

How ING and LCAP are making innovation **second nature**



2021

Introduction

Welcome to our 2021 series of Genesis Expo broadcasts.

A theme that struck a chord with our guests last year was that in the wake of the 2008 crisis, the innovative drive of financial markets decelerated as banks had to adapt to new capital and compliance requirements.

It was in this context that fintechs — unconstrained by the cultural and technological legacy of incumbent firms — began to transform how financial services are distributed and consumed.

In January's Expo we highlighted how large, established institutions have been returning to the fray — but with a different mindset, one much less focused on building and owning innovations that can be leveraged more easily and cost-effectively through partnerships.

We welcomed two exciting speakers from ING: Ron Kersic, Enterprise Architect, and Matt Rhys-Evans, Lead Market Innovation and a familiar face at our Expos.

Ron talks about how the power of embedded finance transforms the application journey. Solutions may be consumed individually, but also in contexts the creators of the app or tool never dreamt about. The more flexible, agile and composable your development approach, the more of such innovative contexts you can create.

Matt gives us an example of that. He appeared in our first Expo in July 2020 to launch a credit risk insurance application build on the Genesis

Low-Code Application Platform. This tool is transforming a trillion-dollar market currently run on Excel spreadsheets and has just been rolled out in ING's US, Hong Kong and Singapore operations. Great news.

But it goes further than that. The modularity of the Genesis platform is enabling ING to reuse components of the credit risk tool to develop a very different application for its fund finance teams to manage their transaction data. This will greatly speed up the development of this app.

The digitalization of finance and all other aspects of our lives is blurring the boundaries between the functions of a bank and the technologies it deploys. This also makes a nonsense of another distinction: between 'designated' innovators and everyone else at a financial markets firm. No. Both Ron and Matt are innovating the way that ING impacts the financial markets every day as the bank nurtures a culture of change.

The mindset needs to align with the technology.



Felipe Oliveira
COO - Genesis Global

“The new paradigm is possible, doable, unstoppable.”



Ron Kersic
Enterprise Architect - ING

It is worth reflecting on the true impact of digitization. Because, once a product or service has been digitized, some truly extraordinary things can happen.

For one, the transaction cost. The cost of acquiring a digital product is close to zero. Take this Expo broadcast as an example. To join requires nothing more than just clicking one link. And likewise, the marginal cost in serving an additional customer is equally low. And finally, the potential reach of any digital product is nearly infinite; we could have been joined by all 5 billion people on this planet connected to the internet.

All of this change is the foundation of how we conduct business. It changes the shape of the firm, the boundaries of which become less defined; it changes the shape of the customer, who becomes much more active in the overall value creation. And that changes the shape of scale — from efficiency at scale to learning at scale. In my job at ING, I track a number of trends based on these new shapes. And one trend I would love to highlight in this session is embedded finance. This trend is not limited to just finance. If you are working in logistics, the

trend manifests itself as embedded logistics. If you are working in commerce, it becomes embedded commerce, and so on.



How embedded technologies amplify scalability

To get across this concept of embedding, we should have a look at a typical pre-digitization pipeline. Very much integrated, and by and large owned and operated by just one organization with the license to operate — a banking license in our case — through infrastructure, capabilities, products, and services, all the way to customer journeys, and customer contacts.

Each of these components, its distribution, its access, could be digitized with near-zero transaction cost, near-zero marginal cost, and near-infinite leverage. And each of these digitized components could be consumed outside the context of the owning organization. Let’s take Shopify as an example. Shopify is a global eCommerce platform, and powers thousands of web shops across the globe. If you didn’t do all your Christmas shopping on Amazon, chances are you did so at a web shop

powered by Shopify. And Shopify offers its customers – eCommerce merchants – all the financial services they would need to set up and operate a shop. You own your business; you own your finances is the motto here. Do note that these services are branded as Shopify and the brand experience is Shopify as well. Now, Shopify didn't suddenly become a bank.

Instead, they embedded capabilities provided to them by Stripe, which is an online payment processor. And everything from holding funds to paying bills earning interest and managing cash flow is provided by Stripe to Shopify, through modular components. And in turn, Stripe partners with global banks to enable payment transfers, all based on a banking license. Now, you may think this is a bad thing for Stripe or the banks on which it relies. For sure this has to be the dreaded intermediation and indeed, Stripe does not have a customer relationship with all of these shops on Shopify. That's exactly what Shopify is good at. So why would Stripe even try it? Instead, Stripe is focusing on what it is good at: providing that API layer to banks that will never have the capability to serve individual Shopify shops. So, Stripe gets to build its business across a scale it could not have achieved in the integrated scenario, just like Shopify could not have been able to offer these specialized capabilities to its customers.

The potential reach of any digital product is nearly infinite.

Ron Kersic, Enterprise Architect - ING

The culture of innovation at ING

I'm fairly convinced that the boundaries of organizations such as ours, but pretty much any organization, will become less well-defined. We have a dedicated Innovation Group, and they do excellent work. You need to have an independent or separate Innovation Group if only to protect new ideas from what you could call the corporate immune system, especially in the beginning. So it totally makes sense to have a discrete innovation group as part of your corporate structure.

But at the same time, you see that there are many more people that identify as innovators, even outside the Innovation Group. And not only do they identify as innovators, they actually behave as innovators, they act as innovators. And if I may take myself as an example? I'm an enterprise architect in tech. So that's it. And still, here I am, almost unashamedly talking about innovation and sharing my perspective on what's around the corner. And not only is that allowed, not only is that possible, but it's also encouraged for me to behave in this way. This is what I meant when I said it is a very much more open culture. It's an inclusive culture; we all have to be innovators in our own way. So if there is one way of me typifying our culture of innovation, that would be it.

