OLIVER WYMAN

90% OF AN ICEBERG IS UNDERWATER

FOR BREAKTHROUGH CUSTOMER EXPERIENCE, START WITH BACK-END SIMPLIFICATION

90% OF AN ICEBERG IS UNDERWATER FOR BREAKTHROUGH CUSTOMER EXPERIENCE, START WITH BACK-END SIMPLIFICATION

New digital players have set the bar very high as far as customer experience is concerned – communications operators eye their success with envy and dream of becoming the "Uber of telecommunications"

The spotlight often shines on companies that offer an intuitive and simple customer experience. Quite often these stars come from the digital world where one can define the customer experience and supporting back-office processes from a blank sheet of paper. Netflix, Amazon, Uber, to name only a few, have raised the bar and defined consumers' current expectations of experience.

Traditional communications operators and media distributors, encumbered by their legacy product portfolios, processes, systems, and cultures, have a hard time competing with these new players, and eye their success with envy. They know they need to improve their customer experience and simplify their operating model, but often do not know exactly what this means, nor how to do it. Customers naturally wonder "Why can't you be as easy as they are?". They may only see the "tip of the iceberg" that is visible to them, with no clue of – and little interest in – the massive infrastructure at work behind the scenes. This reminds one of a beautiful Swiss watch: a consumer sees the beautiful handcrafted face, bezel, and strap and is drawn to the elegant simplicity, but do not see the 10,000 cogs and highly complex interlinked mechanisms turning inside that deliver the flawless performance.

Exhibit 1: Behind a wonderful customer experience, there is always a great backstory

A delightful experience is built through the backstory
What is the backstory? It's the 10,000 moving parts that make the experience complete

Magnetic offer
Handmade Swiss Watch

Backstory
10,000 Moving Parts

Operators are stuck with a complex legacy back-end – this costs them hundreds of millions of dollars, euros, etc. in terms of inefficiency or customer impact, but they hesitate, or are unable to approach the problem structurally

An operator's back-end is often the result of many years of multiple M&A integrations, which brought together disparate "spaghetti" systems, incongruent processes, legacy cultures, etc., and of "best effort" scaling to market growth and demand. But complexity is simply no longer sustainable for operators: it is costing hundreds of millions of euros, dollars, etc. and is preventing them from serving customers on time and from meeting today's expectations of quality and service.

Most operators are very aware of this. But they are often anxious about starting a full simplification effort, frightened by the magnitude of the task. The painful and expensive examples of "Big Bang IT transformations gone wrong" are on everyone's minds. And often it's very unclear exactly where to start. Should this be initiated as an IT transformation? End-to-end processes streamlining? Product portfolio rationalization? The easy way out has unfortunately often been to postpone the decision and to kick the can down the road.

Operators too often think that better customer experience and simplification can be achieved by focusing mostly on the front-end – by just decreasing the number of products – typically with disappointing results

In many cases we've seen, operators have launched siloed attempts that just scratch the surface, or customer experience programs that ignore the "factory," or the submerged part of the iceberg, and attempt to apply a patch solution on fundamentally flawed processes and systems.

For example many companies start their simplification programs by reducing the scope of their offer portfolio and hoping then to automatically reduce back-end complexity, time and cost, and/or bolt on new sexy solutions for the front-end (launching fancy web sites, digital initiatives, brand and visual systems, marketing messages and materials, etc.).

But now, after years of frustrating attempts at trying to decrease the number of products and customer options without streamlining corresponding processes, business rules and IT systems, operators increasingly understand that this approach is insufficient. There is a growing awareness that "if you want to have an attractive front-end, you need to start working on your back-end".

Simplification is too often misunderstood by operators: this is not about decreasing the richness of the marketing offer – to the contrary, this is about enabling even stronger value propositions

Simplification is often based on a fundamental misunderstanding: simplification is not about decreasing the richness of the marketing offer and compromising on the value proposition to the end-customer: the Henry Ford Model T car, offered "in any color as long as it is black".

