

Building global Data Analytics competencies at Aegon

In order to give meaning to the seas of data in your global organisation, focus on the (wo)man, not the machine.



Geertje Zeegers
Junior Partner
Mlcompany



Helen Rijkens
Program Manager
Mlcompany



Robbert Bakker
Chief Digital Officer &
Chief Marketing Officer
Aegon



Building global Data Analytics competencies at Aegon

In order to give meaning to the seas of data in your global organisation, focus on the (wo)man, not the machine.

To almost all organisations today, it is obvious that they must do something about utilizing Data Analytics. Discussions no longer center on why you should (the answer by the way: because companies using Data Analytics consistently outperform their competition. See Figure 1) but focus on how companies should go about this utilization. The key? Focus on analytical talent and analytical competence building. We will explain why. And illustrate the effectiveness of this focus through the approach Aegon took to building their analytical capabilities.

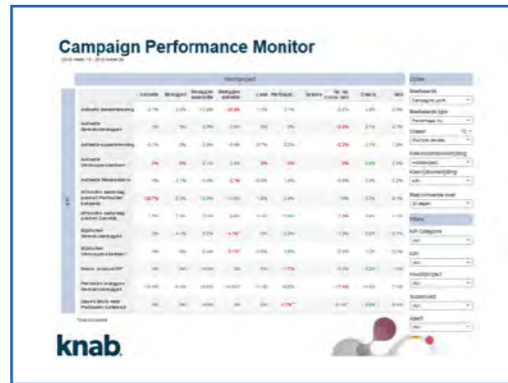


Figure 1. companies that make extensive use of Big Data Analytics consistently outperform their competitors

Conquering the data challenge is no easy feat. As is the case with many 'new' developments, global organisations face several challenges when attempting to utilize their data. They face legacy systems and old tooling on the one side and old, or even ancient, ways of working within the company on the other side. The first reaction for many companies? To focus their efforts on technology in order to solve all their problems. Often resulting in long lasting data warehousing projects at high costs, with no concrete results for the business. On top of that, companies struggle with the question of how to turn data into something of value for the organisation. How do you transform data,

and even analyses, into an insight? Additionally, within global organisations especially, and local organisations to a lesser degree, (deep) analytical competencies are often scattered across the organisation. Both within countries (finance and commercial departments for example) and across countries. With no or extremely limited interaction between these disciplines and operating countries. And to make matters worse, the gap between the Data Analytics competence and the commercial and functional 'users' of Data Analytics is often huge.

Robbert Bakker: At Aegon, we needed to make a huge step-up in analytics in order to be able to address our global mission. We want to help our customers achieve a lifetime of financial security. And we need analytics to help people do that. So the aim of having an excellent Data Analytics skill is by no means only to increase profits. Its' aim is to serve our customers better (and thereby achieve our company mission), to grow as an organisation while doing that, and to earn enough money to keep on doing both.

So what to do? We suggest you stick with the following four guidelines:

1. Talent before technology. Walk two paths: invest in young talent and develop existing analytical pool
2. Focus on impact is key when turning data into value for the organisation
3. Integration of analytical teams across disciplines and continents greatly accelerates global application of Data Analytics

Introducing Aegon²

Aegon N.V. is a multinational life insurance, pensions and asset management company headquartered in The Hague, Netherlands. At the end of 2015, Aegon companies employed more than 31.500 people worldwide, serving literally millions of customers. Aegon has large operating segments in the Americas (including the United States, Mexico and Brazil), the Netherlands, the United Kingdom and in a number of countries in Central and Eastern Europe and Asia, as well as Spain and Portugal. Aegon's purpose is to help people achieve a lifetime of financial security. Central to achieving this purpose is for the company to shift from a product-based company to a customer need-driven one. We asked Robbert Bakker, Chief Digital Officer / Chief Marketing Officer at Aegon and driving force behind building their Data Analytics capability, to illustrate how they have built their global competence, in part through collaboration with Mlcompany's Analytical Academy program.

4. Don't only strengthen and train the engine of analytics in your organisation (your analysts), but address all parts if you want to build a real supercar.

