

Illustrations

Are we living in the past?

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There was a time when 'Illustrations' meant an Actuary with a scientific calculator, pen and paper. Then Microsoft Excel and Lotus 123 opened a new world to the Insurance Industry and although there are still those who believe that there is nothing more powerful than an Actuary with an excel spreadsheet fortunately the world has moved on. But has it really? if you peel back the covers of any Life & Pension company's technical infrastructure or if you walk the floor in any actuarial or pensions administration area you will find that there are still multiple calculation/quotation solutions to be found.

They are required due to; a lack of functionality provided by legacy administration systems, the attitude of 'Just build an app for this', the requirement to forever offer those very special deals and to manage the exceptions, though in truth there are more exceptions than the rule.

Illustrations and quotations though key to the majority of business processes within a Life and Pensions organisation, historically have rarely been viewed strategically. Rather, they have been viewed as 'pet' projects, embarked upon out of the necessity to implement a solution to manage a new product or to 'fix' something which is found to be deficient (never wrong!).

There is little point in embarking on programmes to improve service, reduce costs, launch new distribution channels or enter new markets only to find that existing Illustration system(s) (Spreadsheets, calculators, VB applications, Turbo Pascal, Clipper – you know I am not joking) cannot support the newly defined business processes or products and, at best, you are facing into yet another expensive and time consuming IT project to 'tweak' the existing Illustration system or worse still, to implement yet another one. As products

become more blurred with hybrids and wrap products, there is the need to touch on more than one quotation system.

Yet, typically, this is what Life and Pension providers have done resulting in the current situation whereby, most providers have several Illustration solutions supporting different business processes, products and distribution channels. The very limited calculation and illustration capability provided by the policy administration system is not able to support the business process and product demands of most Life and Pension companies. It is not unusual for a typical Life and Pension provider to have different Illustration solutions supporting each of the following:

- New business illustrations and existing business illustrations
- life products and pension products
- individual business and group business
- unit linked business and traditional business
- intermediary business and direct business

When did you last see a complete inventory of all calculations / quotations systems within your organisation? Thought provoking? It should be, in our experience we have seen over 50+ solutions in some companies when they thought they had 4!! Though this may be the product of market consolidation and necessity over time, is this an adequate response when you consider the inherent risks?

On closer examination, Life and Pension providers typically discover that the existing myriad of illustration solutions may be written in several different languages from Excel to Turbo Pascal to Visual Basic, they are not documented, require specialist knowledge from key personnel to provide maintenance and support and in many cases, there is no back-up available in the event of a fatal hardware or software crash. The same regulatory and legislative changes need to be executed separately across each system resulting in significant development and testing duplication for IT and Actuarial staff.

But enough of risk let us consider the business impact of this.

What are the drivers within your industry today?

It is no longer a question of whether you can create a new product, add a different benefit or price a product better than the competition but a question of Service Differentiation, Speed to Market, Self Service, Process and Cost Efficiency. Innovation is redundant where the business cannot cope and the competition can do it better, faster and cheaper.

In the current environment where the opportunity to grow the market in developed countries is limited, the focus is on grabbing market share by being able to:

1. Target certain segments of the market with more specialised products and offerings
2. Make products available through more diverse distribution channels including portals
3. Offer improved customer service to intermediaries and end customers with:
 - a. Online self service options for single and multiple quotes
 - b. Ability to retrieve quotes and execute revised quotes
 - c. Online enquiry, policy reviews, 'what if?' analysis and top-ups
 - d. Online purchase of new products, top-ups and straight through processing
4. React faster to regulatory and market changes
5. Reduce time to market for new Life and Pension products
6. Achieve cost savings and process efficiencies by deploying a single calculations solutions with a single point of entry for product definition and reference data

Of course, legacy illustration systems are preventing many Life and Pension providers from achieving these objectives. Specific barriers include the following:

- Illustrations and calculations are executed in multiple locations and indeed multiple applications across a diverse technical infrastructure to standalone platforms.
- Manual calculations and processes are often integral to illustration and policy

administration processes including claims and top-ups. Such manual intervention is not only costly but it exposes the organisation to the risk of error and regulatory breach.

- Similarly, the need to maintain product rules and reference data in several locations is also increasing the risk profile of the organisation. Over time, data changes are difficult to track and it is virtually impossible to maintain a satisfactory audit trail.
- Product development takes too long, costs too much and ties up expensive and scarce actuarial and IT staff.
- Product testing and testing reference data changes becomes a constant business process in its own right and frequently demands the establishment of dedicated testing teams.

In summary, many of these ad-hoc solutions have become mission critical and are central to the execution of key business processes leaving the organisation dependent and exposed in equal measure.

