حكومة دبي
GOVERNMENT OF DUBAI

هيئة الطرق والمواصلات
ROADS AND TRANSPORT AUTHORITY
RTA

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DUBAI INTERNATIONAL PROJECT MANAGEMENT FORUM
11TH EDITION الدورة الحادية عشرة

Big Data and AI Programme 2024 (Public Transport Agency)

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01

Introduction

This report is a case study of best practice in programme management for Big Data and Artificial Intelligence (AI) initiatives within government agencies. It focuses on how the Public Transport Agency (PTA) of Dubai, United Arab Emirates (UAE), has strategically developed and managed a portfolio of AI and data-driven projects aimed at enhancing operational efficiency, improving customer experience and enabling data informed decision making.

The PTA's approach demonstrates how carefully planned use cases—spanning predictive maintenance, real time passenger information (RTPI) accuracy, demand forecasting, safety analytics and digital conveniences—can be orchestrated under a unified programme to deliver tangible benefits while aligning with broader smart city and mobility strategies.

About Dubai

Dubai is one of the seven Emirates of the UAE and has evolved into a global hub for commerce, tourism, transport, and innovation. The city is recognised for its ambitious vision, large-scale infrastructure projects and adoption of advanced technologies. Dubai's strategic location, modern urban planning and progressive governance have made it a testbed for emerging technologies, from autonomous mobility to blockchain-enabled government services.

With a rapidly growing population – exceeding 3.6 million residents – and a significant influx of visitors (over 17 million annually pre pandemic), mobility is central to Dubai's economic and social vitality. This creates both an opportunity and a necessity for data-driven transport systems.

Dubai's aspiration as a leader in the Fourth Industrial Revolution

Dubai has positioned itself as a global leader in the Fourth Industrial Revolution (4IR), driven by technologies such as AI, IoT, big data analytics and autonomous systems. The Dubai 10X initiative and the Dubai Smart City Strategy encourage government entities to adopt transformative solutions that keep the city "10 years ahead" of global peers.

Key strategic frameworks supporting this vision include:

Dubai 2030 Autonomous Transportation Strategy – targets 25% of total trips to be autonomous by 2030.

UAE National AI Strategy 2031 – aims to position the UAE as a leader in AI adoption across priority sectors, including transport.

Dubai Data Law & Dubai Data Strategy – enable secure and open data sharing across government and private sectors to fuel innovation.

Within this context, the RTA and PTA have embraced AI and Big Data not as isolated experiments but as integral tools for delivering safer, more efficient and more sustainable mobility services.

About RTA

The Roads and Transport Authority (RTA) is Dubai's integrated mobility authority, established in 2005 to plan, develop, and manage all land and marine transport systems in the emirate. Its scope covers metro, tram, buses, marine transport, taxis, roads, traffic management, and vehicle licensing.

RTA's mission emphasizes "safe and smooth transport for all" and is supported by strategic goals such as sustainability, customer happiness, financial sustainability, and innovation. RTA operates with a mix of direct service provision and regulation of private sector operators, relying heavily on technology to monitor and optimise its services.

RTA's Organisational Structure

The Roads and Transport Authority is led by His Excellency Mattar Al Tayer, Director General and Chairman of the Board of Executive Directors, and consists of four agencies representing different lines of business and four corporate sectors:

Public Transport Agency

Traffic and Roads Agency

Rail Agency

Licensing Agency

Executive Affairs Sector

Strategy and Corporate Governance

Corporate Administrative Support Services

Corporate Technology Support Services

About the Public Transport Agency

The Public Transport Agency (PTA) is part of Dubai's Roads and Transport Authority (RTA), and PTA is the operational and regulatory entity for public transport services, shared mobility services and the broader passenger transport services within and around Dubai. PTA currently focuses on seven different mobility sectors within Dubai, including public buses, marine transport, taxis, electronic-hailing, luxury vehicles, car-sharing and school buses. PTA covers a broad range of functions from operations to regulation and driver management. PTA employs a wide range of technologies to ensure its pioneering position among other public transport operators, including unified payment systems, in-vehicle electronic services, advanced telematics and tracking systems, driver behaviour monitoring and management systems. In addition, PTA is leading projects on autonomous vehicles, autonomous aerial taxis, smart mobility testbeds, a smart monitoring centre and other projects related to next-generation transportation technology.
PTA consists of six departments as follows:

01.

Planning and Business Development – responsible for bus network planning, scheduling and mobility policies.

02.

Passenger Transport Activities Monitoring – responsible for monitoring all passenger transport services, including inspections and investigations.

03.

Buses Department – responsible for daily operations of bus services, including terminal and depot management as well as bus driver services.

04.

Transportation Systems Department – responsible for implementing the necessary systems to enable PTA's core business objectives.

05.

Maintenance and Services Department – responsible for maintenance and services of bus fleet.

06.

Marine Transport Department – responsible for Marine Transportation, planning and operations services round Dubai.

Additionally, PTA also has three auxiliary offices to enable strategic functions:

01.

CEO Office – handles all advisory functions to the CEO of the Public Transport Agency.

02.

Project Management Office – manages the projects, programmes and technical plans that belong to the agency as per RTA's project management policies.

03.

Quality, Health, Safety and Sustainability Office – handles the quality management as well as the HSE functions of the organisation.

Given below is the functional view of the agency with respect to different modes of transport managed.

