SUCCESSFULLY MANAGING AIRPORT ASSETS

The aviation industry is faced with changing requirements and regulations, increasing passenger volumes and fluctuating financial conditions. The industry responds to the increasing traffic volume by further investing in global airport greenfield construction; also airport expansion remains strong. Many of these expansion projects are financed on a public-private partnership (PPP) basis. To ensure an airport asset delivers the desired returns, a holistic and integrated Airport Asset Management, including a solid calculated Capital Improvement Plan (CIP), is required. Airport Asset Management can increase the effectiveness and efficiency of the way airport facilities are operated, managed, and evaluated. This is crucial as airports tend to be limited in their resources. Another positive side effect of Airport Asset Management is the provision of timely and relevant data on the asset in an integrated manner. The data enables the airport board to make informed and proactive decisions, meeting service level standards in the face of growing traffic demand.

M2P CONSULTING – THE IDEAL PARTNER TO ADD VALUE

M2P provides experience, tools, and judgement to assist its clients in operating and managing their airport facilities to ensure that the airport’s strategic objectives and the, thereof, derived performance targets are met. However, benefits are not limited to airport operator, but, managed efficiently, can extend to retail shop owners, restaurants and passengers. Our knowledge covers portfolio management and the entire asset management lifecycle from the strategy and definition to acquisition of new assets, as well as the operation and management to the exit. Through the M2P team’s long-standing experience in airport privatization, airport management, and operations around the world, our knowledge and capabilities cover, amongst others, the following key aspects:

- Asset registry development
- Lifecycle cost analysis and residual life determination
- Business risk identification, analysis and mitigation
- Asset valuations
- Asset portfolio strategy and analysis
- Asset portfolio management
- Asset strategy & policy
- Infrastructure investment and funding plan
- Business cases
- Accounting treatment analysis
- Financial funding strategy selection
- Asset operation and maintenance
- Asset renewal / redeployment
- Stakeholder management
- Regulatory compliance
- Various types of other analysis and services

¹ Source: CAPA Center for Aviation
APPROACH AND METHODOLOGY

A holistic and effective asset management of airport facilities requires more than just maintenance and reactive decision making. It uses activity outputs of airport master planning to proactively determine what the assets’ strategic requirements are in order to support the overall targets set out. This includes a clear estimation of the life-cycle costs, as well as understanding the imminent failure modes in terms of levels of service, regulation, capacity, physical failure, and the management of renewal and overhaul of existing and new assets. Below, the high-level asset management cycle with its five phases is displayed¹:

![Asset Management Cycle Diagram](image)

To get the most out of your airport facilities in terms of operational efficiency and financial opportunity, M2P provides the following four service areas covering all five asset management cycle phases to enable a proactive and informed management of your assets:

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¹ Cycles 3 and 4 are covered in our Phase 3 “Offering & Managing the Asset”
Service Area 1: Planning of Asset Management Strategy

Key objective of the asset management plan is to work towards the optimized trade-off between level of service, costs, and risk exposure. In the first stage, we identify the need and the requirement for a new asset that is planned for and justified together with our clients. For this phase of the asset management cycle, we follow a proven ten step approach to organize and evaluate current assets and to identify and financialize future asset opportunities:

- **Develop Asset Registry**: The asset registry is an inventory database of all assets within the airport for which asset management is being developed and handled.

- **Assess Performance and Economic Failure Modes**: Define goals, criteria, and KPIs for the selection of an airport, e.g. on-time-performance, operational processes (turnaround, dispatch, baggage/ground handling, terminal processes), and stakeholder management. The asset management framework and strategy are defined and documented in the asset management policy (see image below).

- **Determine Residual Life**: Identifying the likelihood and timing of imminent failure modes. An asset may not reach the calculated end of its design life, but can be replaced by other causes such as changed economic conditions or requirements to operate the asset.

- **Define Lifecycle and Replacement Costs**: Lifecycle costing (LCC) includes all costs of owning and operating the asset, from planning through retirement or replacement. A strong collaboration is required between all involved stakeholders during the design phase in order to ensure that all expectations and needs are met.

