mgminsights

Innovation Implemented.

Efficient digitisation of industrial insurance

Digitise portfolios and processes quickly and efficiently with low code: Distribution, underwriting, inventory management, claims

Imprint

Author: Alexander Stolte

mgm technology partners GmbH
Frankfurter Ring 105a
80807 Munich
Phone +49 89 / 358 680-0

www.mgm-tp.com

Content

1. Introduction

Many industrial insurers are facing major challenges: "There is no easing of the market situation in sight. Even though the earnings situation of insurers improved last year, the pressure to implement portfolio improvement measures will continue". [1] In addition, many insurers are having problems covering their costs with premiums: "Even though the GDV's projection[2] for 2019 predicts a combined ratio of 98% and thus represents an improvement in results, not all insurers are profitable". [3]

There are several reasons for the tense earnings situation, three of which are important:

- Complex, paper-based processes from the "old days" that slow down communication and data exchange between customers, brokers and insurers - especially in the area of risk assessment and evaluation.
- IT systems that are difficult to adapt and lack technical standards. "It is "incomprehensible and unacceptable", according to the head of the General Association of the Insurance Industry (GVNW) Alexander Mahnke, "that on the part of industrial insurers, common standards for technical communication have still not been established. [4]
- Lack of ideas on how products and processes can be translated into the 21st century. Although digitisation could optimise processes and reduce costs, many industrial insurers are hesitant: "Nevertheless, more than 40% of insurers have not implemented any digitisation initiatives in 2019, or have done so only insufficiently from their point of view, and are thus giving away a lot of potential with regard to new business models, distribution channels or ways of working". [5]

Digitisation is therefore urgently needed in the industry. The levers for future business success are efficiency in internal administrative processes and improved risk selection. These should be introduced and implemented in the 21st century on the basis of a digital end-to-end value chain. Companies therefore need a platform with which they can quickly create digital applications and insurance products.

Low Code Development offers a suitable solution for this. With such a development platform, even non-developers (so-called Citizen Developers) in the business departments are able to put together products, processes and user interfaces. Since no new program code is written, the error rate during digitisation is reduced - quality and speed are improved.

[1] Willis Towers Watson: industrial insurance.
[2] General Association of the German Insurance Industry
[3] Willis Towers Watson: industrial insurance
[4] Kaspar, Alexander: Industrial insurance faces multipolar challenges.
[5] EY Innovalue: More than 40% of insurers give away opportunities through digitisation initiatives

In an end-to-end digitalised world, underwriters can focus on the truly complex processes and challenges and brokers can invest more time in the advice that is important for a customised offer. Insurers, brokers and clients benefit equally.

Detailed information on Low Code and the possible applications

Crisp-Research-Study in cooperation with mgm: Low Code Development - Recommendations for planning and deployment.

At: https://a12.mgm-tp.com/index_en.html#insights

2. Low code development as a solution for industrial insurers and brokers

In many companies and across many industries, business and IT decision-makers are discussing the use of low code to accelerate application development time. This is because the concept brings - among other detailed changes - the abandonment of classic, usually time-consuming software development processes and the strict separation between the specialist department and development.

But what is Low Code actually? Put simply, low code applications are development platforms that use visually supported development tools and graphic modelling methods instead of written code. This means: By means of a graphical user interface, the users (Citizen Developer) can put together correspondingly prefabricated modules and elements as they need them. This applies not only to the initial digitalisation in a company, but also and above all to changes and updates to risk issues, dependencies and coverage models, as well as to completely new product ideas. Instead of going a long way through the IT development, a trained employee can model these cases and implement them completely or in large parts on his or her own. Moreover, applications and modules that have already been programmed and are used again and again do not have to be developed anew each time.

Example Use Case:
An industrial insurer wants to launch a new insurance product. The starting point is usually a risk questionnaire and a data model derived from it. Thanks to low code and an existing set of data models, a implementation-ready first version of the digitalised product can be developed quickly. With this fail-fast method, insurers can immediately see whether the idea is viable and whether a particular product is worthwhile for them. If the idea is less promising, costs are kept within reasonable limits - the ideal solution for making underwriting processes more efficient. In addition, a new product is directly part of the internal processes if it is developed on an integrated low-code platform.

