Accelerating your Digital Transformation with Safety

How digitizing safety processes can deliver tangible gains for your business.
Foreword from our Founder

A digital transformation of safety is an important, value-driving project for every business.

The purpose of this paper is to demonstrate the case for a digital transformation of safety, using real-world examples and the latest statistics. We'll also give you an indication on the key components of a digital transformation of safety project so you know what to expect.

I encourage you to take advantage of the special executive demo available to readers of this paper. This will give you a chance to ask questions with one of our leading experts, and get custom advice and support to get your digital transformation of safety started. Register here for your one-to-one executive demo session.

Enjoy the read.

Regards,

Clint Van Marrewijk
Founder & Managing Director
Introduction

Digital transformation is rapidly changing the way we manage business processes and the models which drive businesses. The tools of this revolution, such as mobile, big data, APIs and IoT are already everyday necessities to stay competitive in many industries.

If you’re like most businesses - the 67% who research firm IDC tells us are in the early stages of digital transformation¹ - you’ll appreciate the scale of the task ahead to transform your business into a digital one.

As you seek to accelerate your journey and success with digital transformation, there is much to be learned from the experiences of the estimated five percent of organisations who are “fully transformed” and reaping rewards from their projects.

These experiences are highlighted by the results of a survey of 1770 executives by Coleman Parkes Research.²

Using a scorecard based on 14 common business KPIs, the study found that businesses who had transformed digitally experienced several significant benefits compared to pre-transformation:

- Revenue from new sources increased by average of 37%
- Customer satisfaction rose by 40%
- 74% of the businesses saw an improvement in customer experience
- And 69% improved competitive differentiation

In addition, speed to market and time to act on new opportunities both improved by over 30%.

The businesses leading digital transformation have managed to identify projects that are critical to key strategic objectives, bringing their staff, customers and supply chain with them. The projects have been achievable (they've been able to execute on it), and they support continuous innovation.

¹ IDC, ‘DX Maturity’: https://www.idc.com/getdoc.jsp?containerId=prUS42388217

---

1 IDC, ‘DX Maturity’: https://www.idc.com/getdoc.jsp?containerId=prUS42388217
They’ve also managed to identify and overcome key challenges, pinpoint key success measures, and track them as they evolve. The difference between leaders and the rest is a large one, as Harvard Business School professor Marco Iansiti notes: “Our research shows that a substantial performance gap is opening between digital leaders and laggards, effectively creating a “digital divide” across companies,” he said. In this context, a ripe opportunity exists in every business for the digital transformation of safety.

Transforming safety is an achievable digital transformation project that can shift important metrics which drive shareholder value. It can help your company gain a competitive advantage in your industry. Safety challenges are relatively well-known and are common to many businesses, while a multitude of complementary tools are available to help drive success.

In short: with the right tools and processes you can transform safety from a compliance cost center to a driver of shareholder value.

Yet, as of 2018 safety remains an underutilized digital transformation opportunity. Recent research from industry analysts LNS Research revealed that only 33% of businesses have implemented EHS software, despite high levels of awareness.

The majority of businesses lag with spreadsheets, paper, or legacy systems and therefore their safety function is maintaining a compliance cost center instead of driving new value.

With overall adoption rates still low, the opportunity for your business to gain a competitive advantage from a digital transformation of safety is compelling.

This guide will introduce you to the case for digital transformation of safety - why it matters and how you can execute on it.

For a personal follow-up you can register here for a free executive demo to all readers.

---

What is a digital transformation of safety?

The digital revolution within safety - sometimes referred to as ‘EHS 4.0’ (in reference to Industry 4.0) - involves both a technological and cultural shift in health and safety initiatives to an advanced level of maturity which in turn delivers a wide range of benefits to an organisation.

Like with all digital transformation efforts, safety transformation is - as Forrester describes - “a state of being; it’s not something with definitive beginning and ending points, but a constant state of motion”. 5

We’ll explore practical steps on how to progress a digital transformation of safety forward in a later chapter, but first it is important to establish the core components of a safety transformation.