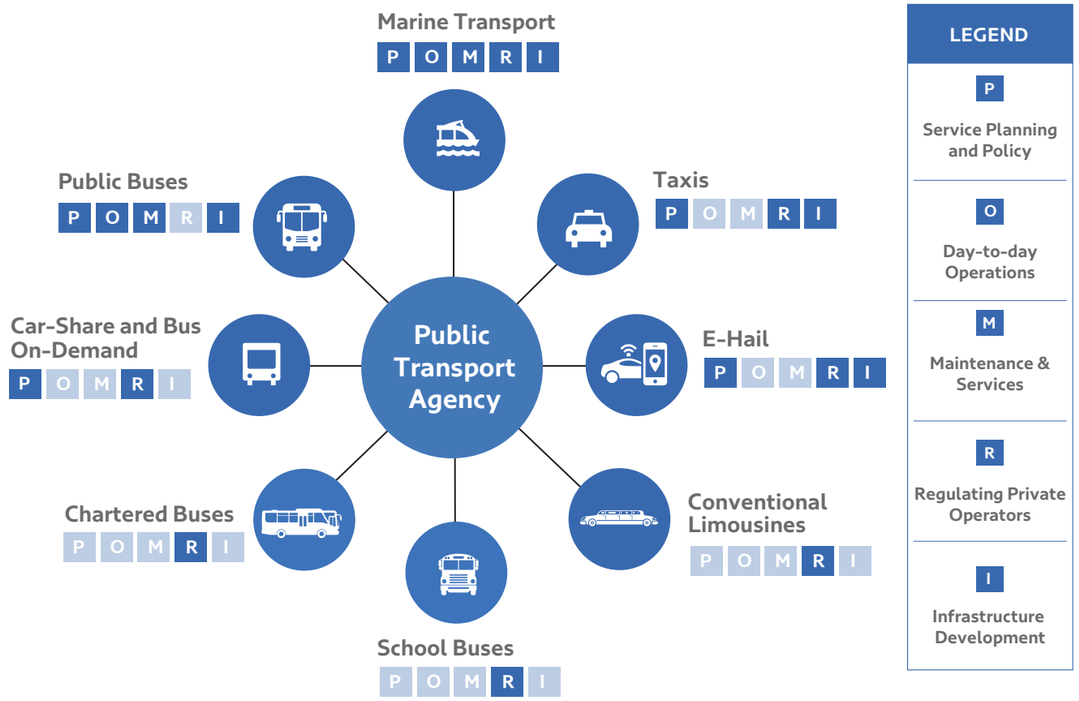


Figure 1 - Functional View of the Public Transport Agency (Dubai Roads and Transport Authority)

About the PTA Big Data and AI Programme

Launched as part of RTA's broader digital transformation strategy, the PTA Big Data and AI Programme is a structured portfolio of projects designed to leverage the agency's vast datasets for operational, financial and customer experience improvements.

Key features of the programme:

Data platform integration – supports creation of a secure, scalable and governed lakehouse integrating scheduling, operations, maintenance, safety and customer datasets.

Priority use cases – early projects focused on predictive maintenance, headway optimisation, demand forecasting, RTPI accuracy and fare evasion risk scoring.

Governance framework – adoption of strict data quality standards, privacy protocols and ethical AI principles in compliance with Dubai Data Law.

Capability building – training internal teams on analytics, machine learning and data product management.

Continuous improvement – iterative delivery, measurable KPIs and expansion to new use cases over time.

By aligning individual projects under a single governance and delivery framework, PTA ensures that investments in AI and Big Data are sustainable, interoperable and directly tied to strategic outcomes such as increased ridership, reduced costs and improved environmental performance.

Chapter

02

PTA Big Data and AI Programme 2024

In this chapter, we explain how PTA forms the projects and use cases under its Big Data and AI Programme, as well as detailed example use-cases that were developed and deployed under this programme.

Programme Objectives and Strategic Alignment

The annual Big Data programme is conceptualised through a process designed to improve data maturity and close the main gaps that exist within the organisation. The process involves five steps:

01. **Maturity Assessment –** First step is to perform a multi-tiered maturity assessment at each department, assessing the maturity in terms of data readiness and data utilisation within each of the units. The specific metrics are provided below.

PTA Data Maturity	Data Readiness				Data Utilization		
	Availability	Generation	Integration	Quality	Decision-Making	Analytics	DS & AI
Maturity Scale (5–1)	Measures the availability of related internal and external datasets.	Measures how much of this data is machine-generated, system managed or manually managed.	Measures the level of integration of available data with decision-making systems.	Measures the data quality management practices adopted within the department.	Measures the proportion of decision-making relying on data products.	Measures maturity of data products within the department.	Measures the level of Data Science and AI within the department.
	New			New			New
Weights	15%	20%	20%	10%	10%	15%	10%

PTA Data Maturity Maturity Scale (1–5)

Score	Data Readiness				Data Utilization		
	Availability	Generation	Integration	Quality	Decision-Making	Analytics	DS & AI
	Measures the availability of related internal and external datasets.	Measures how much of this data is machine-generated, system managed or manually managed	Measures the level of integration of available data with decision-making systems	Measures the data quality (DQ) management practices adopted within the department	Measures the proportion of decision-making relying on data products	Measures maturity of data products within the department	Measures the level of Data Science and AI within the department
5	Easy access to all internal and external datasets required for decision-making in a timely manner.	All datasets used are system-enerated or managed, with strict DM processes in place.	All datasets used are well-integrated with enterprise systems to allow cross analytics.	The source systems have automated DQ checks and periodic DQ audits to ensure high quality.	Almost all strategic and operational decisions are made using data, and all processes adopt data products.	Data products within the department consist of AI & ML-based algorithms.	Dedicated data science team exist within the department to manage data and execute DS&AI use-cases.
4	Hindered access to most external datasets required; easy access to most internal datasets.	Most datasets used are system-generated or managed but lacks DM processes.	Most datasets are integrated with enterprise systems, but missing attributions limiting the amount of cross analytics.	The department have DQ controls to ensure only high-quality datasets are used in decision-making.	All processes adopt data products, but the use of them in decision-making is unclear.	AI & ML-based tools are limited to proof-of-concepts and not within the regular decision-making cycles.	Dedicated resources play data-oriented roles within the department.
3	Easy access to all internal datasets, but no access to external datasets required for decision-making.	Several datasets are generated by systems, but managed manually for decision-making.	Several datasets are integrated with enterprise systems, but usability is limited due to availability issues.	The department does periodic DQ audits to ensure data quality issues are reported and addressed.	Data-driven decision-making is encouraged, but processes are not aligned with data products.	Data products use classical aggregation and slicing-and-dicing based dashboards.	Certain resources are tasked with data-oriented roles along with other tasks within the department.
2	Access to even internal datasets are not easy to obtain and maintain.	Several datasets used for decision-making are manually generated and managed.	Several datasets are yet to be integrated with enterprise systems limiting the potential for cross analytics.	The department only reports and addresses DQ issues identified on an ad hoc basis.	Data-driven decision-making is optional, with several strategic and operational decisions not being data-supported.	Data analyses are limited to spreadsheet-based analyses done by employees on a periodic basis.	Some employees perform data analysis as part of their roles, and/or out of interest.
1	Lack of access to most datasets required for decision-making hindering the performance.	Almost all datasets used for decision-making are manually generated and managed.	Almost all datasets are yet to be integrated with the enterprise systems.	The department lacks any sort of DQ management practice.	Data-supported decision-making doesn't exist within the department.	There are no well-defined data products for the department.	Data analytics capabilities are absent in the department.