How successful low code can be in the future was analyzed by the consulting firm Gartner: "By 2024, three-quarters of large enterprises will be using at least four low-code development tools for both IT application development and citizen development initiatives. By 2024, low-code application development will be responsible for more than 65 % of application development activity." [6]

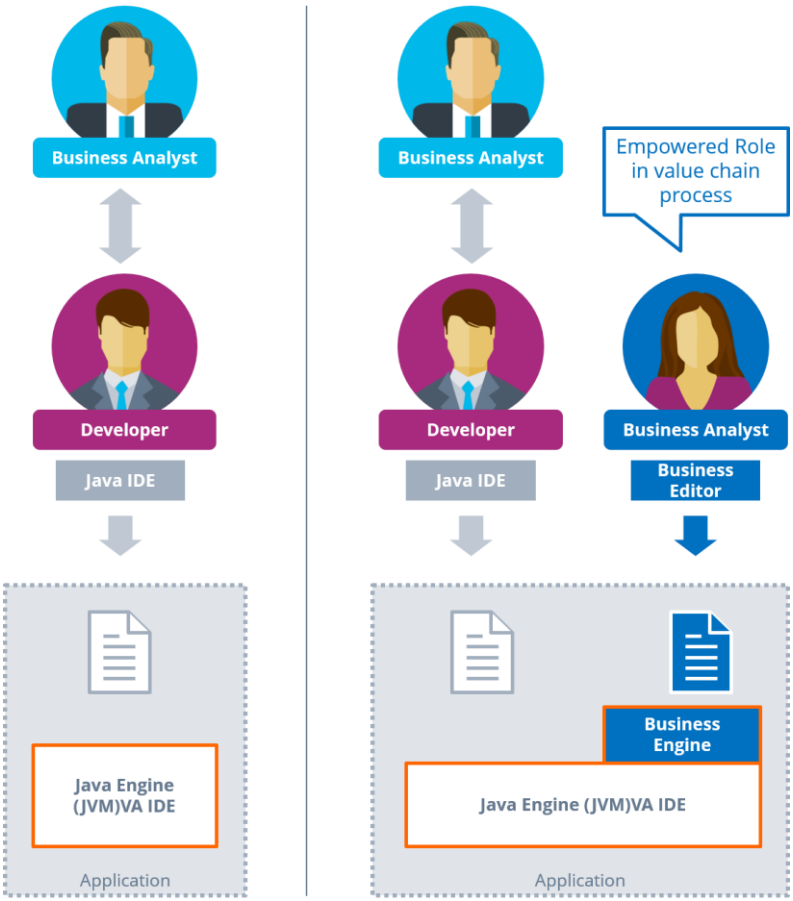
[6] Gartner: Magic Quadrant for Enterprise Low Code Application Platforms.

The advantages of Low Code:

- get faster to the final application
- less programming effort
- more flexibility in applications and insurance products
- Cost savings in programming and work processes
- Low-code users can be quickly trained
- no technical difference between "prototype" and implementation-ready software
- Applications can be changed flexibly at any time

Low Code is not equal to Low Code

Although many low-code platforms can map simple processes, they fail due to complex applications and their integration into heterogeneous IT landscapes. For this reason, custom development is often necessary, for example to program interfaces and to connect systems with each other. Especially in the enterprise this means: Low code and classic code must grow together in order to realise complex applications quickly and securely.



On the left, the classic role distribution is shown, on the right the role distribution of the model-based approach. In addition to the developer, the business analyst independently helps to design parts of the application.

3. Digitise industrial insurance more efficiently - with low code

What would happen if underwriters or brokers no longer exchanged data manually by e-mail and telephone, but instead communicated digitally end-to-end - with the help of self-designed digital products and processes? The role of underwriters and brokers would change fundamentally - they would directly implement the market requirements of their partners and customers in digital form and actively participate in shaping digitalisation.

Even if these promises still sound like dreams of the future, they can already be realised to a large extent today. Only the first step needs to be taken.

