Optimizing Fleet Management with Key Control

Introduction

In these modern times, some people may be surprised at the continuing importance of one of the security industry's most mature technologies: keys.

Keys remain important for many reasons, even when facilities are equipped with the most advanced access control systems. They serve as resource management tools, timekeeping tools, cost allocation tools, emergency response tools and – oh, yes: they open doors and start vehicles, even in remote areas and during periods of electrical failures when other systems are down or don't exist.

Because of the ongoing utility and importance of keys, it has also become increasingly important to keep track of them. Who took which key, and when? When was it returned, and to where?

Nowhere are these simple questions more important than in the field of fleet management. Fleet vehicles, whether they are cars, trucks or heavy equipment, are valuable assets that must be managed. And, they are not only critical to the execution of an organization's business and objectives, they are one potential source of significant business risks. Your fleet is controlled by keys – and so the tools that can help control who has access to which keys, and when, can be an answer to important business challenges.

This paper will focus on business challenges and opportunities that are central to fleet management, and show how key management systems can offer important advantages for fleet managers.

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Current Key Management Systems

Key management systems are made up of three primary elements: electronic key cabinets, intelligent key tags, and key management software. Together, these three elements can be implemented to gain a wide range of business benefits. Refer to the illustration below to see the elements in an example system.

The key management software is the "brains" of the system and provides the administrative interface. This software can run on dedicated hardware, or on a suitable workstation connected to the organization's internal data network. The administrator has the power to set the rules of the system from a management screen, including who has access to which keys, when, and for how long. The software uses these rules to release keys to authorized users in accordance with any restrictions and accept the return of keys. An audit trail is preserved, recording all attempts at key access, and capturing the times and locations of each individual's key withdrawals and returns. Note that leading systems have the capability to trigger email or text-message alerts to managers when certain conditions are met; so, for example, if all keys are supposed to be returned by the end of each working day, managers can be alerted automatically if any key is missing at that time.

The keys themselves are fastened to intelligent tags that uniquely identify each key, or set of keys. For added security and convenience, key sets can be grouped together with an easy-to-use, tamper-proof key ring. To help ensure the most effective management, the intelligent tags are also designed to be part of the capture/release mechanism, so that it is only possible to be credited with a return if the tag is inserted and retained in the system. Leading systems can be programmed to allow key returns only to the same cabinet (or even the exact key slot) it was borrowed from, or to any cabinet in the system to support multi-location operations.

Perhaps the most visible element of the system is the electronic key cabinets. These cabinets provide the primary storage locations for keys in the system, so they are designed to balance the need for convenient access with the need for a rugged design to prevent unauthorized access or tampering. Different door options are available, such as all steel or with a polycarbonate panel for quick visibility of keys. Cabinets come in various sizes, and well-designed cabinets usually include a modular arrangement that allows for customizing the number and size of stored keys while supporting future changes if needed.

Two other important elements set the cabinets apart from standard key storage cabinets. The first is that each key storage location is equipped with a locking mechanism that engages the intelligent key tags as described above. This helps in controlling which keys are taken from the cabinet, and ensures that a reported return actually happens. The second element is an access interface that is used by the authorized key borrowers to identify themselves and request keys. Older systems used a keypad for this purpose while newer ones have changed to touchscreens for programming flexibility. Many systems have also incorporated biometric elements, such as fingerprint or employee ID card readers, to increase the accuracy of user identification and thereby

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increase the security of the systems. The administrator can set the system to require a single ID type or multi-factor identification as needed.

Key Control Implications

By implementing a key control and management solution to store and track keys, fleet managers not only address some nagging ongoing business challenges, but they also create new opportunities for improving management effectiveness and potentially even for creating new revenue. Remember that with a system in place, every time a key cabinet is accessed to either remove or return a key, the activity is automatically recorded, including time, date and identity of the individual accessing the cabinet.

Here are some of the implications of using a key control system:

Adherence: Using a key management system ensures that no matter whether your vehicles are being managed by a long-time employee or someone you brought on board last week, policies will be followed correctly.

Accuracy: When every action at the key cabinets creates an audit trail, management no longer depends on users remembering to make entries in a log or record accurate times. There is no question which vehicle was taken, or by whom.

Accountability: In turn, the high level of automated accuracy leads to an increase in accountability. Team members know that their actions will now be attributed accurately, and they will not be wrongly questioned or accused. Managers can also be more confident that their instructions are being carried out correctly, and that any indications of problems can be given appropriate levels of attention.

Convenience: Not only are automated systems vastly more accurate than manual log books, but they are also more convenient. Features such as illuminated key slots to instantly be directed to the correct key, biometric access to quickly confirm identity, and helpful system prompts all make the user experience friendlier and faster, saving time and reducing wasteful errors.

Control: Put simply, control the keys and you control the fleet.

Challenges and Opportunities for Fleet Management

These inherent qualities of automated key management and control systems lead directly to operational challenges and opportunities for fleet managers. Here are some examples of how they can be employed to improve business results.