Figure 2 - PTA's Data Maturity Assessment Matrix for Departments

02. **Gaps Assessment** – Based on the current maturity and potentially achievable maturity, gaps are assessed for each department. Each unit, then gets a formal progress report that entails its strengths and weaknesses with respect to data, analytics and AI. An example report looks like the following:

Data Maturity Report Card – November 2024

#	Criteria	Score	Weight	Comments
	Data Readiness			
1	Data Availability Measures the availability of related internal and external datasets	3	15%	Access to several key external datasets (such as population, land-use, detailed operator data etc.) are essential to improve situational awareness.
2	Data Generation Measures how much of this data is machine-generated, system managed or manually managed	3	20%	Available datasets are managed manually for decision-making in almost all sections.
3	Data Availability Measures the level of integration of available data with decision-making systems	3	20%	Datasets, especially related to sector performance are not integrated with enterprise systems.
4	Data Quality Measures the data quality management practices adopted within the department	3	10%	Lack of proper data quality controls within the source and decision-making cycle.
	Data Utilization			
5	Decision-making Unclear adoption of data-products within the decision-making cycle.	4	10%	Unclear adoption of data-products within the decision-making cycle.
6	Analytics and Products Need to expand use of AI and ML-based use-cases within the department.	4	15%	Need to expand use of AI and ML-based use-cases within the department.
7	DS & AI Capabilities Measures the level of Data Science and AI within the department	3	10%	Hiring or dedicating data-centric roles within the department is essential.
	Overall Department Score	**3.25 / 5**		
	Proposed Corrective Actions	1. Integration with external systems (Hala, DLD, Via etc.)	2. Adoption of dashboards and use-cases, specifically focusing on AI/ML and such recommendation systems.	3. Creation of data-centric roles within the department.

Figure 3 - Department-level Data Maturity Report Card example

03. **Use-case Discovery** - Based on the assessed gaps and the industry best practices and benchmarking, use-cases are identified for potential development in the next year.

04. **Use-case Prioritisation** – Use-cases are then prioritised based on the benefits they provide and the complexity of development, with 70% of the prioritisation score assigned to benefits and 30% to complexity. Then the use-cases are classified into four categories: **Embrace, Consider, Experiment, and Avoid.**

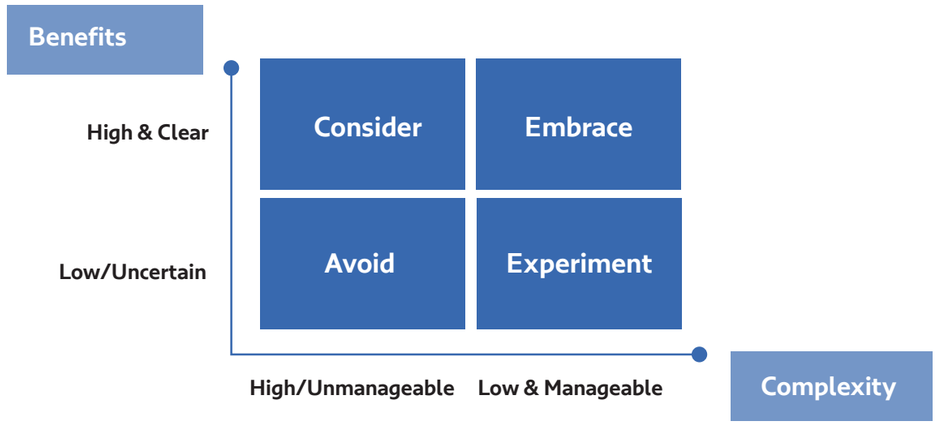


Figure 4 - PTA's Use-case Prioritisation Matrix

05. **Programme Development** – Based on the prioritisation, use-cases are selected by each department for eventual execution from the Embrace category. The programme will also see pilots or proof-of-concepts from the "Consider/Experiment" category.

Overall, the programme aligns strategically with RTA's vision to be a data-driven mobility organisation, and is also aligned with other strategic objectives such as people happiness, asset sustainability and smooth transport for all.

Programme Roadmap and Deliverables

Once the use-cases are set, then each of the departments create their own Big Data and AI project within RTA's project management system OPMS. Each project will consist of 2 to 5 use cases to be executed in a 12 month period. The executor would be an existing vendor, a technology department or the department itself without any additional budget. Each use case will go through a detailed scoping, wireframe development, data modelling/engineering, dashboard development, user acceptance test, data quality assessments, and eventual incorporation into business processes to ensure full alignment with the business needs. A typical roadmap is shown below:

#	Milestone	1	2	3	4	5	6	7	8	9	10	11	12
1	Detailed Scoping	●											
2	Detailed Feasibility Study		●										
3	Data Modeling or Data Engineering			●									
4	Wireframe Development (for dashboards only)				●	●							
5	Data Quality Assessments				●	●							
6	Integration and Governance Documentation						●	●					
7	Staging Development							●	●	●			
8	User Acceptance Tests									●	●		
9	Production Deployments										●	●	
10	Business Process Development/Benefit Realisation												●

Figure 5 - Roadmap and milestones in the implementation of data science and AI use-cases (representative)

Example Use-cases and Impacts

This section shows the example use cases that were developed and deployed as part of the PTA Big Data Programme 2024. These are among the 15 use cases that were developed by different departments.

