



Best-in-class  
aviation  
business planning

**miagen**

## What is best-in-class aviation business planning?

Research has shown a positive correlation between the forecasting maturity of a business and its competitiveness. With the right processes, models and software tools, true aviation business planning gives airlines the agility to succeed. It puts them in control of budgeting and forecasting, providing complete visibility and foresight.

The key attributes of best in class planning systems are:

- Full Enterprise Integration
- Driver Based Planning
- Multi-dimensional View of Profitability
- Use of External Data
- Integrated Benchmarking
- Data Visualisation
- Leveraging of Optimisation Engines
- Prescriptive Analytical Skills
- Use of Modern Technology



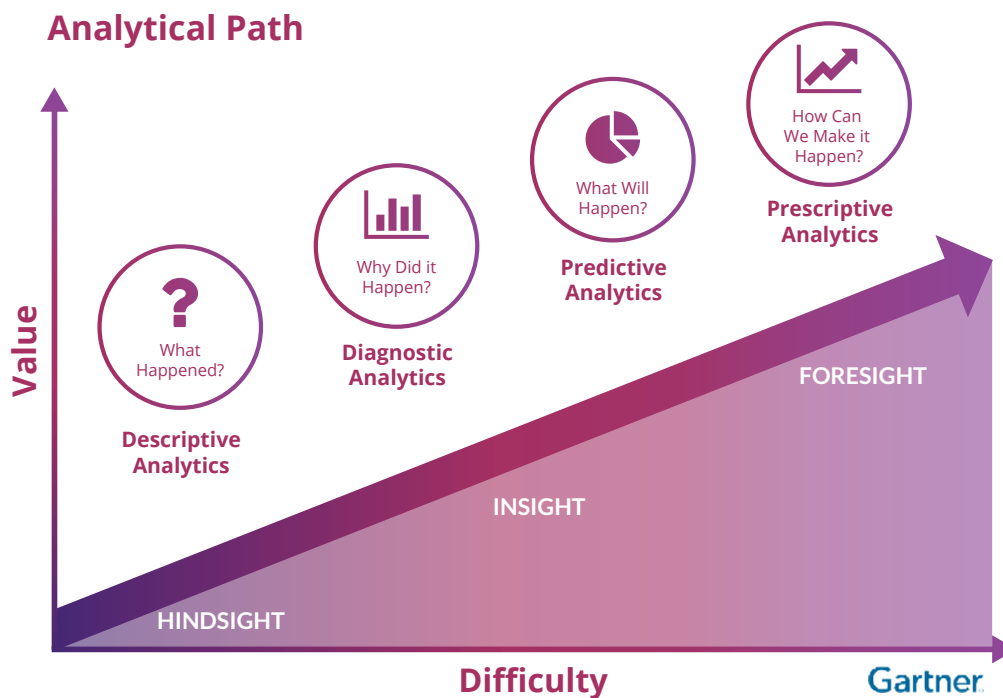
# Forecasting/Budgeting Maturity

Making the breakthrough from cumbersome excel dominated planning processes to best in class normally follows the stages and exhibits the characteristics shown in this planning process development illustration.

## Planning Process Development Path



Each step on the path towards best in class enables more powerful analytics:



# Full Enterprise Integration

Aviation combines several different business sectors, each with its own unique planning, performance, reporting and compensation practices and requirements. There are many interrelated parts, changing all the time.

Best practice dictates that an enterprise adopts a single flexible planning and decision support system that is aligned with business strategy and integrates across all the functions of the enterprise.

Business units across the aviation sector have a high degree of interdependence. Change in one area impacts the management of service delivery, productivity, cost and profit in others.

Management in each unit need to be able to act in harmony with clear insight into the full impact of their decisions across the entire organisation. For example, plan changes in the revenue unit can affect many, if not all, other business units.

Yield changes, or decisions to open or close routes, have implications for flight operations, airport operations, catering, fleet and MRO. The effects can be far-reaching and potentially impact operations, profitability and cashflow. Operational impacts include maintenance scheduling, passenger and baggage handling, as well as the number and configuration of aircraft.

