

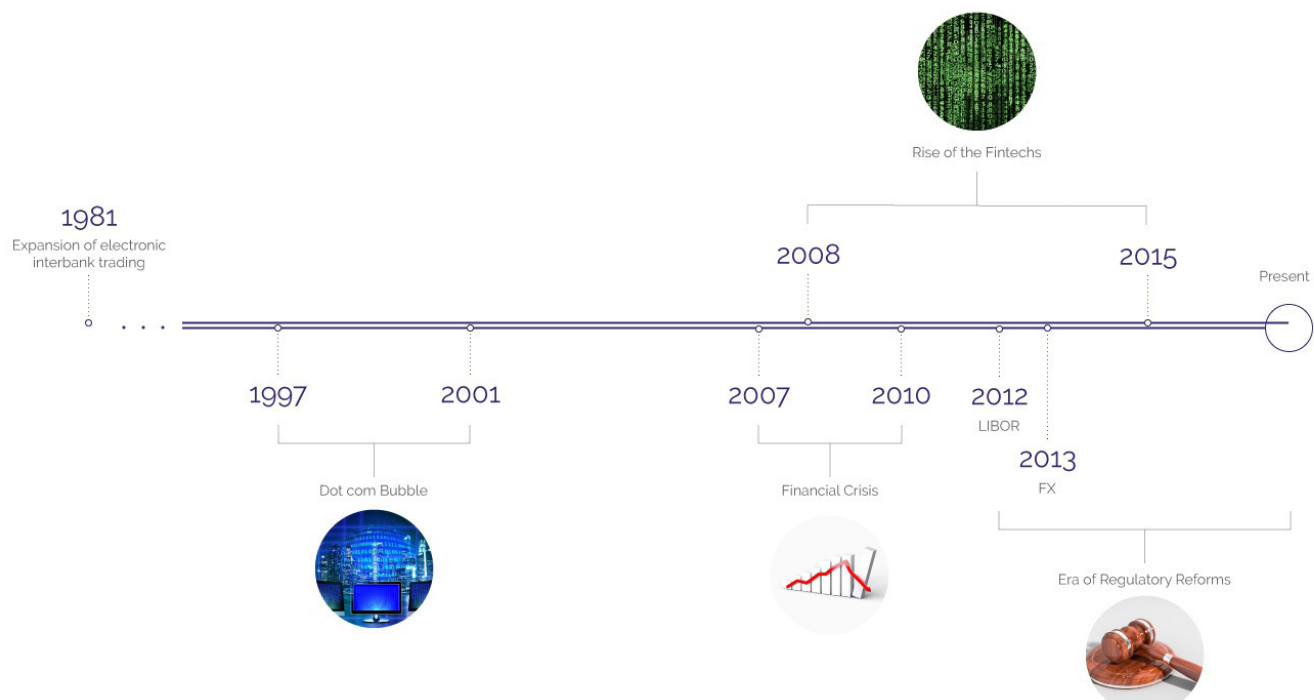
Be prepared: Changing market dynamics and revolving regulatory requirements

I have been involved in the preparation of our solution banking collateral outlining the wide range of functionality and features of siena. It brought home to me the journey Eurobase embarked on with its expansion into banking and the development of its first solution. Initially, this pioneer product concentrated on deal entry and real-time position keeping which were the buzz features appealing to dealing rooms historically.

Along the road, that journey has seen some remarkable events. The expansion of electronic interbank trading which had started in the FX markets in 1981 with the Reuters Monitor Dealing Service. The real pace of electronification picked up in 1990 with the launch of EBS and the 1992 launch of Reuters Matching. The dot com bubble of 1997 to 2001 left a massive imprint on financial markets far beyond the crash of the over inflated asset values of some dot coms.

These dot com years heralded a sea change in electronic trading in bank dealing rooms. The major impact post dot com was the expansion of electronic dealing offerings to customers mainly as single bank platforms or the slightly later incarnation of multi-bank dealing platforms. Aligned to this was the explosion in volumes traded in FX (BIS 1995 survey \$1.2 trillion to \$5.3 trillion ADV today). Similarly, volumes in derivatives rose given the quantum leap in computing power and the ability to model and price more complexity. We went from CDO's to CDO's squared and onwards to ever more exotic variants on vanilla derivatives.

This of course came to a crunching setback during the financial crisis of 2007/2008 and markets were further derailed with the scandals that have beset us since in 2012 (LIBOR) & 2013 (FX) which still reverberate today. Indeed regulatory investigations and legal cases still occupy the business headlines.