From clauses and conditions to a technical product framework
Industrial insurance products consist of various components such as coverage model, risk questionnaire, tariff and premium model as well as various documents (offer, policy, terms and conditions, etc.). In general, the task is to identify and analyse the core components of each product and to bring them together in a technical product framework. In detail, a digital product includes a corresponding data model, but also the meaningful order of fields in online forms. Important in this context is always a look at the needs of brokers, insurers and customers.

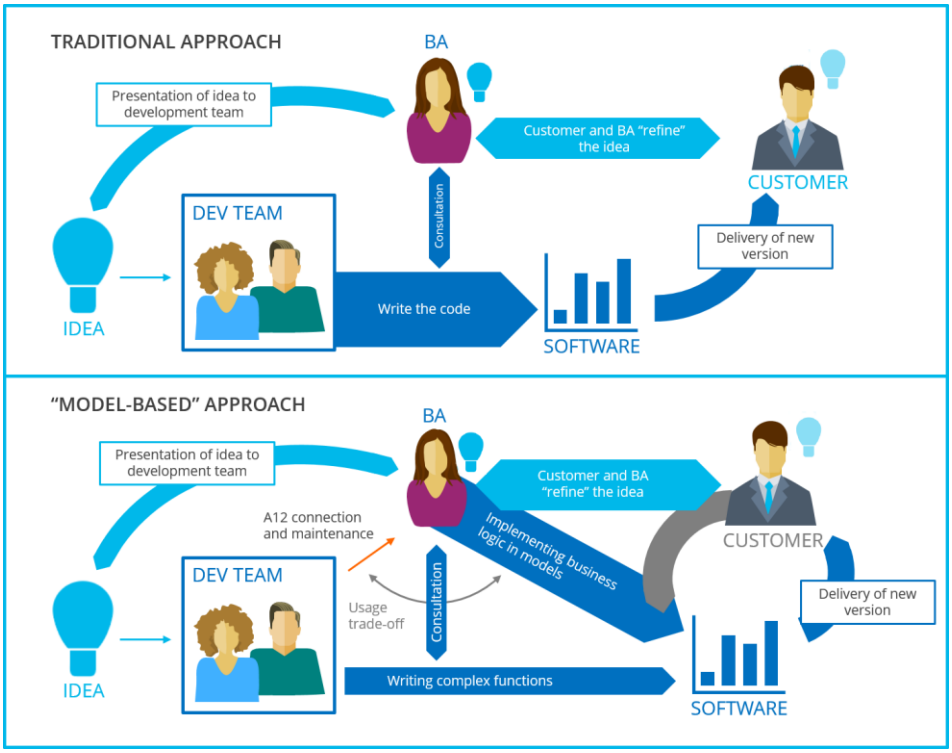
So digitisation means above all the structuring of the components: Products and processes that are traditionally handled rather individually must be translated into structures and regulations - including a clearly defined individual degree of flexibility, which is absolutely essential especially in the industrial insurance sector.

These standards are crucial for the automated execution of processes. There must be certain rules according to which the system makes content and process decisions. Example: If the equity ratio of a D&O insurance policy is too low, many insurers automatically suspend insolvency above a certain limit. It is precisely such clearly defined limits, above which a clause is automatically added, that can be very well mapped in the IT systems.

Important despite standardisation: individual flexibility
For standardisation, the implementers in project teams must ask themselves not only the relevant individual questions, but also questions about the rules. Experts at insurers and brokers have a wealth of experience accumulated over years and decades and a comprehensive knowledge of all conceivable insurance cases. This knowledge needs to be transferred into structures that can be mapped in software. A good starting point, for example, is to look at parallels between cases and to define boundaries.

For the industrial and commercial insurance sector, the process requires a complex re-thinking process. Previously, underwriters looked at each case individually and assessed risks manually through experience and with gut feeling. Therefore, the business experts should be significantly involved in the entire digitisation process. On the side of insurers, it should also be clear where the sales partners deliberately leave room for customer-specific risk situations.

An important requirement is also to be able to produce the products in a reasonable time frame. Six months and more is not an option. A new product should take a maximum of two to three months and a variant of the product, for example for a sales partner, no longer than a few days or weeks. This is possible with a consistently implemented platform model: from simple products and local coverages to multinational solutions. In addition, there is a higher product quality, real-time services and the possibility to quickly enter new business models.



