MedAire Inc. Rolling Full Revenue Forecast Model

W.P. Carey School of Business: Master of Science in Business Analytics (MS-BA)

PARTNER COMPANY: MEDAIRE INC.

MedAire Inc. is a global provider of medical and travel safety services for the aviation and maritime industries. Founded in 1985 and headquartered in Phoenix, Arizona, it operates as a subsidiary of International SOS.

What They Do:
- Deliver 24/7 remote medical and security support
- Provide telemedicine, medical kits, and crew training

Project Relevance:
- Financial forecasting of medical service demand and cost
- Data analytics to identify high-risk regions & cost drivers
- Supports budget planning, efficiency, and risk mitigation

Figure 1

Figure 2 & 3

PROBLEM STATEMENT

Traditional forecasting methods are too rigid to capture real-time changes in revenue performance. This limits MedAire's ability to plan accurately in a dynamic, high-risk environment.

Contractual and transactional revenues are influenced by shifting market activity, client needs, and new offerings. Without a unified forecasting model, predicting outcomes and allocating resources becomes difficult.

There is a need for a dynamic, automated solution that integrates both revenue streams. Such a model would enable more responsive planning and scenario-based decision-making.

PROJECT SUMMARY

Accurate **revenue forecasting** is critical for effective financial planning. Traditional static methods often fail to capture real-time performance shifts and limiting timely decision-making. **Rolling forecasts** provide a more flexible and dynamic solution for today's fast-changing business environment.

This project extends a **Phase 1 model** (Fall 2024) focused on contractual revenue. **Phase 2** integrates both contractual and transactional streams, influenced by market activity, client demand, and product launches. The goal is to deliver an **automated forecasting tool** tailored to MedAire's evolving needs.

The model simulates key revenue **levers** renewals, pricing changes, new accounts, major clients, and product launches using interactive **Power BI dashboards** by region, market, and month. This enhances visibility, improves forecast accuracy, and supports proactive, data-driven planning.

Figure 4

DATA INSIGHTS

The forecasting model was built using Invoiced Sales Data and Outlook EBIT files to estimate both contractual and transactional revenues. Data was cleaned and transformed using Excel and Python to prepare it for accurate forecasting and Power BI integration.

Transformations included standardizing dates, aligning revenue categories, and aggregating monthly values for time-based analysis. The structured datasets were optimized for use in Power BI to enable interactive forecasting and scenario modeling.

Chart 1 Chart 2

A&M Global · Aviation · Commercial Maritime · Luxury Yacht · Luxury Yacht Russia · Operations

The model delivers a rolling monthly forecast with drill-down capabilities across region, market, and month. It incorporates key levers such as renewals, DNRs, pricing changes, and new client activity to improve forecasting precision and insight.

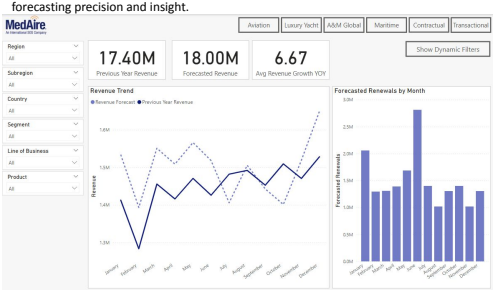
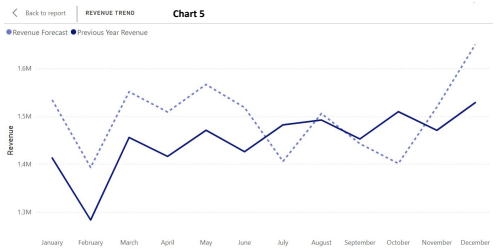


Chart 3

Chart 4

KEY TAKEAWAYS

- The integrated rolling forecast model combined **contractual and transactional revenues**, producing dynamic, month-by-month revenue projections.
- The model revealed **seasonal trends and year-over-year growth**, with transactional revenue showing higher variability due to pricing, market shifts, and new business activity.
- **Power BI dashboards** allowed users to drill into results by region, market, and product line, offering transparency into levers like renewals, DNR rates, pricing, and new client onboarding.
- **Scenario testing** showed that small changes (e.g., +5% renewals or launching a new product) significantly impacted forecasts at both regional and enterprise levels.
- The forecast closely aligned with historical actuals and surfaced the **timing effects on deferred revenue**, especially when invoiced sales shifted across months.



FUTURE SCOPE

- Continue enhancing the **rolling forecast model** by expanding data integration and refining the balance between **contractual and transactional revenues**.
- Invest further in **automation and data pipelines** to reduce manual processing in Excel and Python, improving efficiency and scalability.
- Incorporate **advanced analytics and predictive modeling** to strengthen forecasting accuracy and better anticipate revenue shifts.
- Explore integration with **enterprise financial systems** to embed forecasting outputs into broader strategic planning and operational workflows.

Figure 5

CONTACTS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REFERENCES

Figures

1. https://epihab.org/2020/06/03/epi-hab-partners-with-medaire-to-provide-warehousing-and-storage-for-large-scale-project/
2. AI Generated Image (Private Jet)
3. AI Generated Image (Luxury Yacht)
4. https://www.easel.ly/blog/presentation-tips-keep-audience-engaged/
5. AI Generated Image (Recommendations)

Charts

1. Contractual Revenue
2. Transactual Revenue
3. PowerBI Dashboard Layout
4. Dynamic Filters
5. Revenue Forecast