Return on Investment of Digital Access Management Solutions

ASSA ABLOY
Global Solutions

Whitepaper for Critical Infrastructure Protection

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Experience a safer
and more open world

Contents

1. Introduction

Security and safety are integral components of critical infrastructure. When a company is about to invest in new locking solutions, the operational efficiency of access management can determine how profitable an investment truly is.

How digital access solutions provide return on investment?

When companies plan their budgets, they should compare the cost of investment with the **return on investment**. A cheap investment might save money upfront, but deliver a false economy with a security system that has limited technical support and meets no more than basic security standards. If the possibilities of automation, integrations, and cybersecurity are disregarded, the security system might end up not being used to its full potential. For the budget this means that operational costs stay the same or might even increase.

Looking at how an investment pays back within the next few years, digital access solutions can help with tracking of vehicles, employees, and contractors, and monitoring and identifying access. For example, a digital key or a keyless solution could cut down manhours and fuel spent on escorting people to sites altogether for years to come – whilst still being able to monitor when people attend and leave sites.

In this white paper we take a deeper look at return on investment and offer perspectives on how to increase operational efficiency and reduce costs through access management.

2. Monetising the benefits

What are digital security solutions?

Wired and wireless digital locking solutions provide exceptional security and privacy protection for critical infrastructure. For example, battery-powered Bluetooth® locks offer flexibility and future possibilities for remote opening and IoT monitoring. Smartphones are also true multifunctional devices that can be used as secure digital keys to access different sites and premises. Mobile credentials replace physical keys, cards and fobs, and they have significant advantages, like ease of use and multiple layers of security.

Key-based digital solutions

Keyless solutions

Safety and security are an investment, not a cost

We have worked for decades within critical infrastructure. In our experience, digital access solutions provide fast return on investment by decreasing costs in different operational areas.

What benefits do digital access solutions offer?

- Real time monitoring of remote and unmanned sites.
- Integrations with existing systems.
- Manage workforce access according to people's capabilities.
- Robust and comprehensive solution with a long lifetime.
- Automated access management.
- Predictive maintenance services.
- Optimised key management.
- Enhanced reporting and analytics capabilities
- Maintain regulatory compliance avoiding potential fines

Give access to the right people at the right time

For example, with digital solutions each staff member's and contractor's access rights can easily be set according to competence or areas they need access. Digital keys and keyless access management can also be integrated with third party systems, so that access rights can be activated according to a person's shift or training, thus eliminating safety risks and the need to pick up and return keys to access sites.

What can your company gain through digital solutions?

Savings in operational costs

Reduce potential downtime

Better use of resources, reducing operational costs

Give the right people access at the right time

Ease of use

3. Evaluating return on investment

How to evaluate an investment?

Let's first go through different ways to financially evaluate a project.

Payback

The payback formula calculates the amount of time to recover the cost of an investment. The payback period is the time it takes for an investment to reach the point of break-even, and therefore the desirability of an investment is directly related to the payback period. A shorter payback means a more attractive investment.

Return on Investment

Return on investment is a financial metric widely used to measure the probability of gaining a return from an investment. ROI offers a ratio that compares the gain or loss from an investment relative to its cost. It is useful in evaluating the potential return from a stand-alone investment as well as in comparing returns from several investments.

Net present value

Net present value calculates the current total value of a future stream of payments. When the NPV of an investment is positive, the discounted present value of all future cash flows related to that investment will be positive. To calculate NPV, we need to estimate future cash flows for each period and determine the correct discount rate. One drawback of NPV analysis is that it assumes future events that may not be reliable.