In recent times, Illustrations has emerged from the shadows to centre stage. It is no longer a background activity performed by actuarial and/or IT, out of sight and out of mind. Progressive Life and Pension providers now recognise Illustrations as a key enabler, a catalyst for achieving business growth and cost efficiencies and a business function that is worthy of serious consideration and investment. While many of you may have fond memories of endless nights 'cutting code' and playing with spreadsheets, let us take a strategic look at illustrations and calculations capability within the organisation.

What is achievable? – A **single solution** residing across all systems and processes.

The New Dawn

The concept of centralising all calculations into a single system and then making those calculations available to any business process, application or IT system is becoming a reality for many Life and Pension providers. Supporting the central calculations engine with a flexible and intuitive product configuration solution, in which resides all the necessary product rules and parameters can empower the organisation to achieve unprecedented levels of flexibility, process efficiency and cost savings.

The strategic Illustration / Calculation solution provides the organisation with:

- A single illustration solution integrated across all administration systems allowing for the execution of all calculations across all products from one central point. Thereby allowing for calculations to be defined once and once only and means that all reference data changes can be executed centrally reducing the risk of data errors and saving significant time and cost. This also extends the life of large expensive to replace legacy administration systems.
- Self service offerings with the provision of quotation, enquiry and valuation capability directly to both the corporate and individual customer realtime in a user friendly manner.
- Centralised product development where all product rules are created and maintained in one location and made available to all dependent systems, thereby eliminating the need to implement and maintain products in multiple locations.
- Intuitive user friendly product development utilities which remove the dependence on expert actuarial and technical resources and instead empower the business to actively manage the product portfolio, enables the business to launch and re-price products in a controlled environment.
- The ability to enable the actuarial team to challenge and to innovate within shorter timescales than were previously conceivable.
- Reduced time to market for new products. Instead of taking a number

of months to define and implement, brand new products may be released in a matter of days with the facility to include multiple releases for different channels and special deals.

- Centralised distribution channel management driven through a centralised product launch capability where branding, white labelling and pricing can be automatically inherited by the products in each channel.
- Automated illustration and calculation testing where rather than being a time consuming costly process, testing is a function of the day to day product development and innovation within the product development area and full regression testing can be executed in a matter of hours.
- Dynamic browser based user interfaces where the look and feel is determined by the distribution channel and access is determined by the user's profile.
- Full audit and control capability with user, date and time stamped audit trails and full history maintenance.

The benefits of adopting this new illustrations paradigm are real and numerous.

- The Life and Pension provider is set free to exploit its strategic intent irrespective of how it chooses to differentiate itself from its competitors. An optimum Illustrations solution will support all strategic operating models including operational excellence, product innovation or cost efficiency.
- Centralising calculations and product rules in one place reduces the need to make changes to back office policy administration systems and thereby allows the life and pension provider to leverage its investment in existing IT systems.
- The implementation of a single calculation solution reduces the risk of error, supports transparency and enables an organisation to achieve compliance around treating a customer fairly (TCF).
- Illustrations are removed from the critical path for new product

development, new distribution channel launches and entry to new markets.

- Regulatory and legislative changes are effected in one place only leading to lower costs and increased levels of compliance.
- Consolidating existing illustration systems into a single solution reduces maintenance costs, concentrates knowledge and eliminates the need to maintain competence in two or more software platforms.
- The implementation of a new flexible web enabled illustration system to support both new business and existing business processes allows the provider to radically rethink its business model and how it can exploit the Internet to improve the way it distributes and administers Life and Pension policies.

The net effect of the new illustrations strategy will be **cost savings, process efficiency, product innovation** and **service differentiation**. In theory, the decision to invest in a new generation illustration solution is a no brainer. However, in many jurisdictions, the journey has yet to commence. Experience in the UK has shown that as soon as the early adopters began reaping the benefits, the rate of adoption increased rapidly. The most difficult aspect for most companies when building the business case is to adopt an honest 'warts and all' approach to analysing the current state. The disparate nature of illustrations in Life and Pension providers means that the costs are spread over many business units and are not as obvious as the costs attaching to other processes. An honest cross departmental analysis generally shocks and surprises. Think about it, if you dare!



About Exaxe - The Company

Established in 1997, Exaxe helps Life and Pensions companies launch [new products](#) faster, administer post retirement products more [efficiently](#) and respond with [greater flexibility](#) to the marketplace.

With offices in **Ireland and the Netherlands**, we provide leading edge; front, middle and back office solutions specifically for life and pensions.

Exaxe's component based solutions **more effectively manage**; product development, quotations and illustrations, channel distribution and commissions management, administration, etc. They are **proven** and are in use in a wide range of [client](#) organisations.

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