Talent before technology

As mentioned before, a common pitfall in building Data Analytics capabilities is to start with, and focus solely on, technology. Technology however is widely available, and can be bought and implemented by many organisations. In isolation, technology seldom leads to competitive advantage, especially given the rise of open source technology and software. The differentiating factor, the one that really sets leaders apart from laggards, is having the internal capabilities to uncover novel insights from data and having the ability to translate them into value creating business actions. Hence, investments in analytical talent should go hand-in-hand, or even precede, investments in technology. See also figure 2.

When investing in analytical talent, it's important to make a distinction between two different types of analytical talent. Put simply: new talent and existing analytical talent in the organisation. With regard to the first group, it is essential for organisations to focus on attracting and keeping young analytical talent for the organisation. The benefits of this strategy are multifold. In an extremely, and increasingly so, scarce population, young analytical talent is a little bit easier to find than experienced talent. On the cost side alone, it is often much cheaper to recruit young talent and invest in developing them rapidly, than to look and pay for more experienced analysts (in terms of recruitment

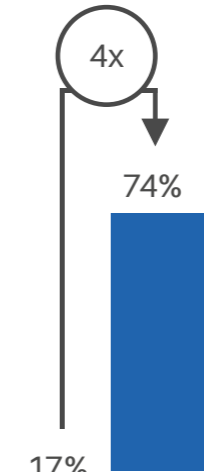


Figure 2. Industry leaders invest highly in analytical talent

costs and salary difference for example). And by attracting and training them within the company you are no longer dependable on finding the very scarce experienced analysts with the right capabilities in the market. More importantly, young graduates are often much more up to date in a field that is developing at speeds most of us can't really comprehend (just think: most of the Big Data software used these days didn't even exist 10 years ago). And finally, young analytical talents are essential in creating the energy needed within the organisation to accelerate on analytics. Key in attracting them (and keeping them) is to make sure you can offer them a career perspective and the possibilities to further develop themselves. If you have them, make sure you also

foster your existing analytical talent. Your more experienced experts must be triggered to explore new technologies, adopt new techniques, and keep up with the data developments happening in general. Be sure to stimulate a culture of curiosity, so that experienced analysts don't stick only to what they know, but broaden and deepen their skill set. And what's extremely important when doing so: don't forget about developing the impact and advisory skills of these analysts as well. Often existing

“We were put together with 8 people from all over the world and we're being trained by some of the best professionals to be found in this business. You don't know what you expect when you sign up for a three year program and then, from the first day you see that not only Aegon invested a lot in this but everything has been though about.”

Tim Steinkuhler, Junior Customer Intelligence analyst at Aegon NL

analytical talents have a wide understanding of the products and business but can benefit greatly from learning structured approaches to identify opportunities, tell data-driven stories, and understanding how to communicate to the organisation. This way they can also be of great help to new talent by identifying the right direction and business relevance.

Robbert Bakker: If you don't have the talent to use technology, than the technology is useless. So we chose to invest heavily in talent as a starting point. Because I believe that you shouldn't outsource that critical skill. Our first step was to recruit and train young talent, both on analytical and social skills. We set-up the Aegon Analytical Academy together with Mlcompany for exactly this purpose. We are now three years into this set-up and are seeing the results in so many places within the company. We have one view on our customers for example. Our self-organizing analytics team(s) guide our organisation based on facts and insights, instead of on opinions and beliefs. Like in our segment-of-one pricing program, where the original 'feeling' was that we should stop with certain products for our intermediaries, but by de-averaging the base, we found that there were quite a few places where we should definitely not stop carrying that product. And essentially, there is a new sort of energy in our company. That Data Analytics is extremely valuable to our business. And that it's even kind of fun.

Focus on impact

This may sound strange in an article focusing on how to build global Data Analytics capabilities, but here it is: data, and even the analytics needed to make sense of the data, are typically not the end goal. When trying to turn data into

“Everybody wants to do data science but not everybody has the complete skills and knowledge. People learn statistics, people learn math, people learn business but this program gives you a full picture. Here we learn how you look at the business, how do you identify business problems and how do you solve them.”