Internal rate of return

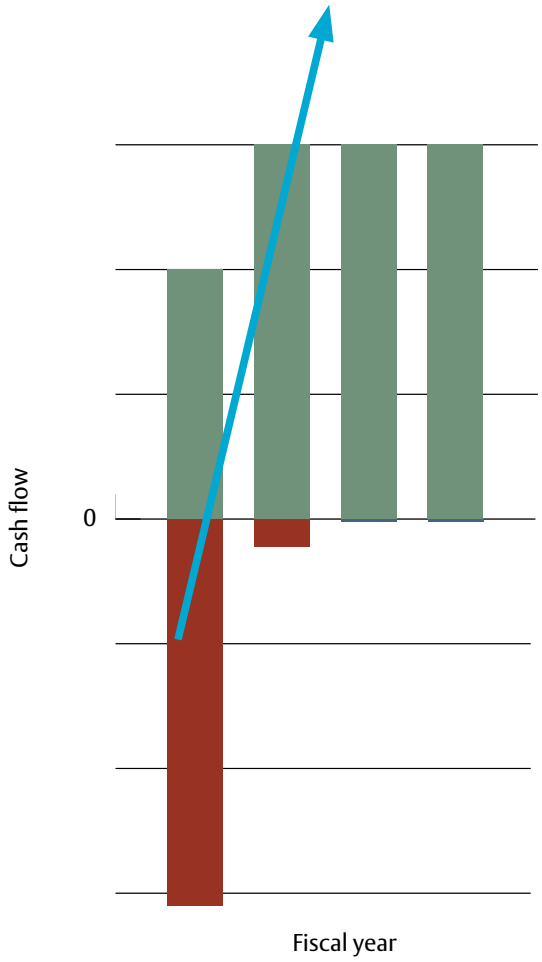
The internal rate of return is the annual rate of growth that an investment is expected to generate. IRR is calculated using the same concept as net present value (NPV), except it sets the NPV equal to zero. It is ideal for analysing capital budgeting projects to understand and compare potential rates of annual return over time.

What is cash flow?

Cash flow indicates the net balance of cash flowing into and out of a business. When the flow is positive, more money is moving in than out. When the flow is negative, more money moves out than in. A company's cash flow can be inspected from different perspectives. A healthy company that actively invests in assets and business solutions will often have a negative investing cash flow, while simultaneously the operating cash flow, meaning net cash generated from business operations, can be positive.

A visual example of cash flow

This graph shows how the investing cash flow and the operating cash flow both affect company cash flow in the long run. An investment that increases operational efficiency will continue to generate operational benefits, even if the initial cost of investment affects the flow in a negative way.



4. Checklist to evaluate ROI

Assess your security situation and evaluate potential ROI

From the energy sector to water, transportation, and telecommunication, critical infrastructure companies have different regulatory demands but similar security needs and challenges. To assess your security situation and the possibilities for return on investment, consider these questions:

- [ ] *Could improving situational awareness help you manage site operations and access needs better?*
- [ ] *How much money and time is wasted on escorting people to site?*
- [ ] *How much money on fuel is spent on wasted journeys?*
- [ ] *Do you run a risk of being fined if you fail a security audit?*
- [ ] *Could you save money with more efficient key management?*
- [ ] *Could you improve staff and contractor safety?*
- [ ] *Could you help prevent disruption from insider theft and organised crime?*
- [ ] *What are your annual insurance costs?*
- [ ] *What are your annual costs of replacing lost keys?*
- [ ] *What risks do you carry if locks are not changed due to lost keys?*


TAX
$$$
TAX

5. Case example: Tower company

A tower company was wasting extra time and fuel on remote asset maintenance. To access a remote site, employees had to take an unnecessary detour to the company headquarters to pick up keys. Now, thanks to keyless access management access rights can be updated on the move, allowing workers to head directly to sites.