LNS Research identifies seven key dimensions which are fundamental to ensuring your people, processes and technology can all experience the benefits of a digital transformation in safety. 6

---

6. LNS Research, ‘EHS4.0 & The Connected Worker’. https://blog.lnsresearch.com/ehs40

The LNS model nicely encompasses the main themes at play in safety transformation. The ‘people’ aspects of the change are vital - ensuring greater engagement, collaboration and connectivity with safety. The technology, data and improved process on the other hand provide the foundations by enabling efficiency and delivering the right insights to the right people at the right time.

This highlights how the technology, process and people elements must work in unity to ensure success with a safety transformation.

At a more practical level a safety transformation involves activities such as:

- Improvement of safety processes using mobile technologies and automation wherever possible
• Improved and increased collection of data through mobile, wearables and IoT devices
• Instant sharing of safety information across platforms to ensure faster and better awareness
• Improved use of analytics and data to drive injury prevention
• Engagement of all workers in safety by improving the UX of safety processes and proactively protecting individuals in their day-to-day work

These activities will be explored in more depth in the chapter about how to drive a safety transformation project forward. The next chapter looks at how a safety transformation will deliver tangible value to your organisation and its shareholders.
How a digital transformation of safety increases shareholder value

“The Uniq Board recognise that both the Group’s corporate performance and its value to stakeholders are affected by its occupational health and safety performance. It therefore requires the Managing Directors and all employees to demonstrate a positive approach to Health and Safety issues.”

Those were the words of British food producer Uniq Plc’s Chief Executive Bill Ronald as they embarked on a programme to invest in safety technology, training and engagement. Three years later the company was experiencing £100,000 annual savings thanks to a 36% reduction in the number of staff days lost due to accident injury; a reduction of more than 45% in the cost of civil claims per member of staff, and an 8.5% reduction in employers’ liability insurance premiums. The Board, shareholders, the executive were happy and the Uniq brand value was strengthened.

Cases like Uniq’s demonstrate how a transformation of safety is an achievable project that can deliver strong results and add further impact to other digital transformation activities.

Safety transformation delivers benefits in multiple arenas - delivering productivity benefits, reducing key risks the business faces, and generating a positive impact on your bottom line through enhancing brand value and driving new business. In a study commissioned by the British Government, PriceWaterHouseCoopers summarized the scope of safety benefits well: “There is a wealth of evidence that suggests a positive link between the introduction of wellness programmes in the workplace and improved business key performance indicators. The available literature suggests that programme costs can quickly be translated into financial benefits, either through cost savings or additional revenue generation.”

By influencing the following ‘levers’ with an advanced safety programme - your executive team will be able to create upward pressure on shareholder value. Here is an evidence-based overview of some of the key outcomes leaders in safety transformation can experience:

### Increased Productivity

Transforming a safety to an advanced state leads to productivity increases. That was the conclusion of a 2017 survey by Plant Engineering magazine, in which 83% of business executives had experienced increases in productivity following implementation of safety projects.

A further American study from 2008 found that organisations surveyed achieved an average productivity improvement of

---

7 UK Government Health & Safety Executive; Uniq Plc case study; http://www.hse.gov.uk/business/casestudy/uniq.htm
9 Plant Engineering Magazine 2017 study, referenced in: https://facilityexecutive.com/2017/01/safety-programs-increase-productivity-for-manufacturing-companies/
66% following implementation of advanced safety initiatives\textsuperscript{10}. A more recent study from LNS Research reveals that companies using advanced EHS software are achieving up to 6.7% higher On-Time Delivery (OTD) than average, as well higher Overall Equipment Effectiveness (OEE)\textsuperscript{11}.