Vinila Sista, Statistical analyst at Transamerica US

value for your organisation, focus on impact is key. That means that essentially, data, for most organisations, is ideally a means to an end. The end is not the data itself, but the way in which it is made actionable. This means that the entire organisation should be geared towards creating impact. For your analysts, whether they be new or existing talent, it means understanding the 'so what' of every insight they have created. In fact, it means starting with the 'so what' in mind, so that all analyses are aimed at results for the organisation and its' customers from beginning to end.

This means that Data Analytics capability building is most effective when not only focusing on data and technology skills, and on developing knowledge of analytical methods and techniques, but integrate these skills with impact and business focus. Although deep analytical skills are essential, they really start to be unique when they are integrated with a better understanding of where impact can be realized for the organisation, what a customer focus means, how products are set-up, which drivers are essential to the working of the business, and so on and so on. Impact through analytics goes beyond 'just' the technical and advanced analytics skills, it means understanding the workings of the business and its' customers, and the ability to show others in the organisation how they can use Data Analytics to make better decisions.

Robbert: It's extremely important that when you invest in Data Analytics, you can show from day one that you can make the difference for the business. All people in our business should continuously ask themselves: 'am I working on the big, relevant things'. And determining that, so sizing the opportunity that people are working on, is something that they find extremely difficult. They need confidence to get to a number. Data Analytics facilitates this. Once they have the number, then the fun really starts.

Integrate analytical teams

One of the challenges we've discussed previously is that within many organisations (deep) analytical competencies are often scattered across the organisation. Both within and across countries. Analytical teams often operate like

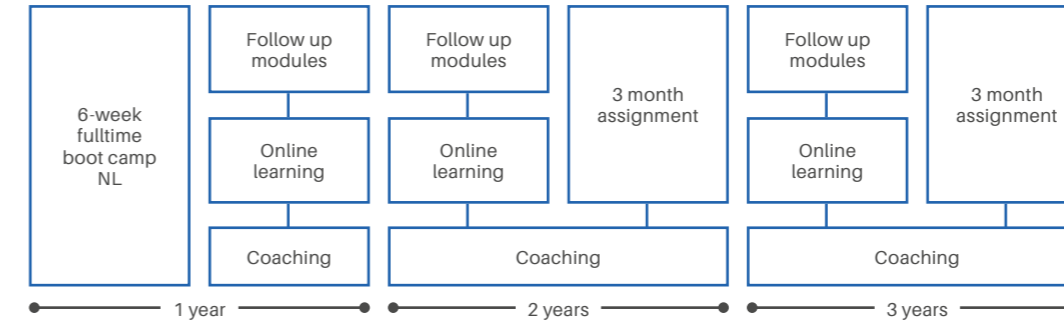


Figure 3. Set-up of the Analytical Academy program

small splinter cells within countries or divisions. With the obvious risk that wheels are (re-)invented in different divisions or locations at the same time. By integrating analytical teams across disciplines and continents, strong analytical talent in both commercial, financial, and product disciplines, can learn from each other and build on existing knowledge. Integration by no means translates directly into physically integrating teams in one central division, but means teaching different disciplines to speak the same language, so that gaps between these disciplines are closed.

Customer lifetime value as a theme is an good example of this idea. Marketing analysts must guide the business towards initiatives that create long-term customer value growth. They often build customer lifetime value models in order to gain insight where these initiatives will have the most impact. To build a successful customer lifetime value model, marketing

analysts are challenged not only to understand the customer lifecycle, but also to integrate financial metrics in their model. They will need to interact with the financial analyst to integrate financial metrics such as MCVNB (Market Consistent Value of New Business) and book value with customer metrics. And in order to make correct lifetime or cross-sell estimations for example, they will need to interact with product disciplines to gain a good grip on how products are designed.

One way to achieve this integration, is through integrating the disciplines in training programs. By creating classes of analyst cohorts across different disciplines and countries, organisations ensure that the same Data Analytics language is taught to all disciplines. In fact, by creating the opportunity for analysts to work temporarily on deep analytical projects within different departments or in different countries, true acceleration can be realized

for both the analyst and the organisation. By learning from analytical approaches across countries, adoption of the approach by country one in which country two is leading is accelerated. There is no need to make the same mistakes and it enables countries and divisions to double down on existing success.

