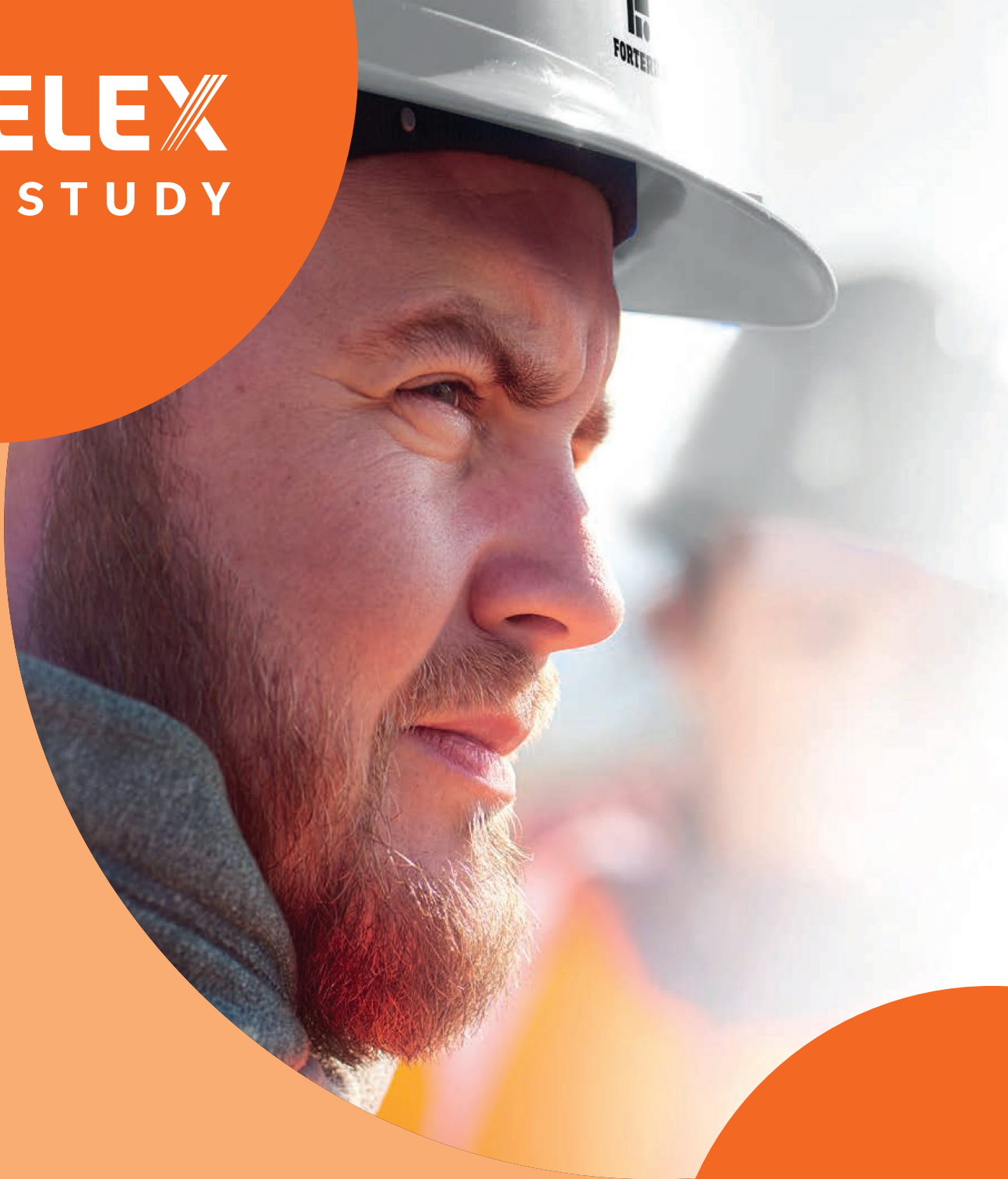


INTELEX

CASE STUDY



Where Technology and
Innovation Intersect with
Bricks and Mortar



Forterra PLC, a leading manufacturer of building products for the UK construction industry, has built a solid foundation based on traditional values and advanced technology solutions.