Challenge: Combating Unauthorized Vehicle Usage

Perhaps the most obvious business improvement is an immediate and clear spotlight on vehicle usage. If a vehicle is returned damaged or with unusually high mileage, administrators and managers can easily check the automatically recorded access activity records to determine who used it last, when the keys were taken out and when they were returned. One company that recently installed a key management system was driven to it because of repeated issues with 4-wheel drive company

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vehicles being found with extra mileage and lots of mud every Monday during hunting season.

The system itself will prevent many uses without proper authorization based on the pre-programmed rules, and can alert managers immediately to circumstances such as late returns or returns to the wrong location. In the best key management systems, the alerts can be customized to match a wide range of potential criteria such as an alert when a specific vehicle is requested or taken out, or a particular person is requesting a vehicle, providing management with a flexible, powerful tool for proactive actions. To help ensure accountability or compliance with company policies, priority email or text-message alerts can be sent to management to inform them of the status of specific keys.

Challenge: Tracking Vehicle Status

Because the tracking of all the keys in the system is centralized and always up to date, it is a simple matter for managers to understand the current status of their fleet. Managers have the visibility to know immediately what vehicles are available for use, and where they and their keys are located. Many leading key control systems offer mobile apps that make it even easier to check key status in real time.

Recall that networked systems can be set to allow keys to be returned to any fleet key cabinet in the system. This makes it straightforward to track a vehicle that has been returned to a different location from where it was picked up. The system software will record the location and time so any authorized user looking for that vehicle can verify who took out keys and when. Armed with this information, managers can decide whether vehicles will need to be moved between locations for balancing or other purposes.

Challenge: Ensuring Balanced Usage

One key challenge for fleet managers is balancing the use of older or less desirable vehicles when newer vehicles become available. Without controlling this situation, excessive mileage can quickly accumulate on the newer vehicles and disturb maintenance schedules and have other unintended effects. Scheduling functions built into the key control software can be used to improve the situation by, for example, ensuring that drivers can't simply grab the newest car on the lot while older cars sit unused.

Scheduling can also be used to tackle another common challenge – the use of specialized units – alone or in conjunction with the age-based balancing already mentioned. It is common in many applications for the available units to be different in important ways. For example, certain trucks in a delivery fleet might have a lift gate, or certain police cars might be equipped for water rescue, or certain vans might be set up to seat extra passengers. In these cases, users might casually choose to use these vehicles for unrelated reasons – they are newer, or have better air conditioning, or a nicer color – that makes them unavailable when needed for the specialized

task for which they were intended. Using key scheduling and other functions, users can be directed to the other vehicles as part of a comprehensive plan, while users who need a specific vehicle can be sure that it will be waiting for them.

Challenge: Lost and Missing Keys

Lost or missing keys represent one of the biggest financial threats to fleet management. Implementing an effective, centrally controlled key management system can help minimize the potential for these damages. Keys are

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Bell Ambulance Improves Tracking and Saves Money with Key Management

Bell Ambulance Company, based in Milwaukee, Wisconsin, is the largest provider of ambulance services in the state, with 9 stations throughout the area operating 24/7. The company responds to around 75,000 calls per year and provides a range of services including basic life support, advanced life support, critical care paramedics, and long-distance ground transportation.

With all this activity focused on their primary objectives, managers at Bell realized that the practice of storing the ambulance keys on open hooks no longer met their needs. Vehicles were not always returned to the same location, and the paper tracking system could not provide timely status reports. Lost keys, which were once considered a minor nuisance to replace, were becoming increasingly costly, as newer-style secure key fobs cost hundreds of dollars and also necessitated reprogramming of the vehicles. And, the stations themselves were often unoccupied and unguarded, making the theft of keys much easier. Bell needed a better way to manage and track its keys.

Implementing an automated, networked key management system was the ideal solution for Bell. Key cabinets are installed at each location, and the system tracks exactly which keys are available at all times, and where they are located. Usage tracking helps the service team schedule vehicle maintenance, and the high costs associated with lost keys have been almost completely eliminated.

attached to a system key fob and are securely stored in the automated key cabinet when not in use. And by using tamper-proof key rings discussed above, the system helps thwart any thief who might attempt to keep the original key and replace it with a counterfeit key in order to return later and drive off with the demo car.

Key cabinets are equipped with alarms that can be set to alert management under conditions such as the use of force to gain access or remove a key, three consecutive invalid user codes, a door left open for longer than a user-selected interval, power failure, a key missing or not returned on time or a key returned by the wrong user. With all this additional information automatically collected and instantly available, managers are far better equipped to minimize these losses.

Challenge: Outside Contractors

Keeping track of keys can be even more challenging when the user is not your own direct employee. Leading key control systems can maintain accountability even when it's not your employees accessing the keys by providing contractors with credentials to access a specific cabinet and make sure keys stay where they belong.