On the contrary, simplification is an enabler of richer and more flexible value propositions that today's technology make possible. Who knows what the killer application or desired product/service bundle will be in 12–24 months? In a world of rising uncertainty, flexibility has become the cornerstone of success. Just think about a "Connected Home" value proposition today versus the basic home phone product of 15 years ago: there is internet access; with different speed and service tiers; a modem, wi-fi router, and/or home gateway, a STB, various displays, DVR capabilities; home security applications; thermostats, speaker systems, sensors, cameras, appliances… and often a phone too!

The aspiration is not to reduce this richness down to one basic, average offer but rather to deliver a segmented, seemingly bespoke offer to each customer at the best cost for the operator: make it simple, intuitive, high quality, solve customers' hassles during the registration process and provide a wonderful service throughout their tenure.
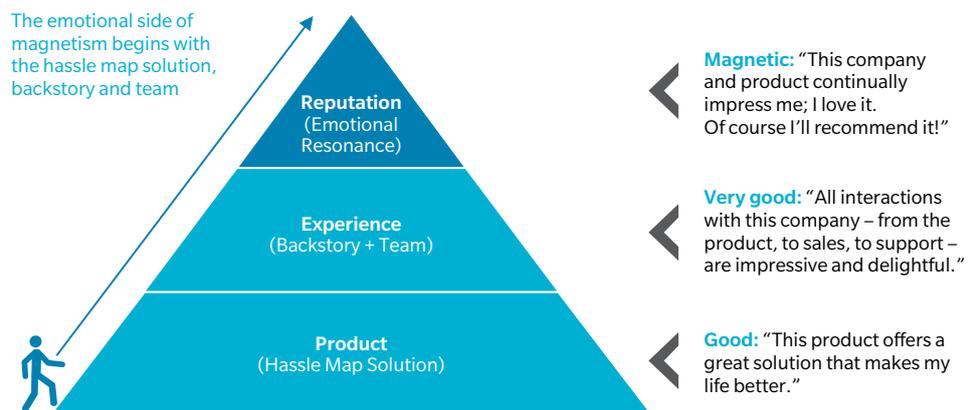
In the end, the objective of simplification is to make interactions as simple and reliable as possible to empower the customer: the user can configure their own offer by themselves and access the company's systems via easy-to-use and light front-ends. The back-end provides modular "LEGO-like" options that the customer can use to build and customize their own experience, like many digital leaders already do.

Real simplification requires the approach to be reversed from conventional wisdom: instead of starting from the front, start from the back

After years of experience with simplification programs, we are convinced that operators need to make a fundamental switch, putting the back-end under the spotlight to start their simplification program there, rather than starting with the "tip of the iceberg"; defining an aspirational front-end which only scratches the surface and is unlikely to be compatible with the legacy back-end.

Exhibit 2: Below the tip of the iceberg – start working by simplifying the back-end

The emotional side of magnetic starts with a "delightful functional experience" supported by a Backstory, and Hassle Map resolution

The emotional side of magnetism begins with the hassle map solution, backstory and team

Reputation
(Emotional Resonance)

Experience
(Backstory + Team)

Product
(Hassle Map Solution)

Magnetic: "This company and product continually impress me; I love it. Of course I'll recommend it!"

Very good: "All interactions with this company – from the product, to sales, to support – are impressive and delightful."

Good: "This product offers a great solution that makes my life better."

The most inspirational examples are found in other sectors, such as digital, transportation, banks, consumer electronics, and so on. Before promising wonders to customers and hoping to create a magnetic or emotional link with them, best practice companies have worked very hard to build solid delivery capabilities and a strong back-end to ensure delivery on that promise.

Outside the communications and media distribution sectors, inspiring best practice companies have built very strong back-end capabilities – however, they are better known for the front-end customer experience than for what's "below the water"

Take Uber, for example. Great promise: Uber moves you, connects you with a driver at the tap of a button, makes it easy and affordable to take care of everyday hassles, allows you to be the Boss. But what happens behind the scenes? A powerful IT system integrating the customer database, allowing permanent geo-localisation of clients and drivers, a "seamless transaction" model, flexible pricing models and promotion management including price estimates, proactive fleet management services, driver validation and monitoring, and the list goes on.