Robbert Bakker: From day one, we have integrated analytical disciplines in our training program. So that all of them learn to speak the same language. Because the financial truth used to be a different one from the commercial truth. We eliminated that problem by putting the people behind the truths into the same class. And even physically having them do projects in each other's departments for 3 months as part of the program. And then we decided that it would be a waste to not do the same on a global level. Because we are a global company, so why not use the insights and models and technology in each country and learn from that. So our second class consisted of analysts from all over the world. And with success. To name an example: we were able to translate the next-best-activity model for intermediaries that the UK spent years developing to a Dutch version in a week. We would never have been able to do that if the people hadn't been connected and known where business priorities and strengths of each Country Unit lie.

Address the supercar as a whole

For companies on a mission to create a Data Analytics supercar, one that will outperform all its' competitors and give the ultimate driving experience, there is one final challenge to address. And that is to close the gap between the Data Analytics competence and the commercial and functional 'users' of Data Analytics.

So although your supercar engine is the driving force behind its' performance, the other parts must be completely in sync with the engine in order to reach your supercars' maximum ability. This means two things: developing your commercial and functional management, and enabling your company's leaders.

Traditional commercial and functional management, such as marketing-, product-, or category management divisions, often rely heavily on analytics departments to supply them with the basic numbers or lists of customers that they need to perform their respective functions. Often however, these departments have never been taught to ask the right questions of the analytics teams. Or has attention been given on how they can move from 'gut-feeling' proposals to data-driven business plans. Teaching these departments a data-driven cycle aimed at impact often greatly enhances overall company performance. This means teaching them a way of working that involves the following steps:

1. A first fact that inspires a hypothesis about the business;
2. A sizing of the potential impact of this hypothesis;
3. An insight that answers this hypothesis;
4. An initiative developed from this insight;
5. A pilot to test the initiative;
6. An analysis of the outcomes of the pilot, improvements to the initiative and then a repeat of the cycle.

Running through these steps not only makes it easier to create a result and impact focus

for your commercial and functional management, but also enables them to quantify success when it happens.

Of course an organisation cannot be fully data driven if its' leaders are not Data Analytics oriented as well. To drive your supercar to exceptional performance, the navigator must understand at least up to some degree how the engine and the main parts of the supercar work. Fostering a culture of curiosity amongst your leaders greatly improves the organisations' chances for success. By moving from a company culture where leaders give orders to a company culture where leaders ask questions aimed at proving or disproving existing ideas using Data Analytics, a data driven way of working is stimulated across all layers of the organisation. It is important to enable your leaders, often from a strong managerial or financial background, to get a basic understanding of data, technology, statistics, and analytics. So that they can enable analytics leaders and analytics teams in the organisation. And steer on quantifiable metrics and customer focus.

Robbert Bakker: When we talk about speaking the same language within Aegon, I don't only mean our analysts from different disciplines. I also mean that the entire rest of the company should do so. Our marketing and sales people should know what a (machine learning) model is. And how to use it as input for their decisions. They need to understand some of these basics so that they can ask the right questions. Same goes for our executives. We actually trained all our Management Teams in the

Netherlands in Data Analytics. And had them build a simple model so that they would really understand. And we trained our entire Marketing & Business Development team (of >60 people) in a multi-day program on the basics of Data Analytics. So that they learn how to ask the right questions. Which makes the excitement and understanding around analytics something that's happening in the entire company. It's not just a data scientist party anymore.

So. In order to give meaning to the seas of data in your global organisation, focus on the (wo) man, not the machine. Everyone potentially has access to the same machines, but not to the same people. It is those people that will make the difference. They must learn to create impact with the machine. In all layers of the organisation. And across continents. And when you have all the parts of your organisational supercar tuned to perfection, not only will its' performance be outstanding, it will be great fun to drive as well.

Robbert: And that's what I'm most proud of: that we are turning from an opinion based company into a fact based company. Making it possible to make decisions on a much lower level in the organisation. Which is how it needs to be in this digital age. And at the same time, I think we are only at 10% of where we should be! So we will keep on building.

Sources

1. Research McKinsey & Company, may 2016
2. Annual report 2015 Aegon
3. The Talent Dividend, S. Ramsbotham et al, MIT, april 2015