The difference is not great formally - but it is decisive in the process: with the model-based approach, the dev team no longer writes 100 percent of the code, but the work of the business analysts and specialist departments becomes more important. They play a decisive role in shaping the software through models and low code.

Using a low-code platform, large parts of these process steps and the necessary components can be transferred into digital product models - which can be initially and continuously designed by the department itself.

Establishing digital processes with low code

After pre-structuring and clear definition of the required components, the implementation can be started directly with a low-code platform: With the help of graphical tools, the business expert can visualise the data structures of the depicted entities such as contracts or products as workflows. The tool's user interface is structured in such a way that the user selects the required modules on the screen and links them together. Further design tools are then available for layout design and responsive design. With the help of various tools, the business department can model data models, rules, interfaces and document templates - often with the support of business analysts in the beginning.

The special feature here is that the business expert works in a productive underwriting application from the outset, making the results immediately visible. This application must be dynamic and easy to adapt: In the event of change requests from line managers, partners or colleagues, these can be implemented directly in the application.

Low Code + X

Due to the heterogeneous IT landscapes of industrial insurers, it is not easy to integrate new processes and technologies. The connection to portfolio management systems, broker management platforms or other applications usually requires custom implementation efforts. The low-code platform should support the seamless integration of custom software development (for example in Java), so that specialist departments and developers can work together in a professionally managed software development process.

In this context, planning and resource allocation should optimally support the characteristics of the target system or systems:

- In the case of standard products, the focus is on the automation of distribution. Underwriters and brokers appreciate that they are relieved of repetitive standard tasks and have more time for complex cases and/or good customers.
- Other projects deal with the digitalisation of complex products. Here too there is potential for automation, but the focus is usually on the accompanying topics. For example, the system supports document generation and premium booking (including modular accounting).

In the future, however, it will be possible to increasingly use automated processes even for complex risks. For example, complex risk assessments can already be automated by scoring. Big data solutions provide the basis for this. The limit of what is feasible is thus increasingly shifting towards more complex risks.

All in all, insurers, brokers and other industry players need to develop the new capability of "digital product development".

4. Basics for getting started

In order to digitise products with low code, it is generally advisable to start with the modelling of the new business process. The existing processes based on this can then be supplemented accordingly. It should also be ensured that users are already familiar with the low-code platform and have not just started working with it recently.

New digital products or processes always first arouse scepticism in the company and among employees. For this reason, the start of digitisation of insurance products and processes should not be sudden and unprepared.

Ten basics:

1. **Communicate and inform**
   Talk to your technical experts and colleagues who will later be responsible for the low-code project. Clarify and show the benefits. This is a change process that must pick up and accompany all employees and partners.

2. **Strategy decision**
   Of course, the goal must be clear: should products above all be simplified and distributed automatically for a large target group (dark processing)? Or is it about reducing operating costs in the high-value industrial segment and optimising complex communication processes such as renewal or claims handling?

3. **Identify needs**
   First of all, fundamental questions must be clarified: For which products in the portfolio is digitisation even worthwhile? Are there appropriate distribution channels? And which new product ideas are already available? Insurance products should only be selected after a detailed stocktaking and evaluation.

4. **Environment and accessories**
   Even a digital insurance product and a digital inventory management system require human-readable representations. In other words: Which sets of conditions, additional clauses, policies, applications, offers or premium invoices are required? In which layout are these handed out to the customer, partner or broker?

5. **Start small**
   Start with a small application and gain important insights during the development process. Only when all processes are working optimally and are coordinated can you turn to larger projects.

6. **Define framework**
   Provide your experts with a framework. This should include tools, guidelines and training for low coding.

7. **Courage to accept gaps**
   Analysis and calculation for each individual product: what insurance risks can be taken to enable a simple low-code solution? So which provisions of the analogue terms and conditions can be dropped in favour of structuring and standardisation? A 1:1 copy from analogue to digital is rarely possible.

8. **Teach, teach, teach**
   Since low-code technology is still quite new, few people are familiar with it. Therefore, you should appoint coaches from the very beginning who can teach your employees everything important.

9. **Using agile methods**
   Nowadays, agile methods such as Scrum or Kanban are used in IT development. For the new low-code users this is mostly still new territory. Therefore it is important to introduce them to these working methods.