Look at Volkswagen: another great promise of even more choice, rather than a simpler product portfolio. Within each brand one can customize one's car online – choose the model, the engine, the colour, the options; one could configure hundreds of different cars to suit. But in the background, all this is enabled by a transformational modular toolkit strategy, as most components are shared between vehicles, and across regions (architecture, concepts, components, modules, interfaces, norms, platforms, etc.); part of this is enabled by the reduction of production line complexity and assembly process (integration of sub-elements, pre-build, assembly units, etc.), as modularity of the design is also facilitating the modularity of the assembly process.

In the postal sector, UPS became a global leader thanks to major back-office innovations. Increased usage of telemetric sensor and barcode technology, better knowledge of business clients and transported products have increased both efficiency and customer satisfaction. Regular sizeable but carefully focused IT investments have guaranteed optimal processing routes and ensured rapid transition in switching hubs.

Last, but certainly not least, Jeff Bezos built Amazon on a simple but compelling customer promise: "A large selection of premium products at non-premium prices, with same day delivery." This customer promise could only be delivered through robust back-end web services infrastructure coupled with intelligent data mining services and an exceptional logistics system.

Some communications operators and media distributors are also, by nature, very simple, considering both their front-end and back-end. Some of them for example have only two mobile offers with most sales achieved online with very low IT spend. These operators have made this strategic choice upfront, allowing them to launch "greenfield" offers and systems. However, only a few "non-greenfield" telecommunications operators have been successful so far in rationalizing their factories and building great back-ends. We can draw some lessons from these successful cases, as well as the many pitfalls that others have stumbled into. Below we list 7 lessons that we feel are relevant for operators who are struggling with the simplification challenge.

First lesson learned: Define and articulate a business vision around a short list of "strategic cornerstones" that will impact the back-end's future state

Nobody can know how the market will evolve, or what new products and services technology will need to enable in 2 years. Nevertheless, engaging in a simplification transformation without a vision or a target is like crossing the Atlantic Ocean without a compass.

While achieving even 80% of this target is unlikely, we see it as critical to building alignment between the business and the back-end entities as to the strategic business activities that will need to be enabled. In our experience, this boils down to not more than 30 "cornerstones", representing structural elements and functionalities that will be needed to enable future products, multi-channel customer experience, pricing, retention model, etc. To be very concrete, successful operators typically set as strategic cornerstones elements such as:

- **Offer:** flexibility to price the service according to several tiers/dimensions (speed, quality of service, volume consumed, etc.); flexibility to offer converged pricing between fixed and mobile; possibility of offering "trial" solutions to non-customers, bundles with OTT offers, etc.

- **Customer Model:** ability to handle different types of groups (households, temporary groups, contextual groups, etc.); ability to handle customers who do not have access lines, SIMs, etc.

- **Customer Experience:** willingness to offer the same layout through all channels, or a differentiated one for certain channels; a similar front-end for vendors and customers, or different one; flexibility to handle a "basket of goods" seamlessly between channels, or not.

- **Retention Strategy:** necessity to manage individual loyalty points, in real time, on all channels; or also manage loyalty schemes for a group of services and contracts; possibility of focusing on end-customers only, or also reward partners?

These cornerstones should then be translated into a functional, application and technical target architecture, and a roadmap defined to get to this target.

Second lesson learned: Decouple the "marketing view" from the "factory view" and develop modular product structures and platform functionalities

At most operators, additions of layers of legacy products, policies, and eligibility rules have led to an explosion of "Frankenstein offers", each tariff or specific condition granted to a customer becomes a formal product in itself, with its own process, associated service, etc.