For example, fuel price movements and foreign currency movements impact route viability, profit contribution and net operating profit.

In MRO, decisions on engineering or maintenance watch changes or severity can impact unit cost and net operating profit. Investment in rotatable parts inventories needs to be optimised for complex factors such as location, turnaround time and AOG cost. Some estimates put AOG cost as much as \$150,000 per hour.

Management can make better and more profitable decisions when they are able to assess their choices with full and early foresight. In a competitive market with tight margins, the key to managing profitability is to focus on passenger yield in each part of the value chain. Insight into the dynamics of revenue and cost, by dimensions such as aircraft, route and often by origin and destination gives airlines the knowledge to maximise return on investment and outperform their competitors.



# Full Enterprise Integration





# Driver Based Planning

Driver based planning, an approach that bases financial forecasts and budgets on key operational drivers, supports integrated planning and enables much greater planning agility, responsiveness and accuracy.

Top down, bottom up budget differences are often fudged because neither approach is aligned fully with both strategy and operations. Driver based planning can enable the insight needed to truly reconcile these differences.

The focus should be on selecting the right drivers not the right number of drivers. The right drivers are those that are used by operational units to measure performance and compensation plans.

Driver based compensation should be a core part of every planning model. So, for example, for airlines whose strategy is to generate profitable revenue at every stage of the value chain, auxiliary revenue/gross profit per pax should be used as both a planning and compensation driver.

The following illustration shows many of the drivers underpinning an integrated aviation driver based planning model.



## Multi -Dimensional Views of Profitability

When business managers have a detailed understanding of what drives costs in their business, they can know if their product or services offerings are profitable. They can also know if resources are allocated optimally and if service/product mix and pricing are also optimised for profitable growth.

For business leaders, using insights from multi-dimensional business profitability reports can be a game changer. With insight into which services, products or customers are most profitable managers make more informed decisions about what to sell, to which customers in what markets and at what price.

For many managers, particularly in service industries, their financial reporting and planning environment has been lead by regulatory reporting requirements, tax strategy or by cost centre budgeting models. This leads to complex inappropriate cost allocation models that don't properly reflect how cost is consumed within the

value chain. This financial information does not accurately answer questions about the true unit cost of services, process or products.

How can an airline leadership team make sensible and informed decisions without knowing in detail, for example, the true total revenue, cost and profit of a route, or of different aircraft type or customer classes on that route. Without knowing O&D traffic profitability how can they know which routes are true net contributors to profit. How can operational objectives, plans and compensation schemes be aligned to optimise profitability?

Setting up a new structure to support multi-dimensional net profitability may not always be easy but once completed great insights can take place at lightning speeds. Every month the profitability of every customer and every product can be available almost in real-time. Plans can be re-cast just as quickly bringing immediate understanding of the bottom line impact of customer wins/losses, new offerings, new routes,

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# External Data, Benchmarking, Optimisation and Visualisation

High Level Benchmarks		
Unit Cost	Unit Revenue	Unit Profit
Unit Cost Growth	Unit Revenue Growth	Unit Profit Growth
Return on Capital	Free Cashflow % of Invested Capital	Operating Margin % of Revenue
Cost Component Trends (Fuel, Labour, MRO, Infrastructure)	Yields	Yields Trends
RPK	Net Profit per RPK	

The more mature planning environments use external data to drive aspects of their financial planning. Leading edge airlines integrate macro-economic tourist and airport traffic data in their planning systems, using this information to baseline their demand plans which in turn drive routes, sales, manpower, operations, maintenance and capex plans. These plans can be instantly flexed for different scenarios by simply adjusting a small number of KPI drivers.

Integrating external foreign exchange and/or interest rate data can support automated real time understanding of the impact rate changes will have on reporting currencies.

Best in class enterprises don't necessarily use external benchmarks as these are often not trustworthy. Even when external benchmarks are accurate comparing forecasts are not always comparable across different businesses.