Forterra PLC started life as The Butterley Company, which was founded by Benjamin Outram and Company in 1790. In other words, Forterra and its ancestors literally helped build the UK as we know it. For the past 231 years, the company has become known for innovation, efficiency, and growth. Since launching officially as Forterra in 2015, the organisation has established itself as one of the leading manufacturers of building products for the UK construction industry.

You don't stay in business that long by standing in place. During its lifespan, the company has needed to constantly adapt to meet the changing needs of its customers. The unique mix of brands, products, people, and expertise that combined make Forterra, has evolved over the last two centuries.

“Our focus now is on making the most of the exciting growth opportunities we have within our own business. To deliver that growth, we need to make the most of our collective knowledge, skills, and abilities,” said Paul Humphreys, head of Health and Safety at Forterra PLC. “To do that, it is important that we develop a shared understanding of our business – our purpose, who we work for (our stakeholders), our values, and the key areas we are focusing on in the next five years.”

The company's focus is on “keeping Britain building,” says Humphreys. Forterra, he adds, is committed to working more safely and more sustainably across all its activities and is focussed on delivering growth through research and innovation, improved customer service, and greater efficiency as part of a 10-year investment plan. Intelix, which has been recognized by an independent analyst for its ability to allow companies to future-proof their investment in their EHS management software, because of its emphasis on long-term vision and strategy, has become part of Forterra's strategic plan.

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Forterra Values: Safety, Customers, Continuous Improvement

Forterra is headquartered in Northampton and operates 20 sites across England. Forterra's 1,800 employees produce over half a billion bricks each year, which is enough to build 70,000 houses, and 1.1 million m³ blocks, enough to fill 440 Olympic-sized swimming pools. Sites range in size from 50 to 250 employees. Approximately half of the employees work in the bricks side of the business.

Of those 1,800 employees, 20 are dedicated to EHS and 27 are dedicated to Quality. Over the years, the business has grown through mergers and acquisitions, so bringing Intelex into the company has helped create more alignment between the multiple sites that now make up Forterra. Rather than trying to manage multiple management systems, they now utilize the Intelex platform.

The company is structured along product lines and businesses:

- Bricks business – The largest segment of the company, which includes half of the workforce
- Blocks Business –
Aircrete blocks and aggregate blocks, as well as some specialty blocks, which includes products for sustainable drainage
- Pre-cast business – Precast panels and floor beams that go into housing
- Distribution fleet – Responsible for brick and block distribution. The company-run fleet is not common in the space. Nearly 200 drivers comprise the distribution fleet, and for many customers, the drivers are the main point of contact with Forterra.

At Forterra, the company values help define the way they work together – with their colleagues, their customers and suppliers, and the communities in which they operate. They provide a set of guidelines to help Forterra keep improving its business. Those values are:

- Safety first
- People matter
- Customer focus
- Trusted to deliver
- Driving improvement

With these values in mind, Forterra turned to Intelex to support continued growth and drive innovation in an industry and product line – bricks and blocks – that seems, on the surface, straightforward.




Ahead of its Time in Software Adoption

Forterra had an EHS software system for 15 years prior to implementing InteleX. However, that product didn't grow with the company, and it was decided that software was no longer fit for purpose. By the time Humphreys joined Forterra in 2018, the decision had been made to move away from the existing provider and it became his responsibility to own the process of choosing a new software system and lead the project.

"Forterra was in a fortunate position in that we had had EHS software for many years, the fact that we needed software was a given, we knew the capabilities and functionality that was needed, as well as the gaps that the new software needed to address," says Humphreys.

The biggest driver for replacing the old software system was that it had no online or mobile capability. As mentioned earlier, the previous system had no mobile capability; it could only be accessed via a desktop PC. So, remembers Humphreys, there was a huge push internally to provide drivers as well as tablet and mobile users working in their facilities with access to the system from mobile devices. "We needed to make a change to get us into the 21st century" in terms of technology, admits Humphreys.

The project took time to implement in order to meet the needs of Forterra, and Humphreys acknowledges that the InteleX team was instrumental in setting realistic expectations about deployment. Humphreys and the Forterra team understood that there was going to be a lot of effort required on their side to implement the InteleX system, particularly given competing corporate and HSE responsibilities.