- **Set Target Levels of Service**: Clear definition of the level of service required for each asset. Generally, service levels can be expressed in terms of condition, reliability, availability, and various operational parameters (e.g. how many people use a passenger boarding bridge per year). Target levels of service are used to identify gaps in performance, specify budget estimates for investment decisions, or to identify changes to asset maintenance or operating strategies to close performance gaps.

- **Determine Business Risks and Operational Criticality**: Identification of critical assets, which are either classified by high costs or a significant impact in case of failure. Understanding where the critical risks lie allows for pro-active mitigation of non-tolerable risks through the asset management planning process.
• **Capital Improvement Plan (CIP):** The CIP comprises all relevant data and information established in the previous steps to evaluate the best operation, maintenance, and capital investment strategies needed to deliver the required level of service at the best cost and level of risk exposure. Renewal decision-making tools allow the user to postpone an asset replacement and increase maintenance on it, comparing the cash-flow requirements with an option where replacement occurs earlier. Main scenarios of action include replacement, major rehabilitation, different operating modes, repair, refurbishment, or reduced levels of service.

• **Determine Funding Strategies:** In order to implement the CIP, the optimal funding strategy, suitable for the client’s needs, and the underlying transaction volume need to be carefully evaluated. Possible scenarios for airports are, amongst others, bond financing, public private partnerships, or governmental airport financing programs, e.g. the FAA Airport Improvement Program (AIP).

• **Finalize Capital Improvement Plan and Enhance Asset Management:** Review all steps taken and maintain all data sets for optimal planning capabilities in the future. The final output should enable the client to plan out the future investments for short-, medium-, and long-term needs with a minimized margin of error, caused by unpredictable natural disasters or asset failure. This provides the airport operator with a clear picture of their current and future assets and ensures that the right amount of funding is secured at all times.

The asset management policy sets the framework for the management of airport infrastructure and airport assets. Each policy statement is endorsed and upheld by all executive staff. The statements are intended to guide the airport organization by specifying the minimum set of considerations and actions to be undertaken by staff in the execution of asset management analysis and decision making and the development of asset strategies as illustrated in the figure below, visualizing the holistic integration of processes and systems for asset management:

The asset management policy is an important change management tool that provides executive support for investments and activities for maintaining the asset management framework. For example, the policy may ensure a continuing focus on the importance of data collection and update processes such that the integrity of asset data and information is maintained, and staff can rely on the available system information on a permanent basis.
Service Area 2: Acquisition of new Assets

The acquisition stage is about the purchase of a new asset. The asset either might already be existing, under refurbishment, under construction, or needs to be extended or newly constructed. The second service area comprises, amongst others, the following services:

- **Lead / consult on the acquisition process:** Ensure communication transparency and stakeholder alignment among all involved parties, mediating their needs with a clear priority on the client.

- **Evaluate Risks:** Identify, assess, and manage transaction risks related to both financial and operational areas.

- **Manage Stakeholders:** Coordination and mediation between the client, regulatory bodies, governmental authorities, deal parties, third party service providers, etc.

- **Manage data room:** Manage information and data as well as Q&A of deal parties.

- **Due diligence the asset:** Obtain technical, financial, legal, operational, and environmental due diligence.

- **Manage bid process:** Negotiate NDA as well as consult and support on bid submission.

- **Contract negotiation:** Consult and support on negotiation and finalization of sales and purchase agreement (SPA).

- **Closing and asset integration:** Closing of acquisition and operational transition into portfolio.

Service Area 3: Operating and Managing the Asset

We manage and develop the asset at the highest possible quality and efficiency. This stage may be marked by periodic refurbishment, restructuring, or even turnaround. The third service area we are offering is the following:

- **Portfolio assessment:** Regular monitoring of asset portfolio, reviewing financial and operational performance, the latter being qualitatively (e.g. surveys) and quantitatively (e.g. process times, savings).