Best practice operators have first organised their back-end with modular product structures and central product catalogs, focusing on reusing basic building blocks to assemble offers. This dream of "product catalogs" is of course not new, and many IT vendors may have over-promised on this, with off-the-shelf solutions that were not clear-cut catalogs of basic components, but concepts mixing different components and functions together. Adopting modular product catalogs is not about deploying an off-the-shelf software solution, but much more about defining carefully what a product is, and decoupling it from other back- or front-end functionalities.
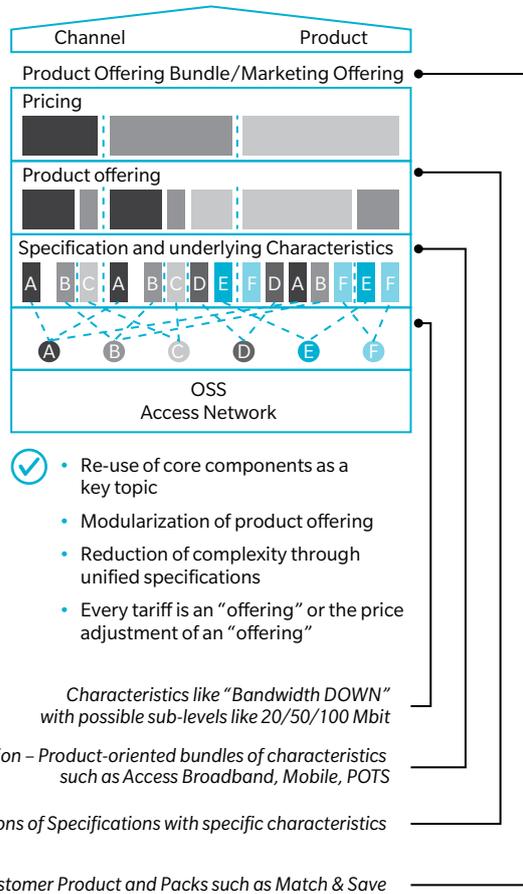
Exhibit 3: Switch to modular product structures

Modularize the product portfolio

Starting point for product simplification and modularization

"Product house" – Modularization of products
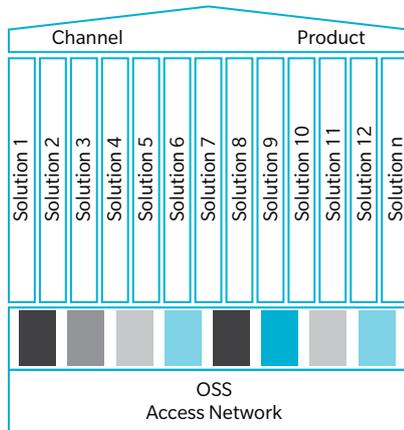
- ⚠ • Today: "every tariff is an end-to-end product"
  - Limited re-use of components
  - High complexity/time-to-market!

- ✓ • Re-use of core components as a key topic
  - Modularization of product offering
  - Reduction of complexity through unified specifications
  - Every tariff is an "offering" or the price adjustment of an "offering"

Characteristics like "Bandwidth DOWN" with possible sub-levels like 20/50/100 Mbit

Specification – Product-oriented bundles of characteristics such as Access Broadband, Mobile, POTS

Products – Combinations of Specifications with specific characteristics

Customer Product and Packs such as Match & Save

Having completed this critical first step, defining clearly what a product is, successful operators align their organizations to better reflect the separation between the marketing layer and the back-end layer.

For example, for one US converged operator, back-end teams have been organized around product and platform teams: products being the final element the customer will experience, and platforms being the functionalities that are "picked up" and assembled to make products. For example, a wireless IP STB is a product; and DVR, or VOD, or Metadata are platforms that are consumed by products.

Third lesson learned: Define clearly what a customer is, and what the client model is

In a context where customers are, more and more, buying multiple services, the necessity of considering the customer as a whole, taking into account their different contexts (household, family, group, etc.), is more and more important. But this is far from simple, given that inherited models are very different between contexts (e.g. home address for fixed line, addressing one household, but SIM card for the mobile perhaps with a different billing address, addressing an individual).

Notwithstanding the product structure, a clean customer model is a must, clearly formalizing interactions between parties (individual line, user, payer, operator, etc.) and roles of the parties. Mapping a household to a customer model requires more than just a few data fields. It requires very clear rules regarding the rights of each party, which can become very complex in a world of multiple usages in multiple places where some usage is shared between parties and others must remain personal and individual. This is hugely complex and sensitive, requiring careful modelling to allow flexibility (associating lines into and out of families, parent approval for kid's data package extension requests, etc.).

