



NUCLEUS
RESEARCH

ROI Case Study: Karmak Mobile Service at TCI Transportation

ROI: 201%
Payback: 6 Months

ANALYST

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The Bottom Line

TCI Transportation achieved a 201 percent ROI upon implementing the Karmak Mobile Service Application on top of its existing Karmak Fusion deployment. The organization recovered its investment in the app six months after its deployment. Previously heavily reliant on manual data entry for its repair order processes, TCI leaders sought a mobile-first solution to add efficiency to its technicians' everyday work. Nucleus found that upon implementation of the Mobile Service app, the organization was able to save 10 hours per week on manual data entry at each of its 26 locations, increase data accuracy by 50 percent, and accelerate time between repairs by 89 percent, with combined annual savings totaling more than \$500,000.

The Company

Headquartered in California, TCI Transportation is a leading provider of automotive transportation services. Its primary mission is to facilitate and streamline auto transport. The organization is authorized by the Department of Transportation, fully insured, and maintains compliance with the highest industry standards. TCI has approximately 26 locations of varying sizes across the United States, employing approximately 150 technicians.

TCI had been looking for a mobile solution for its technicians for years prior to Karmak's Mobile Service launch.

The Challenge

TCI was already using the Karmak Fusion dealership management system (DMS), but leaders had been wanting a mobile component for years. Significant manual work was required to get repair order information into the system, which took time away from actual repairs and other high-value tasks. Given this, when Karmak announced the release of the Mobile Service app, it was a natural next step for the organization. Not only would the app add efficiency to technicians' daily work, but it would also integrate deeply with Karmak Fusion, providing little to no disruption to existing operations once deployed.

The Strategy

The implementation and rollout of the Karmak Mobile Service app started in late 2023 and was phased out in three-month periods, taking approximately one year to fully complete. This approach enabled any issues to be mitigated proactively with the locations associated with each phase before moving on to the next. TCI's Fusion application support engineer took on most of the implementation work, traveling to each location to onboard new users. The app was deployed through iPad tablets, and formal training consisted of an eight-hour block of time for technicians at each of its 26 locations. However, not much training was needed beyond this, as the app is noted to be intuitive and easy to operate regardless of technology proficiency. Ongoing support for the platform is also managed by the Fusion application support engineer, who spends around 20 percent of their time weekly ensuring that updates are completed and that the app is running smoothly.

"Training was easy, as the Mobile Service App is intuitive and easy to use."

- Application Support Engineer

Primary Benefits

Benefit areas seen as a result of TCI Transportation's Karmak Mobile Service deployment include reduced administrative work, improved data accuracy, and an acceleration of time between each repair.

Reduced Administrative Work

Depending on the size of the branch, an administrator, technician, or service manager would have to spend each morning manually re-entering data from the previous day's repair orders. Upon rolling out Karmak Mobile Service, technicians could update everything through the app in real-time, either by typing or using speech-to-text capabilities. This led to a virtual elimination of manual data re-entry for repair orders. With approximately 100 repair orders being created each week across the organization, this translates to about ten hours per week eliminated at each TCI location. Nucleus found that this led to more than \$420,000 in annual labor cost savings and freed up time to focus on other high-value administrative or repair-oriented work.

The Mobile Service implementation yielded more than \$420,000 annually by reducing ten hours of manual administrative work at each TCI location.

Improved Data Accuracy

The reduction in manual data entry afforded by the Mobile Service app led to a significant reduction in errors within the Fusion system, with TCI's data accuracy rate improving by 40 to 50 percent post-rollout. This is not limited to repair order data accuracy, as it has also led to more accurate time punch data. These improvements are due to the fact that the accessibility of the application makes it easier for technicians to clock in and out, as well as enter repair order information when it is still fresh in their minds.

"The app has provided technicians with more freedom and flexibility in their workflows"

- Director of Maintenance

Task-switching Efficiency

Prior to having the Mobile Service App in place, technicians regularly had to spend up to 45 minutes waiting for each new assignment between repairs and filling out repair orders. Nucleus found that the app decreased this time between tasks by 89 percent, resulting in more than \$125,000 in annual labor cost savings.

Technicians went from spending 45 minutes waiting for each new assignment to 5 minutes, an 89 percent reduction.

Lessons Learned

TCI adopted the Karmak Mobile Service app at its earliest stage of release, meaning there will be more features to be released as time goes on. For example, leaders at the organization would like to see deeper reporting capabilities in future updates to have better visualization of metrics such as job completion time. The team acknowledged that they look forward to getting more out of their existing Mobile service deployment once more functionality pieces are added, which will expand upon benefits already realized in the short time it has been used. This project underscored the value of the Karmak Mobile Service implementation as a proof-of-concept, driving positive ROI at the outset with a high potential to deliver incremental ROI gains

over time. Overall, technicians note being very satisfied with the app, claiming that they would not want to go back to a pre-Mobile Service work life. The ability to focus more on repairs while spending less time waiting at the service counter to update repair orders has made their day-to-day work much more manageable.

“Any [Mobile Service] downtime would cause technicians to be upset”

- Director of Maintenance

Calculating the ROI

Nucleus Research analyzed the costs of software, hardware, personnel, and user training over a three-year period to quantify TCI Transportation’s total investment in Karmak Mobile Service. Primary costs of the deployment include annual subscription and licensing costs for the app, the purchase of iPads, personnel time spent implementing and supporting the system, and technician time spent training.

Indirect benefits quantified include time savings for service managers, technicians, and administrators due to a reduced need for manual data entry, and time savings for technicians stemming from improved task-switching efficiency. The indirect benefit is multiplied by a correction factor to account for the inefficient transfer of time between time saved and additional time spent working. Benefits not quantified include improved data accuracy.

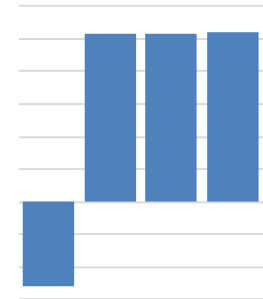
Detailed Analysis

Benefits	Pre-start	Year 1	Year 2	Year3
Direct	0	0	0	0
Indirect	0	548,543	548,543	548,543
Total	0	548,543	548,543	548,543

Time to Value
6.0 Months

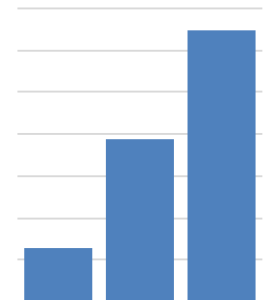
Costs	Pre-start	Year 1	Year 2	Year3
Software	6,000	6,000	6,000	0
Hardware	75,000	0	0	0
Consulting	0	0	0	0
Personnel	109,038	27,000	27,000	27,000
Training	67,392	0	0	0
Other	0	0	0	0
Total	257,430	33,000	33,000	27,000

Net Cash Flows



Net Benefit	Pre-start	Year 1	Year 2	Year3
Net	(257,430)	515,543	515,543	521,543
Cumulative	(257,430)	258,112	773,655	1,295,198

Cumulative Benefit



Financial Calculations

Annual ROI	201%
Payback (months)	6.0
Benefit to cost ratio	4.7 : 1
Net Present Value (NPV)	605,228
Average Annual Cost of Ownership	116,810
Average Annual Benefit	548,543
3-Year IRR	192%

In the first three years
the project returns 4.7
for every 1 invested.