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Implementation Support Was Key

The main purpose of the Intelex solution at Forterra is to capture data: What has been done, when it was done and how it was done. In addition, the Forterra team was keen to enhance their ability to pull documentation, use the audit application and be able to provide the relevant customer data when required to do so. This is where Intelex moved to the forefront as a choice for Forterra.

There were additional drivers as well, among them:

There was no Observations module in their previous system, so the way that they captured their behavior-based safety observations needed improvement. Prior to the implementation of the Intelex platform and Observations software module, they captured BBS by completing a long and complex form stored in a MS SharePoint folder.

Forterra had specific functionality requirements that they needed from their software system, and the team liked the fact that the Intelex system could be customized to fit the needs of their business. For example, they liked the fact that they could add more fields to drop down menus to include multiple addresses linked to multiple business lines, as opposed adding additional modules or functionality at an additional cost. The team had a mantra, says Humphreys: “To make sure that there was as little deviation from the core product as possible.” This decision came partly because there was an understanding that this would make updates and patches to the system much simpler and easier to manage in the future, but also because they learned some tough lessons when they overcomplicated their previous system.

The Intelex implementation team worked with Forterra to configure everything they required for their evolving business. The Forterra/Intelex implementation team methodically worked its way through the configuration process application-by-application, only moving on to the next stage of the project when all involved were happy that everything was correct and working as it should be.





Phased Approach to Implementation

Forterra's strategy was to adopt a phased approach to implementing Intelex. The company went live with Intelex in January 2019 and then had a big implementation push starting in March 2019, with the help of Intelex's rapid deployment team, running through to June. During that time, they built, trained, and launched Phase 1 of the applications, making them available to the business. Those applications, in order, were Incident Management Software, Audit Management Software, Action Plan Management Software and Safety Observations Management Software. "It was a lot of work in a short space of time," says Humphreys.

The Forterra team choose those particular modules for Phase 1 because they knew that they would have the biggest impact based on the number of people who would be using the system. They wanted their employees to be able to use the company's 'Near Miss and Hazard Spot' process and knew that the Incident Management Software would be the one that had the biggest user base. Their New Relic data proves that point; the largest contributor to records into the Intelex system is via their 'Near Miss and Hazard Spot' process.

Audits Management Software was chosen for implementation next, as Forterra has three internal auditors who could implement and launch that complex app. Safety Observations Management Software came next and the simple-to-use application was an easy implementation for a limited number of employees. Finally came the implementation of Action Plan Management Software, since the data acquired through audits and incidents drives the need to create the action plans used to change and improve behaviours and processes.



Phase 2 was more complicated because they had a significant number of applications included within this phase but realised they didn't need to implement them all. First in this phase was Inspections Software, followed by Monitoring and Measurement Software. The next application implemented was Nonconformance Reporting Software, followed by the most complex implementation of this phase: Corporate Reporting Software. This phase, started in July 2019, was completed in 2021. Implementation took longer as a result of the restrictions that the global pandemic put on all businesses, as well as not having the resources that Forterra needed internally to be able to implement Phase 2 as they wanted to.

Humphreys admits that Phase 2 taught them a valuable lesson: Forterra “absolutely need(s) to get internal resourcing right and if we had that time [back] again, we would have a less-aggressive rollout schedule.”

Phase 3 – the final stage – found the Forterra team unlocking some of the remaining software in their solution set, some of which required a lot of development and deployment time from the Intalex team and was one of the only times where Forterra went against their objective of sticking to the core product as much as possible. These implementations simply required a lot more configuration to align with the growing needs of the business.

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“Also to gain exactly what we wanted to achieve from the system, which was an easy end user experience, more effort on system changes meant the end user would have a more useful and easier process to navigate,” says Humphreys. “This was critical to ensure system uptake and acceptance across the business.”

This phase originally was due to kick off in May 2020 but was delayed until February 2021, but is now up and running.





According to information provided by Forterra, “We need everyone to work together as a team to keep us all safe. Our roadmap reflects our real world and will be informed by our annual safety surveys and implemented through local action plans.”

Intelex’s Incident Management Software is invaluable to ensure Forterra is able to track incidents, which can then be analysed and to highlight trends to inform local plans for specific sites. This is particularly important as it means that data can be analysed at a specific site level rather than at incident level. For example, HSE professionals need to know why a kiln at a given site is the source of more injuries than kilns at other locations – that information is fundamental to the way Forterra can continue to uphold their working principles.

