

The Value of Asset Up-Time



What if you could...

- ... Reduce your aircraft downtime by 20% during heavy maintenance
- ... Shrink your plant turnaround by five days
- ... Improve your rolling stock reliability by 15%

With Proudfoot, you can.



How much is one day of increased asset productivity worth? What is preventing you from returning your assets to revenue production faster, safer, and more efficiently?



Time is money! For every day your asset is in a heavy maintenance event outage status, it is not producing revenue. Your lift trucks are not hauling containers, your aircraft is not flying passengers, and your plant is not producing product.



Proudfoot can help you compress your maintenance event times consistently and sustainability, while improving safety, quality and labor productivity.

Major Maintenance Event Focus

Proudfoot has broad-based maintenance capabilities that have enabled clients to transform their ability to perform major maintenance events more safely, efficiently, and profitably. On time, on cost, on quality with consistent results that are predictable, reportable, and achievable

- Plant Shutdowns and Turnarounds, Aircraft Heavy Maintenance Checks, Rolling Stock Preventative Maintenance....
- What do all of the above have in common? The clock is ticking on profitability from the moment your asset is removed from operations until it is ready for service. And many of these events span multiple weeks!
- At Proudfoot, we truly understand that delays during a major maintenance event translate into lost earnings. For decades, we have focused our efforts and capabilities on helping clients do everything possible to ensure the success of their events in the shortest time possible by partnering with their people to impact the following operational processes and outcomes:

OPERATIONAL PROCESSES IMPACTED

- Planning and Scheduling
- Non-routine Maintenance Forecasting
- Daily 6S
- Event Setup – Tools, Materials, Workspace
- Material Requisition and Consumption
- Preventative Maintenance Work Scoping
- Contract Management
- Vendor Management
- Corrective Action and Continuous Improvement
- Failure Mode Evaluation Analysis
- Work Permitting / Red Tagging / Lockout-Tagout



TYPICAL POSITIVE OUTCOMES

- Reduction in delay due to unplanned workorders
- Increased "time on wrench"
- Reduced event span time
- Reduced material spoilage/wastage
- Reduced contractor costs
- Reduced permit wait times
- Improved safety metrics
- Reduced rework per workorder
- Increased asset reliability
- Increased asset availability
- Increased productivity

The Six Factors of Maintenance Excellence

We deliver a comprehensive view of the current state of maintenance operations then accelerate Transformation by focusing on the Factor(s) providing the best opportunities to achieve sustainable value.

Delivery Process

- What would an aerial map of your maintenance model reveal about effectiveness, efficiency, and accuracy?
- Proudfoot can map against our proprietary assessment tools to identify strengths and opportunities.

People

- How ready is the organization for Transformation?
- Proudfoot excels at mentoring, training, and coaching your people to not only implement change, but to ensure the positive effects are sustained.

Production and Procurement Strategy

- The operator must own the reliability of their assets, and a proper sourcing strategy enables that.
- Proudfoot can help you balance risk and control with cost to develop the right solution.

Deployment

- What types of maintenance are done in-house? How are maintenance locations and service offerings decided upon?
- Proudfoot brings multi-industry disparate experiences to bear to help find what works for you given your specific situation.

Technology

- Is the organization Digital Ready?
- Are the users readily adopting the new or existing technology?
- Proudfoot's Digital Ready approach is particularly suited to MRO as many technologies are impacting maintenance today.

Maintenance Model

- What is the mix of preventive and predictive work? Is the organization embracing reliability-centered approaches?
- Proudfoot's team of experts can help select the right model for your set of maintenance variables.

What if you could...

...free up more than 200 hangar days per year using the same resources, sell your excess hangar capacity and free up your skilled labor resources to generate new revenue?

With Proudfoot, you can.

A major international airline in Asia and its strategic MRO partner were struggling to improve operational efficiency in their heavy maintenance operations due to the conflicting impact that an increase in labor productivity would have on their commercial interests.