Put bluntly: there is a wealth of evidence supporting this link. Although many studies focus on intermediate outcome data such as ‘reduced absenteeism’ - these are drivers of increased productivity, and with less downtime, injuries and absences your team will be healthier, safer and more productive.

A recent University of California study supports these findings from another perspective. The research “Earnings Expectations and Employee Safety” found that companies which focused on initiatives to drive productivity and improve earnings results experienced worse safety records - proving detrimental to their business\textsuperscript{12}. This research highlights that a safety-first focus is key to unlocking greater productivity.

**Success Story:** Canadian business Waiward Steel managed to dramatically increase productivity through implementation of a tailored safety programme. It now clocks more than 4.6 million work hours without lost-time due to safety incidents - an 800 percent improvement on previous levels.\textsuperscript{13}

### Reduced costs related to Safety Incidents

Major safety incidents at large enterprises can hit shareholders directly. A detailed investigation by researchers from the Institute of Chemical Engineers (IChem) found that company valuation fell by between 5% and as much as 30% in the aftermath of major incidents at companies across multiple industries.\textsuperscript{14}

The full extent of costs to the business itself are huge. Deloitte’s paper “Workplace Safety Analytics: Save lives and the Bottom Line” itemizes some of the costs faced by businesses in the aftermath of major safety incidents:

- Product re-branding and repositioning to decrease customer churn
- Opportunity cost of lost business prospects and partnerships
- Increased cost of capital due to lower credit rating
- Replacing executives and managers who resign, and skilled talent who leave as a result
- Frequent communications to restore public trust \textsuperscript{15}


\textsuperscript{13} Janet Lane, Edmonton Journal: https://edmontonjournal.com/opinion/columnists/opinion-for-workplace-safety-obeying-rules-is-just-the-start


In addition there is the significant costs of litigation and fines. For example, a 2016 worker death at an Alabama-based plant for Kia & Hyundai led to fines alone of US$2.5m being issued\(^\text{16}\).

Less serious LTIs (lost-time injuries) are also significant financial events. The US National Safety Council says the average cost of a worker injury which requires medical attention is $39,000 - when you account for lost wages and productivity, medical expenses, administrative and other employer costs.\(^\text{17}\)

A digital transformation of safety enables your business to reduce the risk and costs of safety incidents like these, saving unnecessary expense and avoiding the negative impact this can have on shareholder value.

**Success Story:** France-based Schneider Electric invested in safety with the aim of identifying and eliminating hazards that could hurt someone. As a result, the company’s OSHA recordable injury rate dropped from 3.6 per 100 full-time workers to 0.5 over a ten-year period. Rich Widdowson, Schneider Electric’s vice president of safety, environment and real estate said that for the team it meant 900 fewer people injured than would have been a decade ago, while for the business it experienced more than $15 million in direct annual savings as a result of its investment.\(^\text{18}\)

**Brand perception and value**

Digital transformation of safety enables you to put safety as a core strength of your brand - an investment in the so-called ‘triple bottom line’ which can deliver long-term benefits and value for a company and its shareholders.

Brand reputation is fundamental for the success of any business, and its impact touches many different groups:

*Employees:* Accidents and poor safety records can affect an organisation’s ability to attract and keep top talent. As a recent Deloitte report puts it: “Organizations with spotty safety records will find themselves losing out in the war for talent, limiting their ability to meet growth targets and promote shareholder value.”\(^\text{19}\)

*Partners, prospective clients and supply chain:* The impacts are tackled in a thorough paper on Reputation Risk from the Oliver Wyman Global Risk Center, which warns: “Existing or future customers, who are anxious about a certain product or service, or who do not want to be associated with a tarnished brand, may withdraw their business, leading to a decline in market share. Suppliers may be unwilling to offer the same terms of business as they previously did.”\(^\text{20}\)

Investors / shareholders: The Oliver Wyman paper also addresses this point in depth: “Shareholders may take a dim view on ...the strength of management and decide to withdraw their capital. Some institutional investors will actively seek to influence company policies where they fear existing behaviors will lead to value erosion over the long term. The harm from these actions can be very significant and will vary over different time horizons.