Public Transport Insights

PTA owns a plethora of data on how people move in and around Dubai. These datasets, collected from the transit ticketing systems, taxi metering systems, telematics systems on board of e-hail and car-share vehicles, on-demand and other shared mobility management systems track well over 2 million trips a day. In this use-case, the datasets were cleansed, anonymised and fused together into a geospatial visualisation tool and was published locally for use by PTA's planners and policymakers.

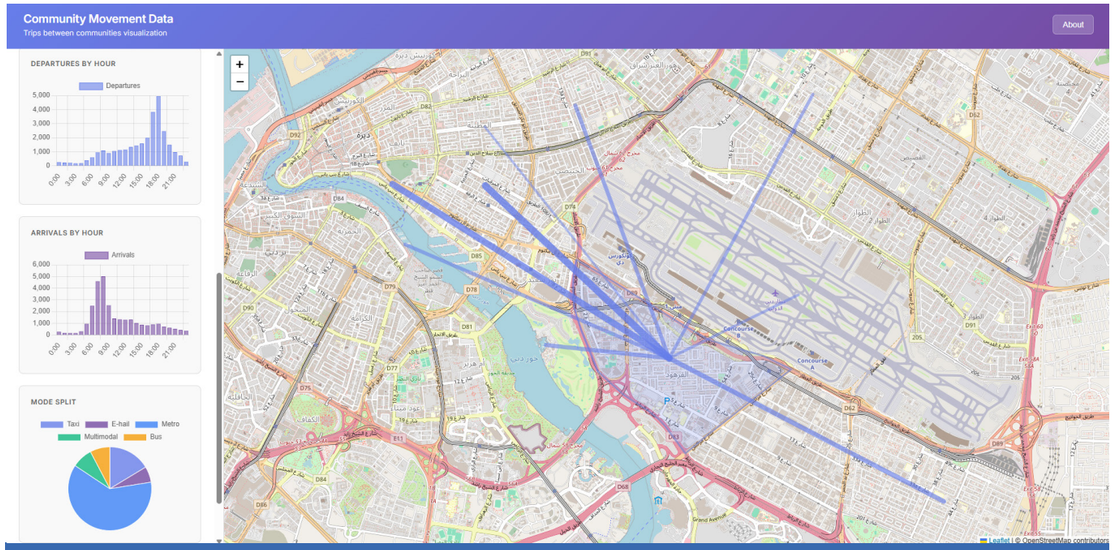


Figure 6 - Public Transport Agency Insights Dashboard

By visualising trips by locations, communities, departure times, transfer characteristics and travel time, PTA was able to make bus service adjustments to improve accessibility and reduce end to end travel time of transit users. The tool was also made available to the wider RTA to develop additional use of this data.

Trip Cancellation Prediction

While new bus-dedicated lanes are being implemented in Dubai, the majority of bus routes still share roads with other traffic and are susceptible to traffic congestion. Peak hour congestion can sometimes cause trip cancellations due to the buses' inability to reach the terminus on time. Using real-time vehicle location, schedule adherence, and vehicle assignment information, the Trip Cancellation Prediction tool predicts the likelihood of trips being cancelled or curtailed (partial cancellation).

This tool has enabled the Bus Operations Control Center, which oversees ground operation of bus service in Dubai, to inject additional buses so that the cancellations can be reduced, and the operational reliability can be improved.