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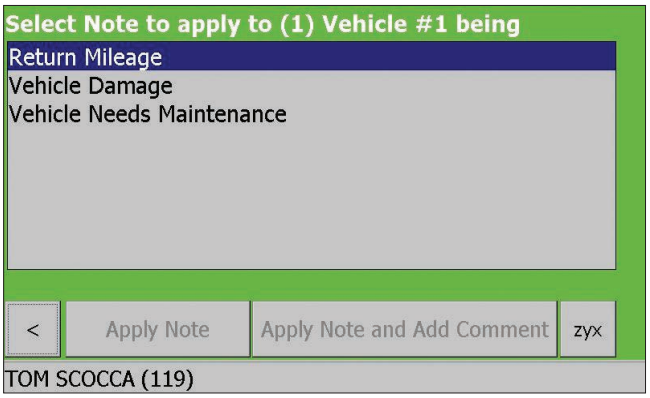
Challenge: Maintenance Notes

When schedules and locations are complex, it is sometimes difficult for staff to alert fleet maintenance crews of items they notice that might need attention. Leading key control systems include note functions that let users input relevant notes easily at the time they return the key. This conveniently captures the important information while associating it with the correct vehicle and noting the user in case the maintenance crew needs further input or clarification.



Opportunity: Reporting for Business Insights

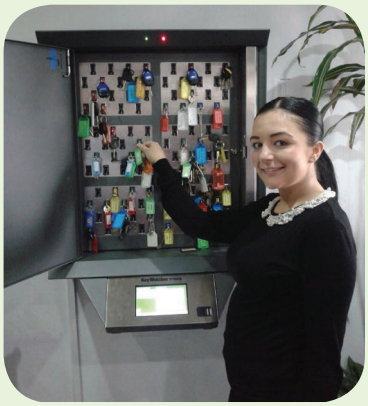
Real-time awareness of vehicle usage by authorized individuals presents the opportunity to more accurately allocate costs to particular projects, lines of business, or clients. For example, it is now possible to accurately know the amount of hours vehicles are used by each department, and allocate costs appropriately, rather than relying upon each department to report usage accurately or remember usage after the fact. The improved accuracy, completeness, and timeliness of the reports, compared to paper logs, increases the confidence level of the data and supports efficient operations with clear documentation.

Every time the key cabinet is accessed, the activity is automatically recorded. This information can be compiled in a variety of formats for analysis or investigative purposes at any time, and depending on the information needed, management can review daily, weekly and even hourly reports. These customizable reports can be automatically emailed to the administrator on a set schedule, or generated on

Purple Parking Improves Control with Key Management

Purple Parking is the largest off-airport car park operator in the UK. At London's Heathrow Airport, for example, the company operates 38 distinctive purple buses, numerous company cars and 110 drivers throughout the five-terminal airport. Purple Parking depends on its reputation for good transport organization to meet customer demands and maintain high satisfaction levels in this competitive market.

The complexity and urgency of these management challenges led Purple Parking to implement a key management system to increase efficiency and improve overall operations. The system is used to regulate, store and track keys for vehicles used to transport customers between the various Purple Parking facilities and the airport. Keys are kept in the tamper-proof cabinet when not in use, and only authorized users can access a vehicle key during their working hours. All access activity is recorded, allowing management to view live or recorded data showing which keys are out and with whom, and when the keys were returned or are scheduled to be returned. To help ensure operational control, if a key is returned late, an alert is sent to management via email or SMS text.



Implementing the automated key management system was exactly what Purple Parking needed. The system helps control vehicle usage and improve driver accountability. Maintenance scheduling has improved, and the key reservation function ensures that private cars will be available when reserved. Overall, the system helps keep schedules, drivers and vehicles organized, increasing overall efficiency.

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demand. In a fleet environment, the accumulated data of key usage can be analyzed for inventory effectiveness and insights. Vehicles with maintenance problems can be identified more easily, for example, as can vehicles which are used the most or the least. With this kind of valuable information, management can get a better understanding of vehicle use, staff activity and business needs and make adjustments as needed.

Opportunity: Risk Reduction

Controlling key access and returns can have business implications beyond the mileage put on each vehicle. Unfortunately, users often don't consider key management systems until there's already been an incident. In a recent example, an employee was arrested making a drug deal in a company car he took out late for the weekend. In accordance with their procedures, the police seized the car – and the company is expending time, attention, and money fighting for its return.

In another example, a well-meaning manager lent a company vehicle to a visiting high-ranking politician. When the manager's staff arrived on Monday, the car seemed to be missing and without a way to know who had taken the key, they reported the car stolen. So, the politician was driving around in a stolen car. That situation ended without further incident, but the risk of any other outcome was unacceptably high.

Here and elsewhere, the key management system can directly address – and reduce – the business risk of such events.

Summary/Closing

Key control and management systems have inherent qualities that can provide tangible benefits for fleet management. These inherent qualities, including accuracy, accountability, and convenience, lead directly to a range of operational implications that address nagging fleet management challenges, and also provide opportunities for business improvements. Fleet owners and managers should look closely at their current systems, and evaluate today's leading providers to improve their operations while reducing business risks. With the cost of today's fleets, and the potential improvements, it is likely to be an easy decision.