In the airline industry high level benchmarks, such as those in the table below, are generally more

reliable than in other industries but few airlines have incorporated these as an integral part of their planning systems.

The airline industry has quite a successful history in applying optimization approaches to their many scheduling problems but optimisation plays little or no role in their financial planning systems. Best in class planning systems can leverage optimisation techniques and integrate with optimisation software in areas such as fare classes, flight schedules, fleet plans, aircraft routes, crew pairings, gate assignments, maintenance schedules and inventory, food service plans and inventory, training schedules, and baggage handling costs.

Data visualisation in the form of insightful personalised self-service dashboards is an essential qualification for the "best in class planning" accolade. Indeed, best in class leaders have already started the move towards full prescriptive analytics.



## Prescriptive Analytics

According to Gartner, Prescriptive Analytics is a form of advanced analytics which examines data or content to answer the question “What should be done?” or “What can we do to make \_\_\_ happen?”, and is characterized by techniques such as graph analysis, simulation, complex event processing, neural networks, recommendation engines, heuristics, and machine learning.

Best in class financial forecasting supports the use of prescriptive analytics in decision making. Although not currently fully deployed directly as an integral part of financial planning systems, best in class companies and vendors are actively looking at ways to incorporate more of these powerful features in their models and applications.



*Best in class financial forecasting supports the use of prescriptive analytics in decision making.*



## Technology

To add agility and speed to your planning and reporting processes choose a modern cloud based purpose built solution – you need a solution that is designed from the outset for best in class integrated driver based planning, not one that is patched from old legacy systems or is an add on to another solution.

Make sure your finance leadership team retain control of the project, use IT only as a support service.

Finance professionals are not always the best project managers, perhaps because their work is typically more cyclical than project. Our advice based on extensive experience is, where possible, appoint a strong project manager who is qualified and experienced in an established project management methodology. Ensure the project manager reports directly to a senior member of the finance leadership team.

Experience is a good starting point in vendor selection. You want to work with a provider that understands your business – one that has a good grasp of the airline industry and of the optimal way to design and implement complex planning models. This way, you benefit from best practice not only in your sector but across other industries that may be experiencing similar pain points.

The right partner should have strong skills in both finance and technology. Many finance technology projects struggle or fail because they are implemented by IT vendors using generalist business consultants and not accountants. Make sure your vendor has strong accounting/finance skills as well as IT expertise.

The marriage of finance knowledge and technology expertise marks out the best partners.



*Best in class cannot be achieved without the right technology.*

*The big question is how do you choose the right technology?*



## About Miagen

Miagen was established in 2003 with the mission of enabling better decision making in large organisations through the application of advanced modelling, cutting edge technology and specialist expertise. Today, thanks mostly to our outstanding team and huge technology advances, we are making a significant contribution to some of the world's largest, most dynamic companies. We have a unwavering focus on service quality and client satisfaction. We are the largest Adaptive Insights partner in EMEA and have been 'EMEA Partner of the Year' for four years running. We operate from offices in Dublin, London and Abu Dhabi and our work spans the globe. Miagen is also a leading EMEA partner of NetSuite and Dell Boomi.

**Adaptive Insights** is a modern, cloud based, software platform ideal for building agile corporate performance management applications which empower executives and company leaders with strategic insights. The software is ranked highly in the Gartner Magic Quadrant for high customer satisfaction, ease of implementation, and visionary mind-set. Miagen's models and applications are built on the Adaptive Insights platform with rapid deployment in mind.

**NetSuite** provides a broad range of cloud-based ERP, CRM and omnichannel commerce software to transform how businesses operate and streamline their mission-critical processes. Miagen's consulting team offers NetSuite to clients across EMEA for its scalability, rapid deployment and built-in business intelligence that delivers real-time insights into key performance indicators.

**Dell Boomi** is an on-demand, multi-tenant, cloud integration platform for connecting cloud and on-premises applications and data. The platform enables Miagen to design cloud-based integration processes and to transfer data between cloud and on-premises applications.



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