Real-Time Predictions

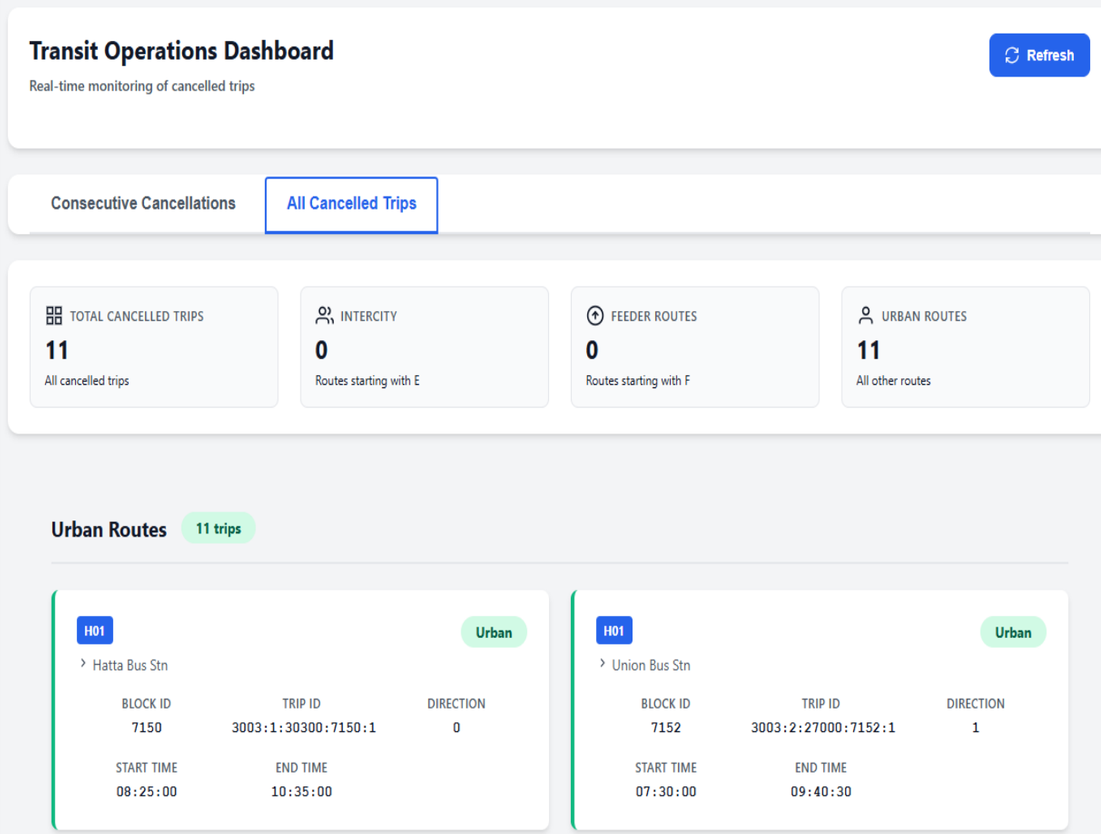


Figure 7 - Bus Trip Cancellation Prediction Tool

Daily Operations Dashboard

The Bus Operational Control Center also developed a daily operations dashboard which ingests data from bus operations, and operational plans to create a post-facto report, as well as a forward-looking manifest. The report shows all the key performance indicators for operational reliability, broken down by reasons, business units and route/route-types.

Figure 8 - Bus Operational Dashboard

The operational dashboard has enabled bus operations team to have 1-click access to key indicators, and also could plan for special events such as Eid and New Year based on historic data.

School Bus Operator Compliance

PTA's Passenger Transport Activities Monitoring department is responsible for the regulation of the school bus sector, and traditionally, they use rigorous inspection campaigns on a quarterly basis to ensure that the school buses are up to RTA's safety standards. This use case aimed to develop fused datasets from complaints, inspection, and vehicle licensing data to develop scorecards for each school bus operator. The scorecards can be used to reward or penalise operator companies based on their performance.

School Bus Operator Compliance Dashboard

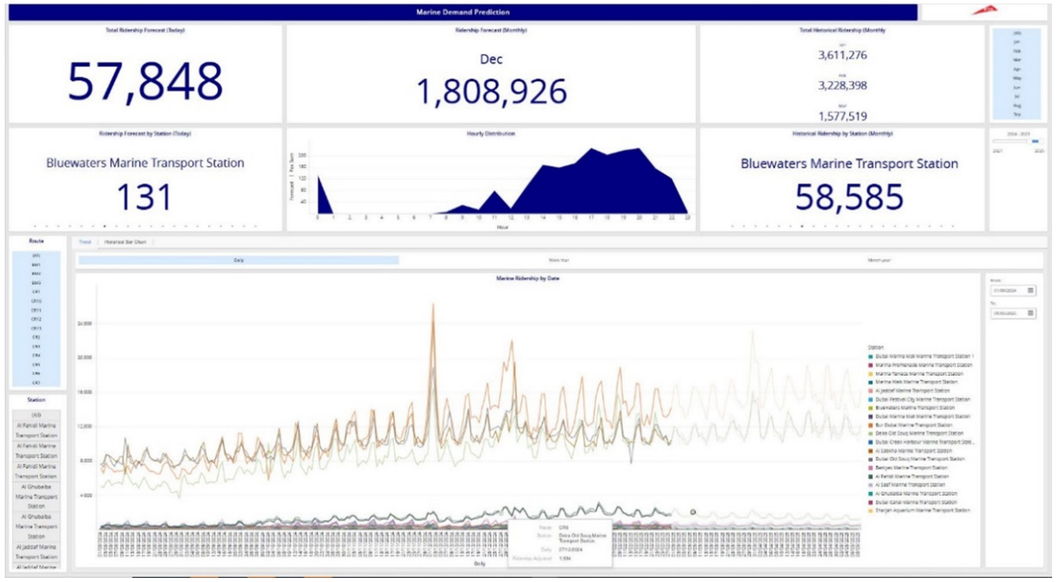
Facilityname	Companyname	Rating	Ranking	Violation Count	Violation Compliance (%)	Safety Violation Count	Safety Compliance (%)	Valid Driver Permit	Driver Permit Compliance (%)	Valid Conductor Permit	Conductor Permit Compliance (%)	Registration Validity	Registration Compliance (%)
Search	Search	*****	1	0	0.00%	0	0.00%	1	100.00%	1	100.00%		
		*****	2	0	0.00%	0	0.00%	3	100.00%	2	100.00%		
		*****	3	0	0.00%	0	0.00%	2	100.00%	1	100.00%		
		*****	4	0	0.00%	0	0.00%	9	100.00%	12	100.00%		
		*****	5	0	0.00%	0	0.00%	22	100.00%	1	100.00%		
		*****	6	0	0.00%	0	0.00%	23	100.00%	3	100.00%		
		*****	7	0	0.00%	0	0.00%	23	100.00%	1	100.00%		

Figure 9 - School Bus Operator Compliance Dashboard

The dashboard enabled a 1-click view for the department to see the best and the worst operators, along with specific criteria that reflect their strengths and weaknesses. Additionally, this data can also be provided to KHDA in their annual evaluation of schools.

Marine Demand Prediction

PTA's Marine Transport Department is responsible for the planning and operations of marine services such as abras and ferries. Unlike other public transport services, the demand on marine services varies by up to 300% on a day-to-day basis depending on season, holidays, weather, visibility and events happening around Dubai. Hence, creating a robust demand prediction tool was necessary to predict daily and hourly route-wise and station-wise demand for better deployment of vessels and manpower. The dashboard created by PTA's data team enabled this by taking datasets from PTA's ticketing systems, passenger counting systems, and other datasets that represent external contributing factors.