Locking points:
6000

Key holders:
800

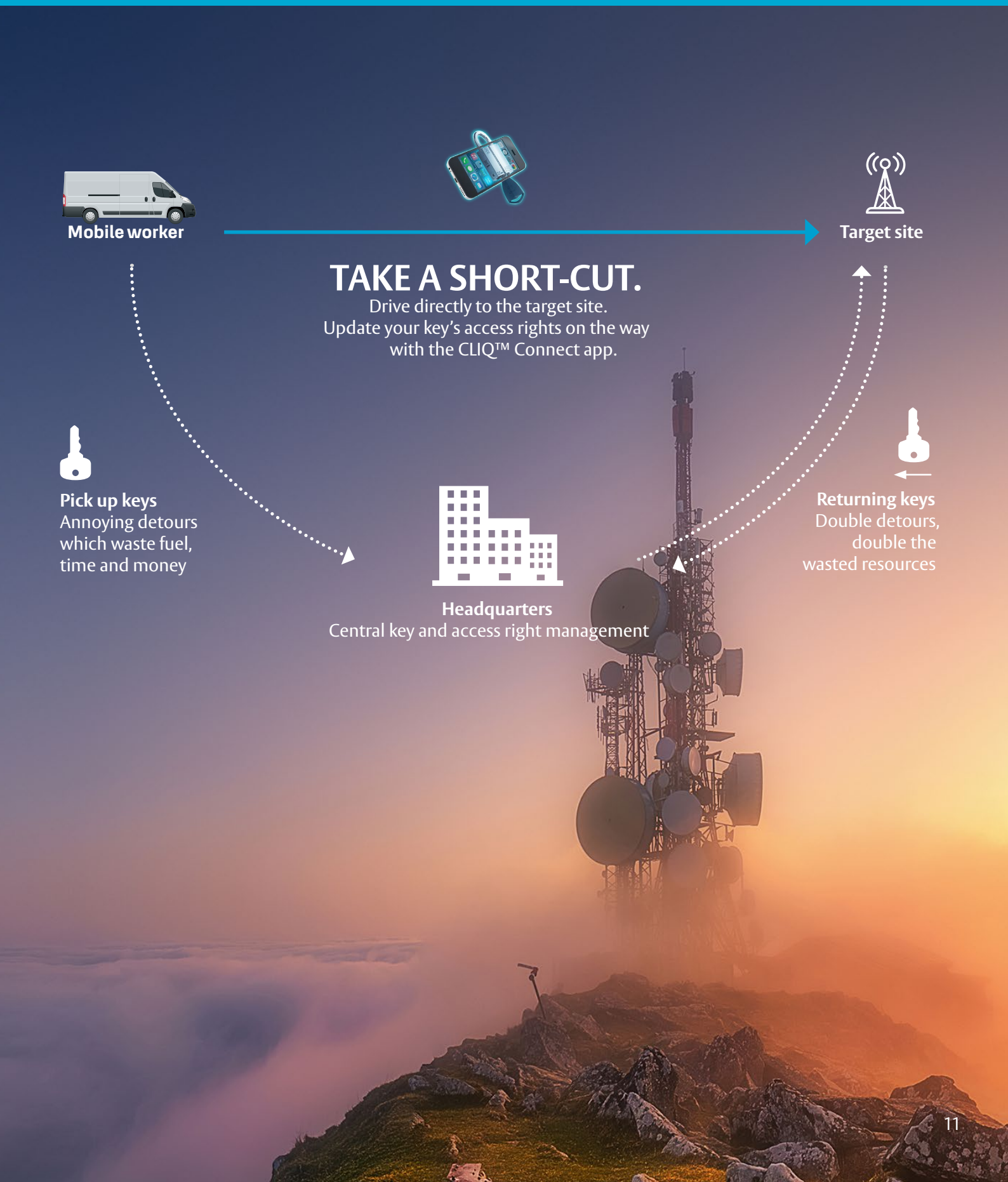
Number of sites:
2000

Area covered:
90 000 m²

ROI
68%

Payback time:
2.2 years

The most notable benefits in a digital, key-based solution were decreased unnecessary travel expenses that lead to significant savings in time and fuel.


Mobile worker
Target site
TAKE A SHORT-CUT.
Drive directly to the target site.
Update your key's access rights on the way
with the CLIQ™ Connect app.
Pick up keys
Annoying detours
which waste fuel,
time and money
Returning keys
Double detours,
double the
wasted resources
Headquarters
Central key and access right management

6. Terminology

- **Cash flow** - Indicates the net balance of cash flowing into and out of a business. When the flow is positive, more money is moving in than out. When the flow is negative, more money moves out than in.
- **IRR** - Internal Rate of Return, the rate of interest that would cause the discounted net benefits to be equal to the initial investment (NPV=0)
- **NPV** - Net Present Value, the value in todays currency of a stream of net benefits received over time. Sum of discounted net benefits.
- **Payback** - The time in months it takes to recover the amount invested.
- **ROI** - Return on Investment, approximate return on investment over defined period.

Contact us

If you want to learn more, our Digital Portfolio for Critical Infrastructure offers solutions for business operations across all industries. ASSA ABLOY solutions cover both digital key-based and keyless technologies.

To get the most out of access management, we will provide you tips and tools on how to manage your solution.

The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.

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