If there is one lesson to share it is that I think everybody can adapt to this new model, to this paradigm shift. Of course, it's never easy. And certainly, if you have legacy in terms of your cultural legacy or in terms of your systems and processes, those need to be adapted. But it's possible, it's doable and in that sense, it's also unstoppable.

I think there will be some **quick wins** with Genesis.



Matt Rhys-Evans
Loan Market Innovation Lead - ING

The first app ING developed using the Genesis Low-Code Application Platform is a credit insurance application or CIA, which we had the pleasure of launching during the first Expo in July 2020. We just launched the app in the US, Hong Kong, and Singapore.

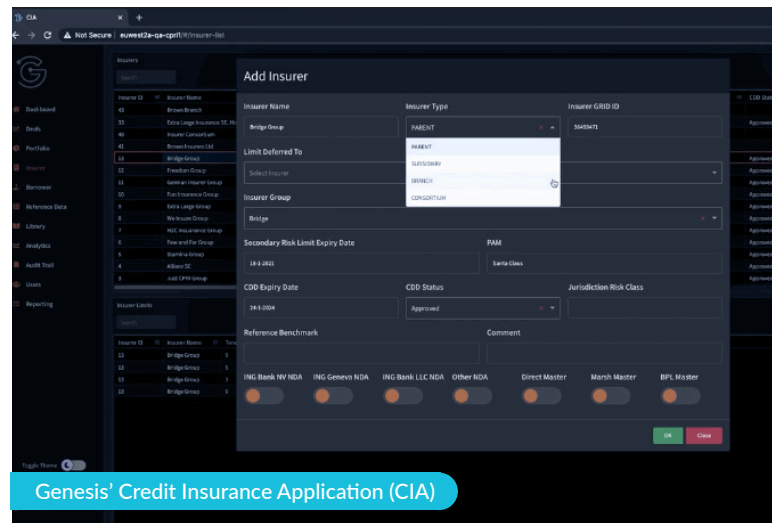
We are now building the second application with the Genesis LCAP, which will help a team called fund finance manage their data on transactions globally. Again, they have teams in the UK, US, and Asia. We will reuse some of the components of the credit risk insurance app for them. That means that we should be able to do this application a lot quicker and deliver it into the business within a number of months rather than one or two years.

The composable nature of the Genesis LCAP is what is delivering this agility in development.

The credit insurance application

But to get back to our first collaboration, the credit insurance app. We had a number of use cases, but this one stood out as being a symbol of the end-user computing scenario.

The credit insurance team had a large, unwieldy database, based on Excel as so often in end-



user solutions. This is a global business of course and our teams were struggling to bring in transaction data and monitor transactions that were going on at any one time.

This is a problem for the whole industry but at ING we wanted to do something about it. The way we could use Genesis to find a solution really stood out for us.

What we were trying to achieve is a workflow for managing credit insurance transactions, and that those are loans that we insure. They are wholesale loans that we provide to ING clients, usually a syndicated loan, done on market terms. There are about 50 insurers willing to provide insurance on non-payment on a portion of that lending. So ING is lending to a client, and we get some insurance on the line, and we manage the insurer like a partner, essentially. There's always a broker in the middle as well.

We have a daily dialogue with those parties, and we have to exchange loan data with them. We have to find out who is interested in doing the transaction, what their pricings are, and we then have to give them information for them to put together a policy. In short, we are exchanging data and information all the time. And that is where the Genesis solution, the credit insurance app, came in. With the CIA app, we are now able to do all that in one central repository, and that allows us to manage live transactions and also our portfolio.

Where ING can also innovate — and sees a role for LCAP

Another key area for us is the wholesale lending space where we do a lot of legal transactions that involve huge amounts of documentation. And that is, in fact, quite an old-fashioned process, ripe for digitalization because there's lots that can be done to improve that now. The market is worth trillions, so there is a huge amount of value to be extracted from digitizing these older processes.

Velocity is our strategy for distributing more of the loans we originate and that includes balance sheet operations. It is about optimizing how we deploy the capital that is used by the bank, especially on the loan portfolio side. We have increased the focus on capital velocity over the past few years because of the increasing capital pressures faced by banks.

We have invested not just in disruptive initiatives, but also in a methodology and structure for designing digital products and services. We call that Pace: a combination of agile, and lean start-up and design thinking.

Pace is our problem-solving pain point discovery process. Pace helps us identify areas where we can improve our business processes and customer journeys, and we can then bring in a new solution and new technology. We can use LCAP for that really easily. I think there will be some quick wins and some ways of deploying Genesis with the types of applications that we are developing at the moment.

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Matt Rhys-Evans, Loan Market Innovation Lead - ING

The road to success

There are many digitalization projects that we've worked on that haven't worked out. There are lots of issues to get around and to work through. So let's look back and summarize where we got to.

It's been about understanding the customer journeys, and that remains critical as we look at more complex problems to solve. We want to use flexible and future-proof technologies such as LCAP that are scalable and deployable as easily as possible, and especially using the cloud. Then, we also need transparent accountability of projects and commercial viability where possible.

Within ING we have a financial markets division and also the new capital velocity strategy I mentioned where we're trying to distribute loans more and improve and increase our trading capacity. All this means that we see lots of opportunities to work with Genesis in 2021 and beyond.

We want to use **flexible and future-proof technologies** such as LCAP that are scalable and deployable as easily as possible.

Matt Rhys-Evans, Loan Market Innovation Lead - ING