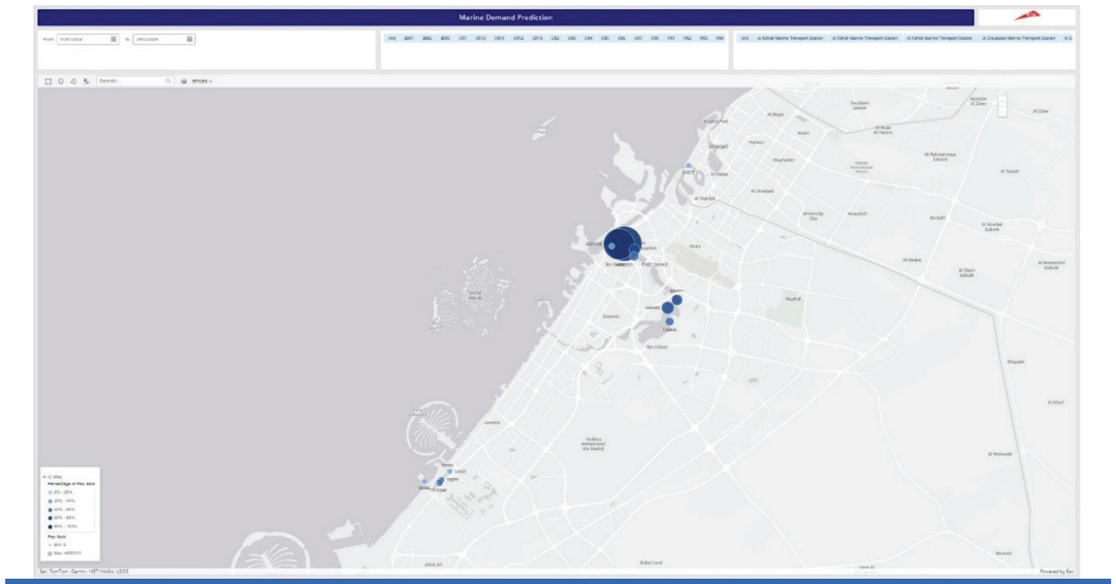


Figure 10 – Marine Demand Prediction Dashboard

The microstrategy dashboard included both visual and graphical elements to ensure that the planners and operators are equipped with high-accuracy demand prediction tools.

Realtime Passenger Alerts

PTA established its real-time passenger information data as an Open API in 2019. Since then, it has incorporated further additions to improve data quality across the different modes. The current system includes predicted ETAs and cancellation information. Under this use-case, the “rider alerts” feature was enabled, which allows PTA to push specific disruption information to users through different journey planning applications such as Google Maps, Apple Maps, Transit App and Yango Maps. Rider alerts include route-wise, stop-wise, or service-wise alerts that enable users to receive additional information about the service.

Since Dubai’s bus network is quite extensive (with over 180 routes and 2,500 stops), the use-case also enabled the automatic generation and push of rider alerts through an integrated transit platform. The system will automatically generate rider alerts when a major disruption is detected in the network. Additionally, the use-case enabled “crowding” information, which shows how empty the buses are.

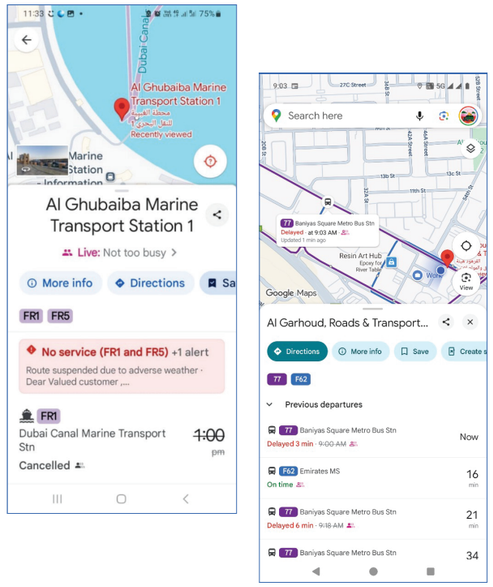


Figure 11 – Google Maps showing realtime rider alerts and passenger crowding information

This information has contributed to better passenger experience by providing better situational awareness to them.

Chapter

03

Programme Governance

Given the importance and scale of use-cases within the Big Data programme, and the reliance on external teams to deliver these use-cases, a robust programme governance and support structure was of high importance. For this programme, the following governance and management structure was adopted.