10. **Start early**
    Parallel to the ongoing digitisation process, digital "translations" should already be considered when defining new sets of conditions. This will make future work more efficient.

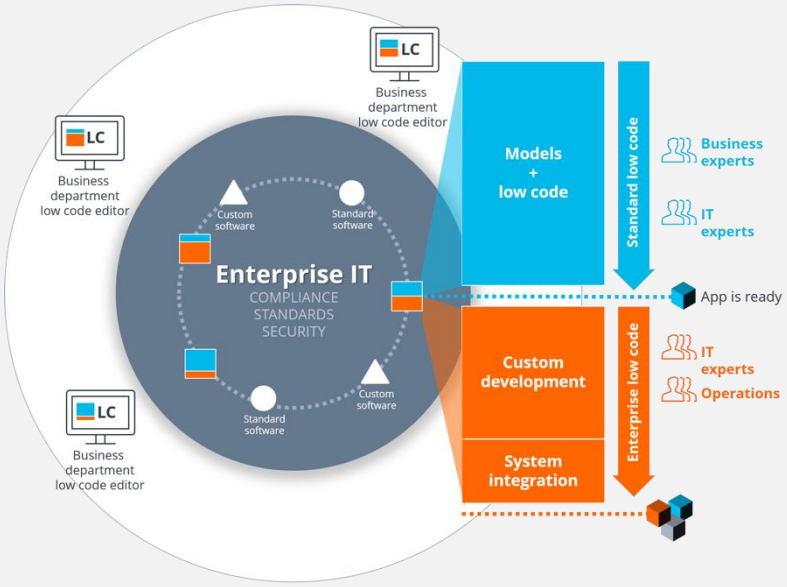
5. Example: Low-code development with mgm A12 and Cosmo

The digitalisation of insurance products poses special challenges. Using the example of the low-code platform mgm A12 and the insurance platform mgm Cosmo based on it, it is easy to see how such a low-code solution for industrial insurers could look like.

What is mgm A12?
mgm A12 is an enterprise low code platform for the development, integration, maintenance and operation of enterprise applications in complex IT environments such as the insurance industry. The underlying A12 Business Application Platform (BAP) consists of a number of client- and server-side components in a modern enterprise architecture, modelling tools and the Plasma Design System.

The special feature of mgm A12 is that it combines the low-code approach with professional custom software development and system integration. Especially for business critical applications a big challenge arises: they have to be integrated into a heterogeneous IT landscape. Although most low-code platforms offer ready-made solutions for simple integration scenarios, they come up against limits for custom developments and professionally managed system integration.

The focus of mgm A12 is not on easily clickable apps for short-term use. mgm A12 develops applications in industrial insurance to fully integrated, business critical enterprise applications. Besides a flexible application platform with a wide range of modelling tools, mgm A12 uses a mature methodology and a cross-project co-innovation approach.



Enterprise Low Code Development
If the business department can design applications itself with the appropriate low code tools and at the same time the IT can secure technology and standards centrally, truly valuable business applications are created. Depending on the project, the low code share can be individually weighted. The aim is for the business department and IT experts to work together effectively.

Co-Innovation refers to a cooperation model in which several partners work together on new solutions. For this reason the mgm internal A12 community was founded, which consists of a core team and many other project teams. Together they work on new innovative solutions based on A12.

Reduction of high development costs
The goal of mgm A12 in all industries: to build robust, secure and long-lasting enterprise software quickly and economically. Behind this is the demand of experienced software engineers to reduce the high development efforts. mgm A12 uses a number of different models, which focus on the different challenges of companies: Data models describe for example the basic structure of business entities, application models define the structure of the application, UI models the structure of components like forms. These model-driven abstractions in particular make it possible to separate business and technical aspects. This in turn is the basis for the fact that business experts only develop and adapt models, but no code has to be written manually.

A big advantage: There are no classic prototypes that are supposed to give a first feeling for the application as pure mockups and are not usable afterwards. Instead, the first data and UI models and workflows are created that are directly executed in a real application.

