The "What, When, Why and How" of modernising legacy systems in finance

tec:agency

Don't be left behind!

Over the past 20 years, the financial industry has been radically transformed by a steady stream of innovative technologies that have made business processes more efficient, more secure and more customer centric. Whether engaging with banks, insurance companies or other financial organisations, **customers increasingly rely on digital interfaces to research, purchase and manage financial products**, ranging from bank accounts and mortgages to insurance policies.

The change of pace with technology is fast. **New technologies introduced in the wider market can quickly create new expectations for customers**, and financial organisations need to be able to keep up and adapt their digital infrastructure to ensure they continue to meet these expectations. Reliance on outdated or legacy systems can prevent businesses from being able to adapt and have a negative impact on their relationship with their clients - both old and new - and with it the success of their business.

In this whitepaper, we dive into the **impact of legacy systems in the financial industry**, looking at what they are, when you should modernise, why and how to go about it. The aim is to provide you with a practical guide to modernising legacy systems by harnessing the insights and experience of TEC Agency's engineering team, that have delivered digital transformation projects for leading banks, insurance companies and FinTech businesses.

What

What is a legacy system?

A legacy system is an outdated piece of software or hardware that is retained, because it continues to perform a function for a business, despite potential issues around support, efficiency, scalability and compliance. It may also be preventing integrations with other, newer systems and impacting the customer experience.

These systems are often directly customer facing, increasing the potential for negative customer interactions and could be anything from websites or mobile apps to online application forms.

When

When should you look to modernise? What are the signs your system has become outdated and how do you identify them?

❖ **Check Age of the system** - How does it compare with industry-standard lifecycles? Is the programming language still current?

❖ **Vendor support** – is a comprehensive support package still offered? If not, it is often a sign that vendor is discontinuing the product or pivoting to focus on newer versions.
   Assess performance & maintenance costs – slow response times or frequent crashes are often signs that system need to be updated. Similarly, if costs to maintain the system are increasing, think about investing this money in a more modern system instead.

❖ **Integration issues?** Problems integrating with new software are a clear indicator that your system might need modernising.

❖ **Is it still industry compliant?** – Does the architecture still meet industry standards in terms of data processing and security?

❖ **Speak to staff & users to identify problems** – how do front line operators find the system? Do newer team members find the interfaces as intuitive and user friendly as those who have been using for a long time?

Why

When we think about **WHY**, there are two angles to consider. We will go onto to address the reasons why businesses **SHOULD** look to modernise legacy systems and the risks bound up in not doing so but first we will look at **WHY NOT** - why a business might not want to make changes and the challenges they face in modernising.

Why Not

Why might businesses be reluctant to modernise? What challenges do they face in modernising?

Change can be a scary thing and there are several reasons why businesses avoid modernising.

The most obvious is cost. New systems are not cheap and require investment in training and implementation as well as the software/hardware itself. There is also potential investment required in skilled resources needed to manage the implementation, and the ongoing integration of the system into the business. At TEC, we can help you address these issues. Our skilled engineers have experience building bespoke digital platforms, using the latest programming techniques and being headquartered in Cluj, Romania, we can do this at competitive nearshore prices.

Another big concern that prevents people from modernising "trusted" systems is fear around the impact such a chance will have on their business, in particular **the disruption and potential loss of revenues during implementation**. There are also often fears around the risk of data loss during migration – data is the lifeblood of all modern businesses, and many aren't prepared to risk losing it even when presented with the benefits a new system will provide (which – spoiler alert – often includes enhanced data security!).

The final concern to highlight is **employee buy in**. People can be reluctant – even resistant – to change, particularly when it impacts how they do their job. The key here is regular communication about the benefits modernisation will bring, how the project is progressing, what is required of them in terms of the implementation and also the impact on performance and efficiency any new system brings.

Such fears, while valid, should not inhibit change. **Working with an experienced agency can help** ensure the transition new systems is a painless as possible. TEC's Project Management team have extensive change management experience, delivering services ranging from communication plans and project reports to RACI matrixes that facilitate seamless migration to more beneficial systems.

As an example, TEC helped leading health insurance specialist manage the change to a more customer centric digital approach. Our engineers designed a new Sitecore-based modular digital architecture that achieved 45% increase in customer engagement and our project managers **helped them ensure that migration to the new system was seamless, with no data loss and no negative impact on sales or revenues.**

Why You Should!

Why should businesses modernise? What are the risks in not doing so and what are the benefits?