The short term might see a dip in the share price, cash flow or liquidity impacts, and revenue loss due to customers switching to competitors – temporarily or permanently. From a strategic operational perspective, the intermediate term might see an inability to secure major contracts, the need for significant relationship-building efforts with key stakeholders, or a major technology or process overhaul.”

Safety transformation helps reduce all of these risks - enhancing your ability to attract and retain talent, partners, customers and investors - protecting shareholder value along the way. To help further strengthen an advanced safety identity, SaferMe offers branded web and mobile apps for enterprise clients so they can demonstrate to all of their communities their tangible commitment to safety innovation.

Success Story: Uniq Plc set about its safety innovation programme from the Board and executive level with the direct connection to brand value and reputation in mind. They succeeded, not only strengthening the brand reputation and shareholder value, but also delivering significant cost savings to the business.

Generating new business

Safety generating new business? Yes. In addition to the flow-on effects of positive brand reputation, there are some tangible ways in which a safety transformation project can help deliver new business:

Ensuring compliance with safety regulations and exceeding the top industry standards will boost your ability to generate more new business by ensuring you meet required standards of prospective clients and maximize your score in tender processes. As an extension of this, advanced safety platforms like SaferMe go beyond software to help their enterprise clients with safety-specific content in their project tender applications to help drive new business.

Success story: Australian civil construction company Bovis Lend Lease in partnership with designer FRH Group Pty Ltd used advanced safety planning and tools to help gain an upper hand and win a $24m roading project tender. The client noted that the contractor’s commitment to safety began “at the tender stage”. The project went on to win a CCF Earth Award for EHS Excellence.

---


22 UK Government Health & Safety Executive; Uniq Plc case study; http://www.hse.gov.uk/business/casestudy/uniq.htm

Getting your safety transformation project off the ground

1. Identify your maturity stage and opportunities

The first step to a safety transformation project is to understand your starting point and what opportunities exist from that starting point. There are various different maturity models you can use to assess where your organisation stands. This LNS Research model is one of the modern frameworks which encompasses people, process and technology factors:

Claritying your starting level helps identify what needs to be prioritised initially and allows you to set realistic goals and timeframes. It gives you the driver to build a project and get people on board.

2. Plan & Strategy: Set goals and align stakeholders

With a strong leadership ready to support the project idea of the organisation's safety maturity level and opportunities - preparing a strategy will help to build the business case and map out the transformation journey clearly.

LNS Research notes that a “Critical Success Factor” at this point is aligning stakeholders around the strategy:

“Many parts of an organization will have a vested interest in an EHS performance improvement initiative.

Key stakeholder groups are:

- Senior corporate or business unit leadership team
- Operations and production executives
- Leaders of business functions such as Manufacturing, Quality, and Asset Management”

“No matter what the scope and starting point of the EHS initiative, the needs and goals of each group should be considered and addressed in the business case process. The effort requires business alignment at strategic, operational, and cross-business function levels.”

This work, and aligning the safety transformation to wider business objectives will help ensure the project gets the support it needs to succeed.

3. Establish leadership

A successful health and safety program needs support from the top of your organisation. As the British Government HSE Executive has pointed out this includes the Board: “Effective health and safety performance comes from the top; members of the board have both collective and individual responsibility for health and safety.”

Directors and boards need to examine their own behaviours, both individually and collectively, against the guidance given - and, where they see that they fall short of the standards it sets them, to change what they do to become more effective leaders in health and safety.”

Company executives will be important from the outset of a digital transformation of safety - not in the least because it will help secure budget to drive the project forward. Your ‘C-Level’ and other senior managers also need to be not just supportive, but they need to visibly participate in the safety transformation too.

Showing the right behaviours from the top of the organisation will help shift safety culture - a vital part of your transformation journey. Getting executives on board will be made easier by showing how the project helps deliver broader business objectives.