What is mgm Cosmo?
The insurance platform mgm Cosmo is based on the low code solution mgm A12. It is an open platform, which is specially designed to meet the requirements of brokers and industrial insurers. Here industrial insurers and brokers can build digital products and product worlds, including underwriting, coverage and claims models, independently and easily. Product-specific processes are also mapped on the platform.

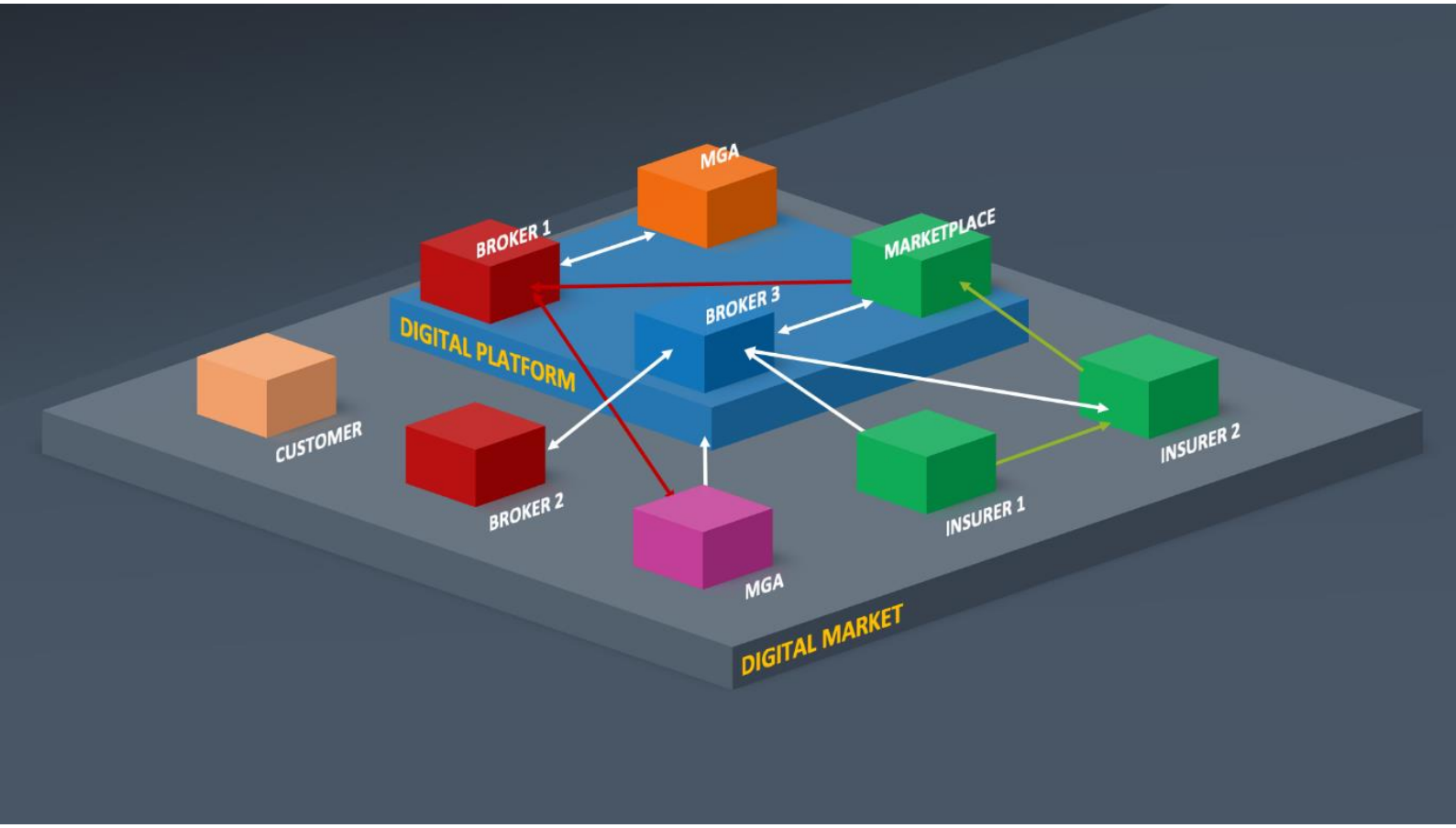
mgm Cosmo is based on four modules, which were designed for special business areas and applications:

- **Cosmo Underwriting:** the solution for industrial insurers, MGAs and brokers maps the initiation process and portfolios and supports the portfolio management.
- **Cosmo Digital Point of Sale:** the personalised portal for sales partners supports digital collaboration and makes the product available to external partners.
- **Cosmo Product Definition:** allows the administration of clauses and conditions for the products and thus supports the configuration of the offer, contract and supplementary documents.
- **Cosmo Claims:** Management and processing of claims for benefit entitlement, which are directed towards the portfolio.