Proudfoot was brought in to enable a win-win solution between the airline and the MRO by freeing up hangar time through reducing turnaround times.

Within a period of 6 months, the MRO was able to turn around their heavy maintenance checks at a 15% faster rate with less manpower - consistently and safely. The airline got more flying hours from their aircraft and the MRO freed-up resources to generate new revenue.

"In this project, we have worked closely with Proudfoot in applying the P3 Operations Methodologies to enhance the predictability of our workload, synchronize our supply chain to ensure seamless coordination between different departments and most importantly, driven discipline execution across the organization."

- Chief Executive



Proudfoot PROOF POINTS

Aircraft Maintenance,
Repair and Overhaul

A TRANSFORMATIONAL APPROACH

- 1 Predict critical defects months before the car input, establish standard plan of controls, develop scenario simulations and NRC Life-cycle management to minimize the initial need to resolve defects? **Creating risk prediction and standardized responses.**
- 2 Apply advanced SMED methodology to externalize non-critical activities, optimize man power allocation and maximize hangar utilization? **Creating externalization of activities and advanced planning.**
- 3 Orchestrate seamless coordination in the movement of materials, tooling, equipment, workshops and trade specific resources to debottleneck supply chain constraints? **Creating synchronized supply chain coordination.**
- 4 Bottom-up task level, critical path scheduling to enable planning driven precision in execution and ensuring maximum productivity? **Creating dynamic critical path scheduling.**
- 5 Make lead indicators transparent to prevent delays through real-time performance variance controls supported by active supervision? **Creating real-time performance controls.**

REMARKABLE RESULTS

Proudfoot helped the client compress their car heavy maintenance turnaround time consistently and sustainability, while improving safety, quality and labor productivity.

20%

Reduced heavy maintenance turnaround time and increased hangar capacity

10+%

increase in productivity

-30 min

Reduced hangar time per plane

-2.2%

Reduction in maintenance costs per available seat per mile

**We design, implement and accelerate
operational & digital transformation
- realizing tomorrow's results today.**

Why Proudfoot? Transformation is our day job

The engagement of your people within a robust methodology and approach:



"We are greatly pleased that the cost savings have already begun to show, especially through the efficient use of external service providers. Working practices and behavior have much improved and a more positive mindset is now visible on the job floor."

Client Project Team Leader

Experience and capability deployed to deliver what we promise:

"Your 3 week Rapid Assessment of our NTH (non-traffic hours) infrastructure maintenance processes opened our eyes to a new range of opportunities and you designed an approach which we believe will help us to transform our maintenance practices safely while adding an extra hour of maintenance during NTH."

I will strongly recommend you to anyone looking to transform their maintenance operations, especially with the added value you bring with different perspectives on maintenance from other heavy asset industries like mining and airlines. These lessons are very valuable to my teams."

**Tony Lee, Chief of Operations
Engineering, MTR Corporation**

Our Scorecard

According to Source Global Research, “only 38% of clients agree that consulting firms add more in value than they charge in fees.” At Proudfoot, we have consistently overachieved, delivering an average ROI of over 400% within the first year.

621

IMPROVEMENT PROGRAMS

Of our last 1000 engagements, 621 had specific targeted financial benefits. The remaining were milestone measurements.

\$5.6bn

YEAR 1 BENEFITS REALIZED

\$16bn within 3 years.

110%

RESULTS DELIVERED

Financial benefits achieved compared to targeted benefits at the beginning of the project.

400%

YEAR 1 RETURN ON INVESTMENT

Average ROI gained by clients within the first year.



Learn from our experience...

**BEST
INTERNATIONAL
PROJECT**



Proudfoot and Rio Tinto's partnership on the Oyu Tolgoi project has been recognized by the Management Consultancies Association and selected as finalist for the award of Best International Project

**2017 SERVICE
PROVIDER OF
THE YEAR**



Proudfoot received Service Provider of the Year for completing a comprehensive revamp of all areas of operations for the company, resulting in many operational changes, improving efficiencies and profitability across the board.



Thank You