While there are reasons to hesitate when faced with the need to modernise, there are also significant risks in doing so:

Reduced efficiency – outdated systems that are not running on the latest technology can be slow in operating and prone to errors or crashing, requiring more maintenance and support. All this impacts the performance of the system and with it the efficiency of the team / business unit involved.

Data security – systems build on outdated technology are more prone to security breaches, something that is a huge concern for any financial organisation. With millions of data points held, including sensitive personal information, banks and insurance companies need to have robust data security policies if they are to maintain their customers' trust.

Restricted scalability – for a business to grow its digital systems and architecture need to be able to grow with it, and legacy systems. are likely to hamper such growth. A Middle Eastern digital banking provider chose TEC Agency to help them replace their legacy banking app. They had realised that the app was not built to scale in line with their plans for expansion and did not meet the differing needs of their individual and business clients. After taking time to really understand the business and their expansion plans, TEC created a robust, bespoke mobile banking application that had the scalability needed to support their growth in EMEA and beyond, by ensuring it met the needs of all client types and was 100% compliant with country-specific regulations in target markets.

Compatibility issues – with significant leaps forward having been made in areas such as cloud computing and mobile technologies, some legacy systems were built before these advancements were available and as a result, are not compatible in the way that more modern systems are. If businesses are to keep pace with changing customer expectations, they need to offer the flexibility that more modern, mobile systems provide.

Negative customer experience – this last point is crucial. Financial organisations need to keep up with what their customers want. Even systems that were implemented specifically to enhance customer experience, will eventually end up doing the opposite as innovations reshape a customer's definition of what constitutes a good experience. For example, many websites that had the best UI and UX available at the time of deployment, have had to be redesigned to become mobile friendly, or have functionality moved to an app, to meet customer demands for more flexible "on the go" usage. Another key component is speed. Any latency when engaging with digital platforms causes friction that can impact customer experience and the bar for what is acceptable in terms of delay is constantly coming down. This is another area where TEC has experienced having worked with a bank to create new streamlined platforms for card and insurance applications that reduced customer wait time by more than 40%.

Therefore, looking at the risks involved, we can say that the benefits from modernising legacy systems are:

- **Enhanced data security**
- **Improved performance and efficiency**
- **Greater scalability**
- **Greater capacity for integration with the latest software**
- **Better customer experience**

In addition, there are also a long-term cost saving that can be made through modernising. Yes, in the short term there is the added expense but over time this is offset by the reduced amount businesses need to pay on maintenance and support for the outdated system.

How

How should you approach modernising your digital systems? What should consider and what elements should you prioritise?

The first steps to take when looking to modernise are:

1. **Assess your legacy system** - how is it impacting your business? Which particular areas of the system are causing problems?

2. Explore your modernization options and **understand what's the best fit for you**. For example, would you be better served by modifying your existing architecture or rewriting the code. Will an off-the-shelf solution meet your needs or so you need to build something bespoke?

Top Tips

Our tips for businesses looking to upgrade a legacy systems:

- **Focus on your business needs…** – make sure you're not upgrading for the sake of it and you're clear on the increased business value new system will deliver

- **…but not at the expense of your customers** – this may seem obvious as business success is dependent on meeting customer needs but is important that any modernisation is centred around improving customer experience.

- **Prioritise data security** – data is key, make sure you are looking after it!

- **Ensure your platform will be compliant** – both now and in the future!

- **Be proactive in communicating** / keeping all stakeholders in the loop throughout implementation to ensure you get their buy in

- **Futureproof through flexibility** – prioritise systems that allow you to build in a modular, scalable fashion and which can be more easily adapted in the future as technology and / or business needs change

Conclusion

While factors like cost and impact on revenues can cause financial organisations to think twice when faced with an aging legacy system, the benefits on offer, and the risks that are avoided, make modernising the smartest option to take. **The risks to data security and compliance** caused by outdated software or hardware are **too significant to ignore** and migrating to the latest technologies allows businesses in the financial sector to improve efficiency, enable growth and enhance the digital interaction they have with their customers, whilst making long term savings through reduced maintenance and support costs.

When **looking to modernise**, banks, insurance companies and the like need to take time to understand exactly how a legacy system is impacting their business. They need to evaluate what sort of technology needs to be brought in and how it will benefit them, both now and in the future, as their business and the environment it operates develops.