The response has been, with some justification, a decade of drafting, consultations and enactment of some of the biggest regulatory changes the markets have previously experienced over such a relatively short period. Coupled with the publication of Codes of Conduct including an FX Global Code this has led to significant technological requirements.

Alongside these tumultuous events we had the emergence of FinTech and RegTech. In an influential scientific study in 2017 FinTech was defined as a new financial industry that applies technology to improve financial activities. Its meteoric rise took place between 2008 and 2015 with investment in new technology ventures rising 2,200% with many falling away before they even launched! RegTech implanted itself in the markets consciousness in 2016/2017 with numerous papers outlining the phenomena. It grew out of the FinTech space and has support from NCA's (National Competent Authorities) in numerous countries with the UK FCA's Project Innovate at the forefront of this official encouragement.

During the history of Eurobase these events shaped or validated the continual development of siena. Hardware changes and increases in sheer computing power was changing the trading landscape and so the product evolved. As noted above, derivative markets rapidly expanded as a result and, combined with capital requirement changes, spawned an off-balance sheet trading revolution. This revolution added more complexity to the requirements and the "cross asset class" capability became the mantra of the day. To put this in perspective my iPhone has more raw computing power than my front-end technology did in the early 1990's and I was using that early technology to run a complex treasury department!

Looking at our latest collateral, I can clearly see how significant changes in the market led to an ever-expanding list of capabilities. Starting with the expansion out of FX into Money Markets rapidly followed by the need to incorporate Fixed Income, Derivatives and even Commodities. FICC became the new anachronym for a dealing room. As the

markets became more complex so did the offering with "vanilla" no longer being the cutting edge. As computational power increased, we moved from interpolation to yield curves and volatility surfaces en-route to ever increasing mathematical input and the technological problems to be solved to safely navigate the increased complexity.

The dot com revolution sparked the birth of single dealer platforms and the need for rate engines with integrated credit limit capabilities, hence the creation of siena eTrader. Dealer Intervention software and GUI's had to be built and a myriad of integration and message routing problems had to be solved. One of the early e-trading customers required extensive voice Sales Desk support leading us to develop one of the early "hybrid" versions of "voice execution/electronic affirmation" platforms. This early development of the Sales Desk features has proved to a boon when asked to solve the Regulatory conundrums post 2015. MiFID II ushered in the need for millisecond timestamps and voice retention records while proving best execution – not an easy Gordian knot to solve.

The FinTech years also sparked a significant development when a major client wanted to compete in the e-payments space to ward off competition from the nascent FX payment sector start-ups. This was a truly exciting project that honed new skills in the company as we adapted our e-trading software to produce an e-payments product that combined the best bits of the banking model with the best features of the FinTech revolution. It even led to some cost savings, for me personally, as I acquired two of the emerging pre-paid FX credit cards to see how they worked and have benefited from better exchange rates and cheaper fees ever since!

Then came the Financial Crisis and authorities worldwide met at the Pittsburgh G20 Summit in 2009 following the groundwork laid at the London meeting earlier in the year. One of the first major announcements to come out of the Summit was that the expanded group would become the new permanent council for international economic

cooperation. This launched the regulatory tsunami that we had to respond to, with new requirements our customers would need to navigate this development. Principally we needed to solve the problems posed by the Dodd Frank Act, MiFID II and associated regulatory initiatives. Out of this came our latest addition to the burgeoning product suite; the Regulatory Reporter. Designed as a modular add-on and holistic database it can enhance rather than replace older technologies when required.

In conclusion, we do not have a "crystal ball" to gaze into, but in our experience, you need to evolve and innovate with what is actually happening rather than bet the farm on guessing what the next cycle will bring. However, from research into new technologies, it is a reasonable bet that blockchain and distributed ledgers will herald change. This is most likely to occur in transforming key areas such as on-boarding, KYC/AML, margin, collateral and post trade services. It will also impact settlement but that is for another blog. The developments in Artificial Intelligence are likely to have an impact on customer facing activities. One thing is for sure – the years ahead will be as interesting as the years gone by!

The key to all this is building flexible products that can adapt quickly to emerging trends and shocks in the financial sector and making sure you don't lose on the roundabouts what you won on the swings. At Eurobase we will continue to research new developments and adapt siena to offer a total treasury and sales solution to our customers. I wonder what our collateral will look like in 10 years' time – answers on a post card please.....why not start by taking a look at our current content which can be found using the link below.

<https://blog.eurobase.com/product-brochures>