Once key business processes are digitalised end-to-end, insurers and brokers can benefit from automated processes such as underwriting and risk assessment, and shared access to business data between partners.

The advantages of mgm Cosmo:

- less development effort
- faster to time-to-market
- decreased costs thanks to accelarated business processes
- more efficiency in portfolio management
- less administration, more time for individual insurance products
- more flexibility in insurance products
- Business experts can easily and directly customise applications
- full traceability of technical changes
- Mockups and prototypes can be developed into applications
- better cooperation and cross-project knowledge transfer



You have questions about mgm A12 and mgm Cosmo?

We would be happy to provide you with further information and advise you on digitisation issues. Simply send us an e-mail to: insurance@mgm-tp.com

6. Conclusion

Industrial insurers and brokers are constantly facing new challenges due to cost and margin pressure, cumbersome IT systems and customers who want fast and user-oriented insurance products.

Industrial insurers and brokers have recognised, at the latest through digitalisation, that the paper-based and analogue processes in the insurance sector are slowing down business processes and robbing them of the flexibility they so urgently need. The days when customers accepted that it took weeks to receive an offer for an insurance enquiry are over. Only when time-consuming products and processes are digitalised and automated will insurers and brokers be able to respond quickly and appropriately to customer requests.

As in many other industries, legacy systems and complex IT infrastructures are sometimes the biggest challenges. However, a modernisation of these structures cannot be realised so quickly. Even new solutions such as low code cannot be integrated so easily due to the heterogeneous IT environment and require custom development to network the systems with each other. Custom software development and professional system integration are unavoidable in order to connect these different worlds.

For this reason, companies are not only looking for a process optimisation and modernisation solution, but above all they need a solution that knows how to deal with old structures and can be integrated into even the most complex IT systems. With the low code solution mgm A12 and mgm Cosmo exactly this is possible.

mgm Cosmo, which specialises in the requirements of industrial insurers and brokers, offers the flexibility and speed of a low-code platform and integrates it into the most complex IT infrastructures. Thus, insurers can already benefit from the low-code advantages while still using legacy systems.

A great advantage of this solution is also that there is no hard break between the systems - the transitions are fluid. In this way, insurers can successively optimise and modernise their infrastructures.

7. References

EY Innovalue: More than 40% of insurers give away opportunities through digitisation initiatives At: https://www.innovalue.de/presse/200114_PM_VielLuftNachObenBeiNeuenGesch%C3%A4ftsmodellen.php [Status: January 2020]

Gartner: Magic Quadrant for Enterprise Low Code Application Platforms. Unter: https://www.gartner.com/en/documents/3956079/magic-quadrant-for-enterprise-low-code-application-platf [Stand: 08.08.2019]

Kaspar, Alexander: Industrial insurance faces multipolar challenges. At: https://versicherungswirtschaft-heute.de/maerkte-und-vertrieb/2019-09-06/industrieversicherung-vor-multipolaren-herausforderungen [Status: 06.09.2020]

Willis Towers Watson: industrial insurance. MARKET SPOT 2020. under: https://www.willistowerswatson.com/de-DE/Insights/2020/06/marktspot-2020-die-aktuelle-situation-im-versicherungsmarkt [Status: 25.08.2020]

8. Contact

Alexander Stolte
Market Performance Team

E-mail:
insurance@mgm-tp.comWeb: insurance.mgm-tp.com

mgm technology partners GmbH
Frankfurter Ring 105a
80807 Munich
el. +49 89 358 680-0
fax +49 89 358 680-288

mgm technology partners
www.mgm-tp.com

mgm consulting partners
www.mgm-cp.com

mgm security partners
www.mgm-sp.com