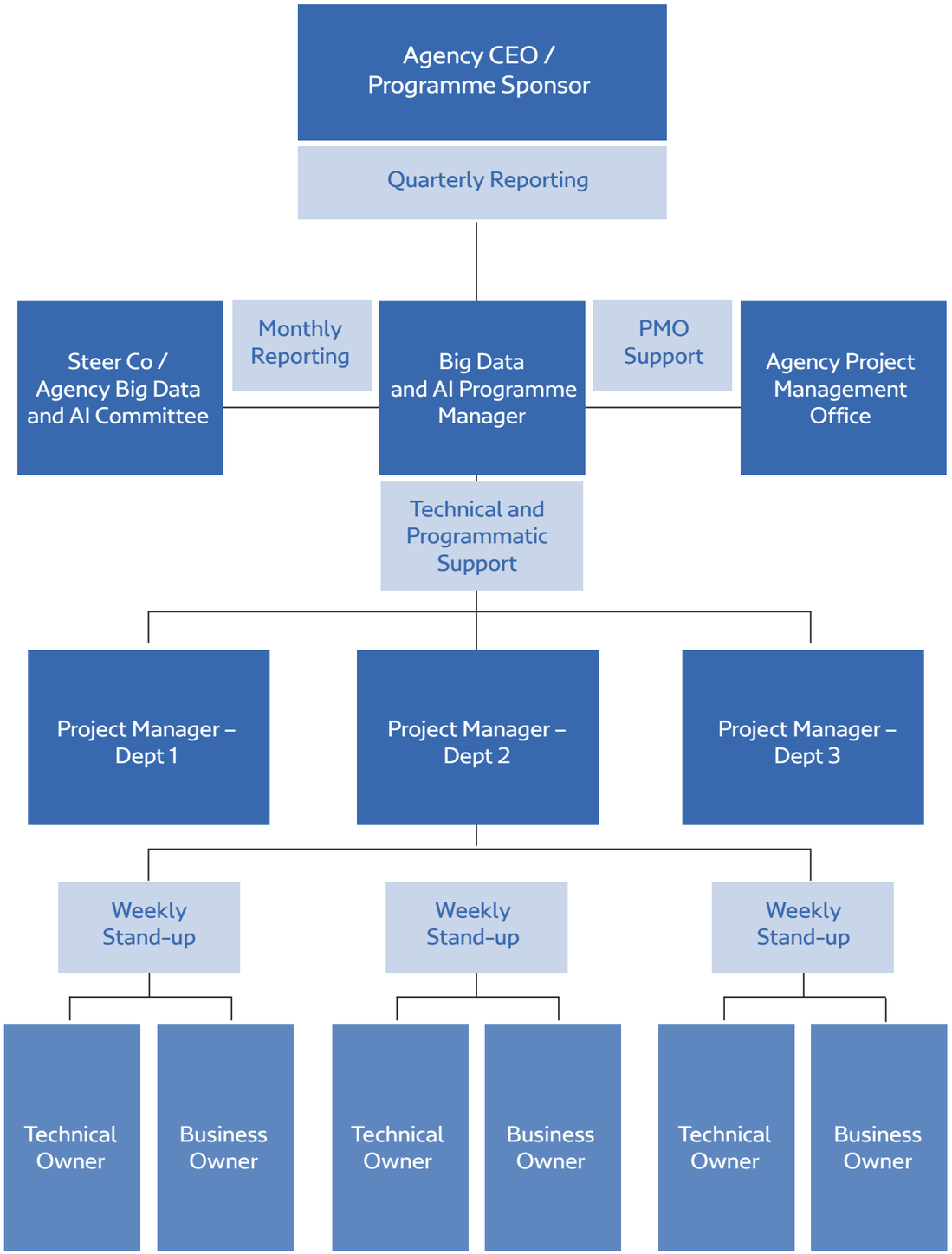


Figure 12 - PTA's Big Data and AI Programme Management Structure

The Big Data and AI Programme Manager works closely with all the department-level Project Managers to ensure day-to-day progress of the use-cases. Decisions and escalations were handled in the Big Data and AI Committee, which is the primary steering committee for this programme. The PTA's Chief Executive Officer is the programme sponsor, and all PMO support was provided by the Agency's Project Management Office. A support network from the corporate sector was also included to ensure IT infrastructure, Big Data and AI platforms at a corporate level were used in developingthese use-cases, including:

Digital Services Department

Digital Services Department, who maintains and manages the **ecosystem** of Big Data and AI infrastructure within the RTA.

Technology Strategy and Governance

Technology Strategy and Governance, responsible for governing Big Data and AI initiatives within the RTA.

Programme Management Practices

Since the Big Data Programme consists of incremental use-cases that are created internally, the following key programme management practices and tools helped in making it a success.

01. **Project Twinning** - Each use-case is developed on a twinning basis, with a project manager and team on the development side and another project manager and team on the business side. Having two project managers ensures that the use-case development is managed properly, and its inclusion within the business process is managed properly. This helps in properly attaining benefits from the use-cases.

02. **Unified Scoping and Review Gates** - Each use-case is developed through a unified process that starts with a discovery session, requirements gathering stage, mock-up development stage, minimum viable product development stage, fully functional product development stage, and production deployment stage. Each of these stages involves full coordination and review from all stakeholders, and unifying the process ensured high integrity.

03. **Multitier Reporting** - The project managers reported progress, risks, challenges, benefits, etc. at multiple tiers to ensure that the use-cases developed are widely reviewed, reported, and utilized. Lessons learned are also key deliverables reported. The levels of reporting are provided below:

a. Weekly reporting and stand-ups: Each project manager reports the progress, hurdles and any approvals required with the Programme Manager.

b. Monthly reporting: Each project manager reports the monthly progress, risks and mitigation approach with the Programme Manager and the Agency Programme Management Officer.

c. Quarterly reporting: Each project manager reports the quarterly progress with the Programme Sponsor.

d. End of the Project Reporting: Each project manager reports the end of the project status, including impact assessment, lessons learned and future directions to the Programme Sponsor, which is then reported to the Director General.

04. **Benefit Realisation Practices** - Post-development and deployment of the use-cases, project managers were still responsible for ensuring the benefits of the use-cases on a quarterly basis. In addition, the benefits were compared with the expected benefits prior to deployment.

Programme Benefit Assessment

Relying on RTA's Benefits Management Manual, the programme also enabled the measurement of benefits for each of the use cases, as well as the overall benefits of the programme. In general, the Big Data and AI use cases were found to achieve one or more of the following benefits:

IMPROVE
Accessibility

INCREASE
in Private Sector Investment

INCREASE
in PT Ridership

IMPROVEMENT
in On-Time Performance

REDUCTION
in Cost to RTA

INCREASE
in Digital Adoption

REDUCTION
in Paper Usage

TIME
Saving

COMPLIANCE
to Legislations and Policies

INCREASE
in Open Data Sharing

For each of the use-case, we define the following:

Primary Benefit

Primary Benefit denotes the benefits that come directly out of the use-cases. Most common examples are time-savings, reduction in paper usage, increase in open data sharing, increase in digital adoption, etc.

Secondary Benefits

Secondary Benefits denotes the benefits that are achieved when the use-cases are incorporated in the business processes to make strategic or operational decisions. Examples are increase in ridership, improvement in on-time performance, compliance to legislations and policies, etc.