Finally - a digital transformation of safety needs an owner. We call this person a ‘Safety Value Creator’ (SVC). This SVC is focused on managing the transformation journey and ensuring that your organisation’s safety programme delivers the valuable outcomes you desire.

---

Three key themes to succeed with your safety transformation

1. Map and improve processes with digital technology

Your organisation will already have safety reporting processes such as near-miss reporting, incident reporting, hazard reporting, safety observations and more. In many organisations (67% according to LNS Research) these processes are run with spreadsheets, paper or clunky legacy software.

By first mapping the processes to understand how they work for users and how data needs to flow, you can then assess opportunities for improvement. With the right approach and technology these processes are relatively straightforward to address - delivering the benefits of saving time, increasing engagement and helping to secure compliance and alignment to modern safety standards such as ISO 45001.

2. Increase data collection and quality

Driving an increase in safety data is a key element of a digital transformation of safety. Increasing data enhances the opportunity you have to understand, analyse and take targeted actions to prevent safety incidents, while ensuring the quality of this data is the key to succeeding.

There are a number of mechanisms through which you can grow your safety data:

- Efficient collection / reporting of data from staff and contractors
- Connected wearables generating and sending data
- Devices and machines connected to the industrial internet of things (IoT)
- Other machine-generated data
- Utilising a global database of hazard data

Your initiative to drive more safety data collection should be multi-faceted, involving a combination of these different mechanisms, with controls and checks on data quality.

3. Mobilize your data - proactive safety

With a wealth of safety data at your disposal the pivotal action your business needs to take is to mobilize the data so it protects your people and provides tangible benefits to your business. This can involve tactics such as real-time communication and notification of data by proximity or other relevance measures; smart and automated workflows triggered by data; or data interrogation and analysis to uncover trends, causation and commonalities between safety issues.
Follow-up actions from these insights will be powerful drivers of transformative improvements.

Vice President of EHS at GE, Ann Klee, captured the importance of mobilizing data as a key driver to safety success in an article on the topic.

“Data from sensors, robots, and the cloud will enable the most transformative part of the new industrial revolution — data analysis.

“We are beginning to apply those techniques to improve safety and compliance, and over time, will be able to use data analytics to prevent injuries, environmental releases, and unplanned downtime. In 2015, GE generated 3.5 million EHS data records to support compliance and operational obligations.

“We are now combining that data with a huge stream of other information (about weather, business activity, etc.) and using data visualization and analytics tools. This provides risk managers with real-time, actionable insights about our highest risks and allows for more efficient resource allocation and risk control,” Klee wrote.

Research also spells out the importance of mobilizing data. Harvard Business School professor Marco Iansiti has pointed out that the way in which organisations utilize their data is a key determinant of their digital transformation success. 

---

27 Clint Boulton, CIO Magazine, ‘Digital laggards must harness data or get left behind’; https://www.cio.
Conclusion & Getting Started

As evidenced in this report, a digital transformation of safety is a project with potential to provide significant benefits to your business, its employees and its shareholders. It is an important component of the broader digital transformation for every business and will help drive your progress towards becoming a digital leader.

Our team at SaferMe is 100% focused on helping large enterprises with the challenge of transforming safety from a compliance cost center to a driver of shareholder value.

The SaferMe safety platform helps address all three of the key themes in your safety transformation project:

- Mapping and improving processes
- Increasing collection and quality of safety data
- Mobilizing data to improve safety outcomes

Our app-based technology delivers practical solutions to improve these components of your safety programme, while driving safety engagement. We support our clients towards their safety transformation goals whether they are in terms of efficiency and cost-savings, productivity or new revenue generation.

We can help you get your Safety Transformation project started.

- Gain understanding of the possibilities for your business
- Demonstration of the technology and how it can be deployed
- Process mapping introduction
- Data collection and data mobilization workshop