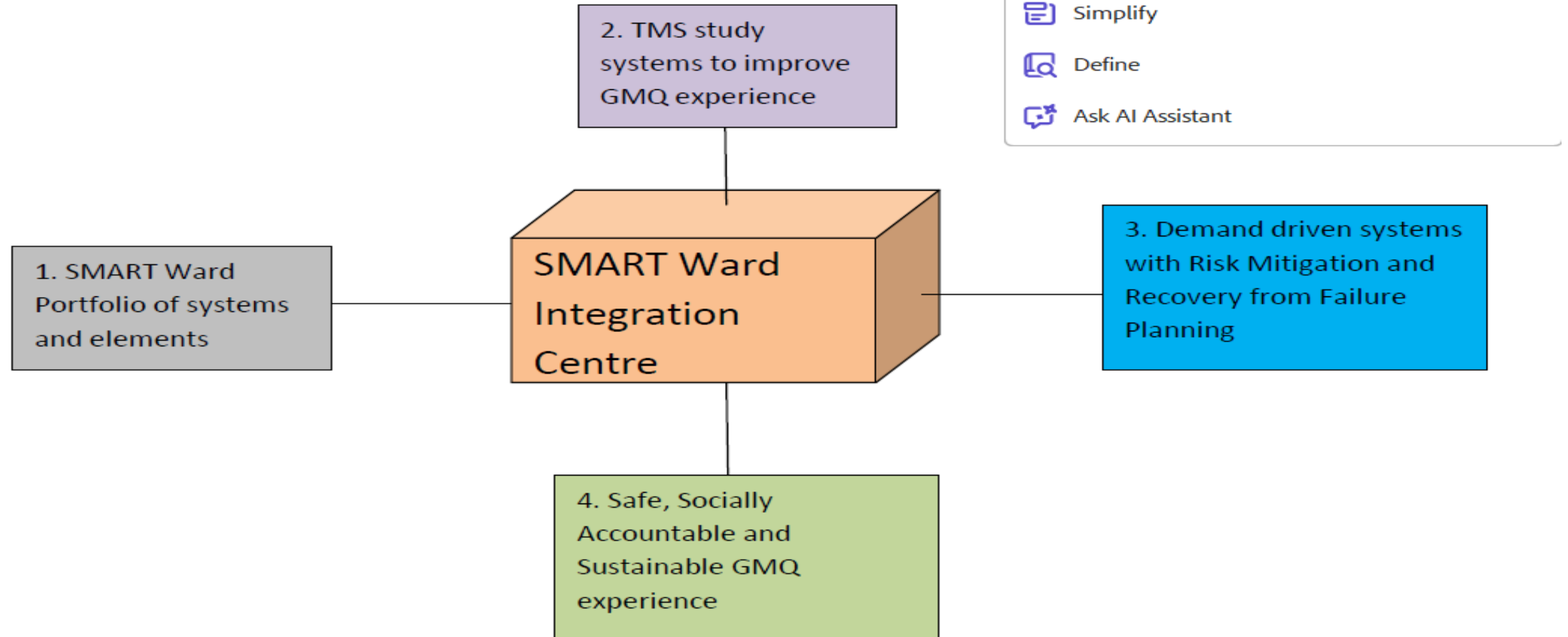
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SMART Ward Field Book

B. Added details

B.1 Time, Motion and Scale studies

AOEC has developed some understanding of this via what is called as conscious thinking for universal criteria management to help sustainable development and growth.

This background covers - Governance - Management - Quality Assurance, where each layer has separate criteria

The SWIC will tabulate the following details for each of the systems and elements that are part of the SMART Ward Portfolio, that is an indication of whether the following have been implemented:

1. Risk Mitigation and Management

2. Condition Monitoring and Traceability

3. Human Machine Interfaces permitting Focus Analytics, Failure Mode Cause and Effects Analysis, Root Cause Analysis, Preventive management and Corrective Management systems

4. Focus Analytics with the use of UAV enabled PIDS / D2L Auto docking that permits exchange of visual, auditory, experiential, knowledge and learning specific criteria

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B.2 The NEXT Step
The NEXT step is planning the exchange of visual, auditory, experiential, knowledge and learning specific criteria, so heuristic systems can predict inadequacy.

A Heuristic system is one that designs & monitors compliance criteria, effectiveness of operations, incidences and trends of problems, failures, events of various networks, systems & elements, where a new AERO-CLOUD solution helps use the cloud computing infrastructure to enable remote manageability & traceability, push/pull data and prioritize, control, engineer or re-engineer management systems for the SMART Ward Portfolio.

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The intent being wards that build surveillance and truth maintenance systems (as components of SMART or Green Asset Exchange) can help in generating a domino effect that can help us in the future.

In the case of Safer Commuting, the insight is to design PIDS Exchange.

The SWIC and the Heuristic system will permit IT architects to plan for manageability and traceability via fibres, sensors, devices, docking systems and extended data interoperability.

SMART Ward Field Book

Docking systems can either be Perception Imagery Drone Solutions or Drawing to Life Auto docking systems, where the PIDS concept is related to connected vehicles/ systems and the D2L Auto docking systems are related to An INCEPTION STAGE concept that incorporates agile synergy in SMART Phones.

For a SMART Ward, data interoperability will involve 4 streams such as…
1. Physical environment specific streams
2. Operational environment specific streams
3. Human assets specific streams
4. PDIS TGMB Integration Centre streams
5. SWIC specific streams .

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B.3 Scaling further

Each SWIC will help a SMART City committee weigh the pros and cons of incorporating SMART concepts and methodologies in wards that may be autonomous or interconnected, where each SMART Ward or Regular Ward is considered as a Zone with indices for GMQ experiences.

Each SWIC will make it easier to integrate wards into a GMQ grid and SMART City vision.

The functional components of a SMART City could include SMART City -> PIDS TGMB Integration Centre -> SMART City Integration Centre (SCIC) -> SMART Ward Integration Centres (SWIC(s)) -> SMART Wards -> IT Architecture -> Engineering solutions -> Deep Interactions, Systems and elements

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The SMART City Integration Centre (SCIC) will enable integration at both the wards and cities level, where each SMART City will integrate a SMART City Portfolio of systems and elements, where the commonness and uniqueness of each SMART ward in the city will be reflected in the portfolio.

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SMART Ward :Portfolio and extended data interoperability

The insight is to incorporate the following
❑ NavSite location element/system
❑ NavSite in-time analytics
❑ NavSite profile related in-time condition monitoring & traceability,
❑ PIDS enabled summoning of imagery / perspectives to a NavSite location element/system
❑ D2L˙system enabled summoning of Auto docking services for payload delivery, in-time analytics, condition monitoring and traceability

❑ We can be contacted via email venkataoec@gmail.com or phone +91 9342867666 for taking this further or for investing in proof of concepts for data interoperability required. We are focusing on Safer Commuting with the readiness assistance of automobile dealer networks and service centres.