By measuring both using well-defined before-and-after analysis, the programme has enabled PTA to achieve the following benefits:

Primary Benefits

- **3,000+ HOURS** – Employee Time Saved
- **2+ SERVICES** – Increase in Digital Adoption
- **12%** – Increase in Open Data Sharing
- **4 SERVICES** – Pioneering Solutions

Secondary Benefits

- **5%** – Improvement in On-Time Performance
- **+12 MILLION** – Increase in PT Ridership
- **~ 25M AED** – Cost savings due to efficiency improvements
- **+3.5% COVERAGE** – Improve Accessibility
- **8% INCREASE** – Compliance to Legislations and Policies

Figure 13 - PTA Big Data and AI Programme 2024 - Benefits

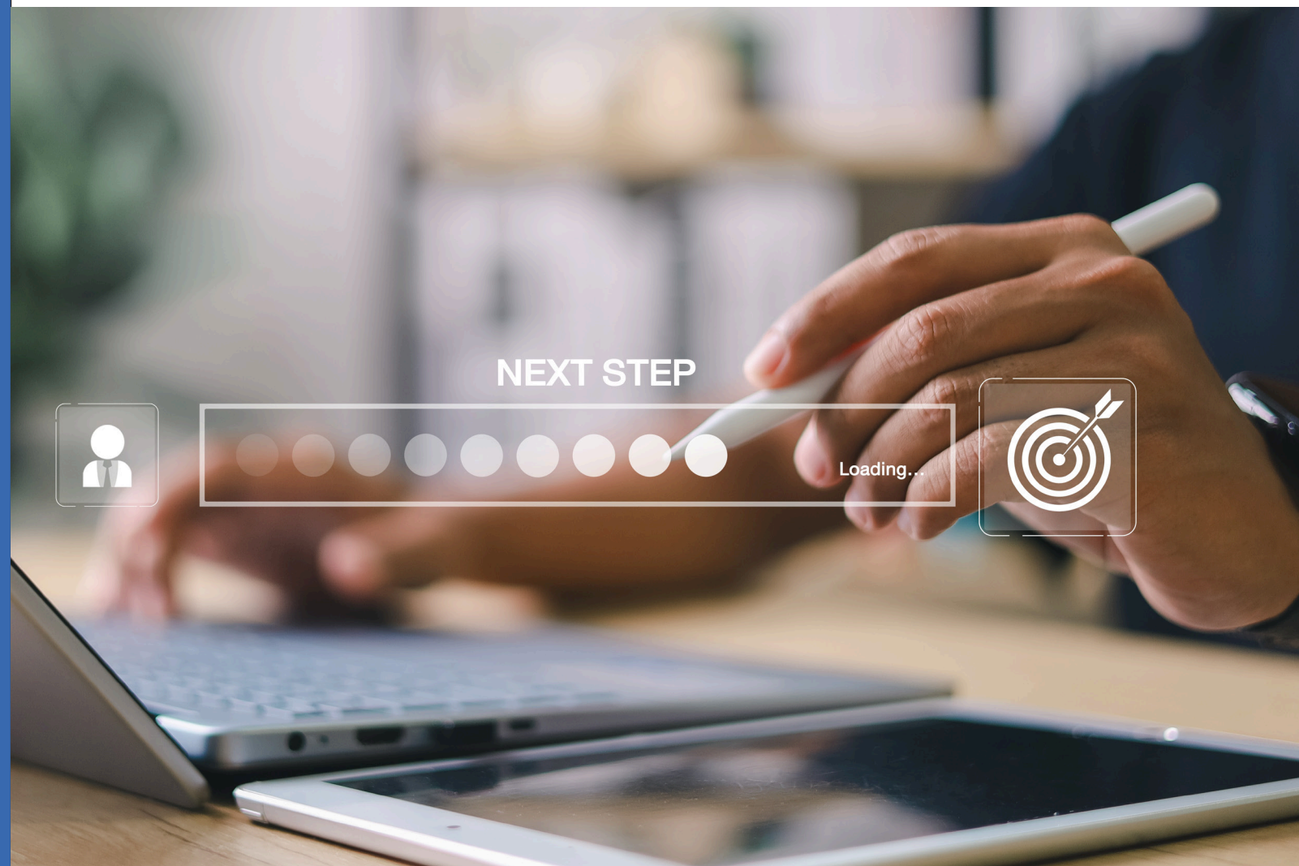
Chapter

04

Conclusions and Next Steps

The report summarised the PTA's Big Data and AI Programme, which included around 15 use-cases in 2024. These use-cases range in scope from AI/ML models that predict operational performance, natural language processing and sentiment analysis of customer feedback from different channels, social media listening, and image and video processing to detect anomalies and patterns. The programme also ranged in scope from proof-of-concepts that served as trials of new technologies to algorithms that generate models based on well-established methodologies.

The report also discussed a concrete benefits realisation framework that is flexible enough to track benefits from incremental use-cases, which can create significant impact when combined with other use-cases.



Success Factors

We identified several factors that contributed to the success of this project. They are:

Sponsorship - Sponsorship - The importance of data-driven decision-making was reinforced through a clear direction-setting for the agency. In addition, the Dubai Government ensured a move towards data-driven decision-making through challenges, mandates, and working groups. This strengthened the motivation for the programme.

Teamwork – Setting up a project management team for this programme that monitored progress and challenges, and offered the right support at the right time, helped enable rapid progress, even though the programme was delivered internally and with zero budget.

Support Structure – The project is also supported by all departments and their directors, which helped the organisation progress at a departmental level. Tying the project to improving the data maturity of the departments also helped.

Data Literacy Programmes – Since the projects were done internally, educating and teaching data science to all employees through a series of training sessions, webinars, talks, hackathons, and industry partnerships helped achieve success.

Going Forward

The RTA conducts agency-level maturity assessments with respect to data, analytics, and digital services, and PTA scored 4 out of 5 in most of these elements, surpassing other agencies. This programme contributed significantly to this achievement, in addition to directly improving services and impacting the customer journey. Going forward, this best practice will be reflected in the execution of the RTA-level AI Strategy and Roadmap, and is expected to become a pioneering example of how transport authorities can embrace data science and AI.