Implementing new digital platforms or infrastructures takes skilled resources, that understand the complexities and challenges of businesses in the financial sector. If these resources are not available in house, then using an agency, experienced in the sector, to supplement your in-house team is the best solution. **TEC Agency's team of engineers** have **worked alongside a range of financial organisations**, at competitive nearshore rates, to overhaul digital infrastructures and create new, robust, scalable platforms which enhanced performance and customer experience.
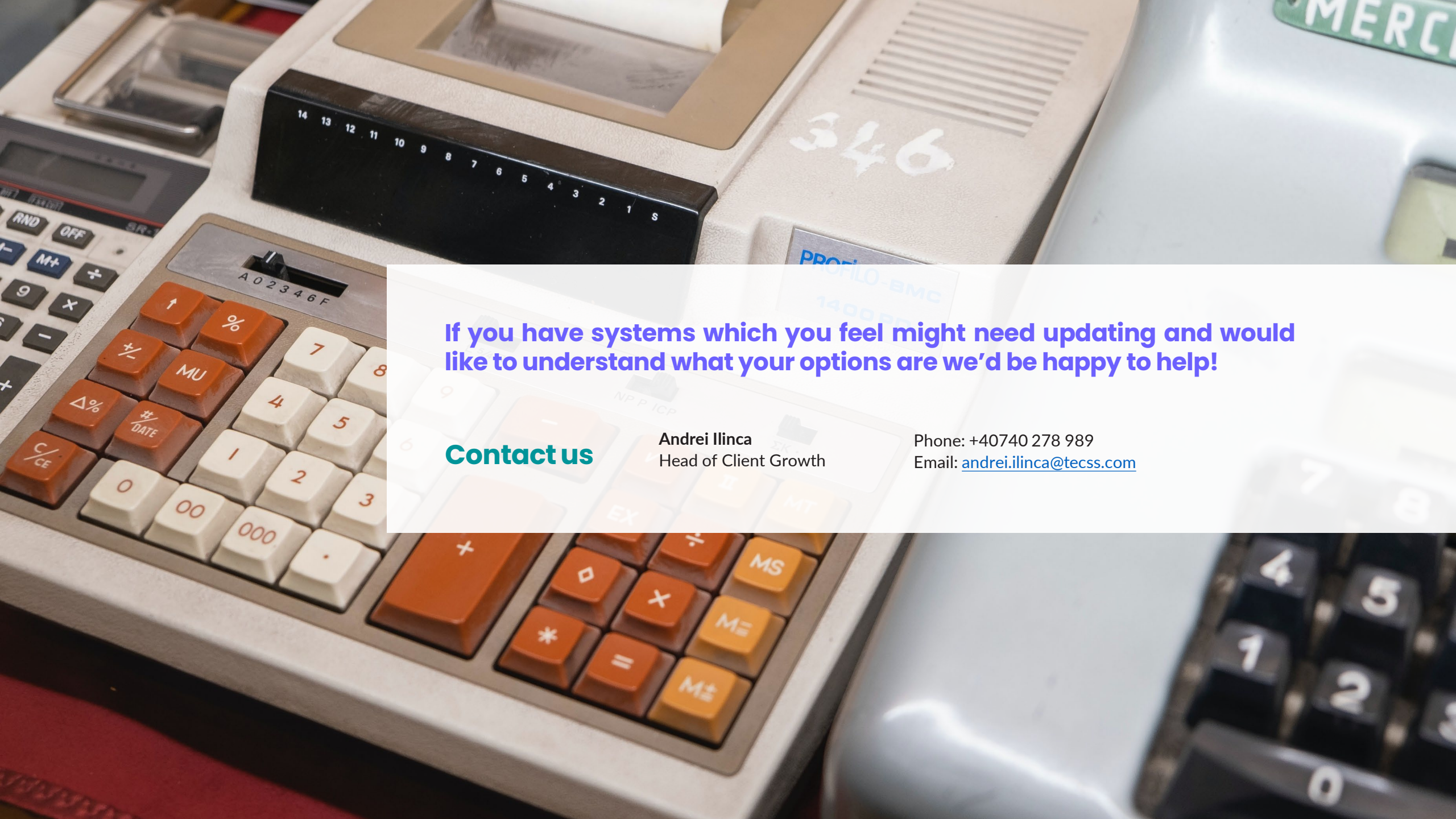
If you have systems which you feel might need updating and would like to understand what your options are we'd be happy to help!

Contact us

Andrei Ilinca
Head of Client Growth

Phone: +40740 278 989
Email: andrei.ilinca@tecss.com