They are exploring what they can do with Inspection Management Software. They have set some workstreams up so that every month, managers have to engage in a safety and a financial audit through Intelex. It forces the managers to adhere to a schedule, and encourages accountability at all levels of the business. Employees are encouraged to actively participate in reporting near misses, and their ability to do so has been enhanced through the use of Intelex’s Incident Management Software. The Incident Management Software is accessible to all employees who need it and stores the data from their internal ‘Near Miss and Hazard Spot’ process.

The implementation of mobile has been the key differentiator for Forterra in implementing Intelex. It has given their workforce the ability to have greater accessibility, submit better reports that are of a higher quality, and share pictures to illustrate the issues that are being found during the course of a working day. Whilst there are still internal challenges to work through to get everyone using it, the predicted improvements to their processes and visibility into the working practices of their teams, are undeniable.

The Benefits of Intelex Software

Key to Forterra is the need to maintain their ISO certifications: 9001, 14001, 45001, 50001 and 6001.

“Intelex is invaluable here, specifically the Audit Management Software, which really helps us drive our internal compliance process,” says Humphreys.

Part of the focus at Forterra now is to instill the ethos of their Roadmap to Zero Harm into all employees. Forterra’s first steps towards its aspirational goal of zero harm focuses on three important behaviours:

1. Do the right thing even when no one is watching!
2. Stop rushing and cutting corners.
3. Treat others as family.

Looking to the Future

Forterra is constantly searching for ways to use more of the powerful Intelix system. They have spent a lot of time entering and analyzing data using the Corporate Reporting software. They use this application to inform their processes around Environment Social Governance (ESG). Corporate Reporting drives all their sustainability data, which is reported to their shareholders. They are keen to get as much as possible out of this application's functionality and will continue to actively work with Intelix to enhance their ability to use this and other software.

"Intelix is able to talk to our other software solutions, so that we can leverage as much synergy as possible and reduce based administration. For example, Intelix can speak directly to our HR system for employment manger and links to training and competence tracking," says Humphreys.

Forterra's simple, easy-to-remember Golden Rules help them live up to their Safety-First core value. Adherence to these four rules is "not negotiable." They are:

1. Always assess the risk and follow safe systems of work.
2. If in doubt stop yourself or anyone else.
3. Only carry out work for which you are competent.
4. Use Lock Out Tag Out Try Out (LOTOTO) every time.

The purpose of these rules – to reduce accidents and incidents, to establish expectations of acceptable behaviour, and to ensure employees are accountable for their actions and those of their colleagues – dovetails perfectly with their use of Intelix and their ESG strategy.

The company clearly states it is committed to sustainability for "People, Planet, Product."

"Operating sustainably is critical to our long-term success as a business and influences everything we do. Our goal to keep Britain building will only be possible if we apply the highest standards in managing our natural resources, caring for our planet and supporting our colleagues and the communities we work in." (Building Our Future Together: The Next 5 Years; Forterra)

Forterra has set a number of challenging new targets across three key pillars:

People – "We care about the health, safety and wellbeing of our people, their families and the communities within which we work."

Planet – "We aspire to positively impact our planet, creating a better environment for future generations to inherit."

Product – "Our products build and enhance communities and we continue to develop new, innovative and sustainable solutions."

Intelix is on board to help them meet those targets and give them the ability to adapt as the business changes and grows.

"As Forterra continues to invest and grow, we will continue to look to our Intelix software system to support both our compliance requirements and provision of information and data to inform us of future work and strategies for improvement.

"We will continue to push the roll out of the mobile functionality, as this is a great way to get information into the system quickly and provide feedback directly to our colleagues about the actions we take to improve health, safety, environment and quality for the business.

"The software will be key to providing data around our sustainability targets. If we remain on track to achieve them and if we use this data effectively, to target work activities, that will make a real difference to achieving corporate targets and revenue," says Humphreys.



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INTELEX

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With almost 30 years of EHSQ experience, we know a thing or two about how safety, quality and sustainability can preserve lives and protect the planet. And we know you need to drive productivity and operation excellence, too.

That's why our technology solutions are built for EHSQ experts by EHSQ experts.