- **Asset maintenance:** Management of periodic maintenance of airport buildings, runways, apron, attached infrastructure (e.g. remote stands and contact gates), ground handling equipment (e.g. baggage belt system, busses, tow trucks), tower, flight-control and safety infrastructure, and fuel supply pipes.

- **Asset restructuring:** Restructure the airport’s usage of aeronautical and non-aeronautical revenues.

- **Turnaround service:** Consulting on distressed airports, identifying root-cause areas, followed by the delivery and implementation of a holistic solution catalogue, end-to-end with the client. The state of distress will be categorized depending on the situation and the criticality in relation to the competitive environment and existential threats.
• **Information management:** Airport information storage, processing, security, and display (e.g. Flight Information Display Systems (FIDS)).

• **Continuous asset valuation:** Regular assessment of airport operations performance according to current and tailored KPIs.

• **Utilization management / airport utilization analysis:** Passenger throughput at typical bottlenecks (such as check-in, immigration, security screening), on-time departure performance (focus on delay codes related to airport operations).

• **Functionality assurance / airport functionality assessment:** Customer experience (qualitatively through surveys), airport staff experience (quantitatively and qualitatively through interviews, performance reports and surveys).

Service Area 4: Optimizing the Asset

When the economic life of the asset has expired, the asset needs to be replaced, or does not fit into the portfolio anymore, M2P manages the exit process in order to achieve the highest possible outcome for its clients. This fourth and last service area comprises the following services:

• **Definition of airport sales strategy:** Analyze how, when, and where to place the airport on the market, identifying potentially interested buyers prior to go-live.

• **Replacement with new asset:** Identify asset replacement in portfolio according to current and future needs, as well as technological trends and opportunities.

• **Renewal of the airport:** Identify, implement, and operationally transition value enhancing measures to achieve pre-set targets.

• **Redeployment of airport:** Relocation of resources to other assets for optimized efficiency in resource cross-utilization.

• **Investor selection:** Identify and approach potential investors, ensuring communication transparency from the beginning to build strong commitment at the base.

• **Bidding process structuring:** Design of bidding process, supporting the client end-to-end on all related functions.

• **Stakeholder management:** Coordination with selected buyer, mediation between the client, the buyer, and all involved governmental and regulatory authorities, as well as ensuring proper documentation for smooth transaction execution.

• **Airport asset valuation:** Assessment of airport asset value according to performance history, future outlook on traffic growth, macroeconomic and competitive environment factors, progress of digital transformation, current state of technological innovation, etc.
LET’S PARTNER TO ASSESS YOUR AIRPORT INVESTMENT OPPORTUNITIES

Contact us for an open discussion and further information without obligation on how M2P can support your organization based on your individual needs, requirements and schedule as a valued client.

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More than twelve years of experience in top management consulting especially turnaround, restructuring and raising efficiency projects. Former VP at Deutsche Telekom Capital Partners and CEO of T-Venture, Europe’s biggest strategic venture capital firm.

More than four years of management experience at an international airline in network operations and strategy planning, as well as airport operational planning and asset management.

WHY M2P

Our team of leading airport and airline industry experts in business planning, strategy, and management as well as stakeholder communications and relations have been delivering award winning services to clients for over 19 years. We are independent and objective.

OUR STRENGTHS

M2P has functional and industrial experience in airports and airlines, combining the knowledge and experience of strategy consultants and functional specialists. We thus provide expertise across all airport subjects: Business strategy, operating standards, operations, physical assets, human resources management, security planning and business restructuring.

We possess a deep understanding of airline strategy, regulation, financing, operations and route development, and setting of airport charges to airlines in the U.S., Europe and around the world. M2P’s digitalization expertise adds value in assessing future digital business cases.

OUR PROFILE

M2P has a global presence, with more than 100 dedicated employees serving clients worldwide from offices in New York, London, Frankfurt, Dubai, Hong Kong and Silicon Valley. We have been adding value to the businesses of satisfied clients for 19 years, delivering 500+ projects to this day.