Fourth lesson learned: Processes streamlining and business rules alignment to be done in parallel with IT enablement

A major source of complexity is usually the explosion in the number of business rules (for example, the way the offer is presented to customers on various channels), which differ across products, regions, channels, customer segments, etc. Before even considering potential IT projects, unification of business rules and streamlining of major processes is essential.
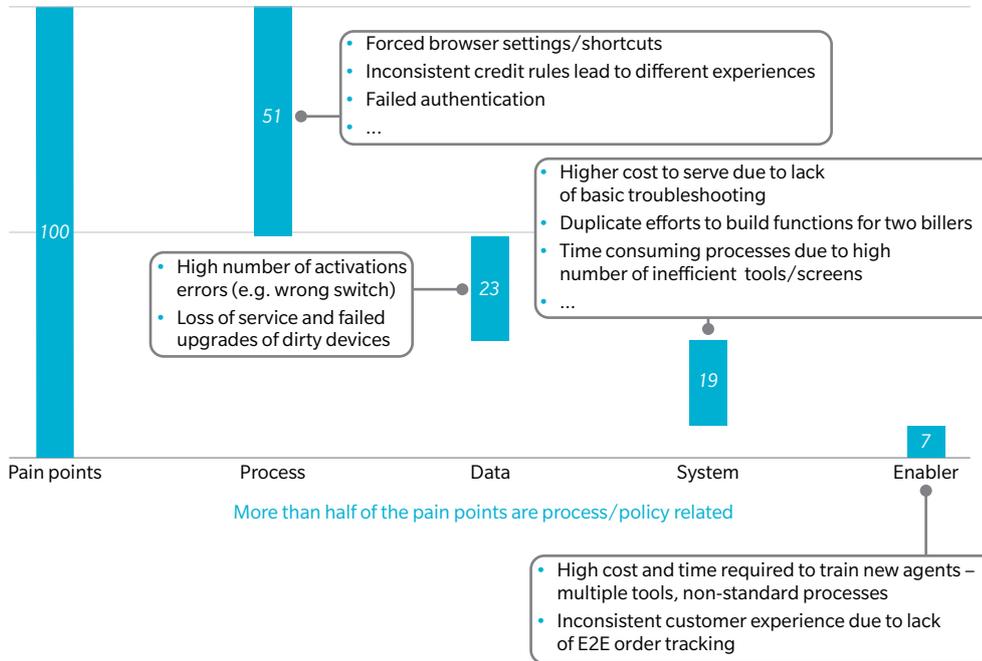
For example, contrary to initial intuition for one North American Cable MSO, 70% of dysfunction root causes were due to process and business rules issues and only 30% to IT system issues. To cite a few of these examples: lack of well-defined and communicated customer eligibility check process; redundancies in activation sub-steps; inconsistent access and management of offers across channels; inconsistent order policies across channels. Also, process inefficiency was often attributable to poor compliance by employees and insufficient training; re-investing in an expensive and time-consuming Next Generation IT system without having first addressed these policy and process issues would have been a mistake.

The same situation was evident in one European converged telco operator's Sales to Activation process: after a detailed root causes analysis, it became clear that working on streamlining key overarching processes would solve a good proportion of issues: standardizing the selling process, optimizing feasibility checks in early process stages, improving scheduling and coordination (including work force management), building automated end-to-end Sales to Activation tracking, improving exception handling, establishing active customer communication, and so on. This simplification of processes was done in parallel with the product portfolio modularization and IT architecture simplification.

System issues are finally "only" 20% of the problem

Pain point volume break down
%, by focus area, examples only

- Forced browser settings/shortcuts
- Inconsistent credit rules lead to different experiences
- Failed authentication
- ...

- Higher cost to serve due to lack of basic troubleshooting
- Duplicate efforts to build functions for two billers
- Time consuming processes due to high number of inefficient tools/screens
- ...

- High number of activations errors (e.g. wrong switch)
- Loss of service and failed upgrades of dirty devices

Pain points	Process	Data	System	Enabler
100	51	23	19	7

More than half of the pain points are process/policy related

- High cost and time required to train new agents – multiple tools, non-standard processes
- Inconsistent customer experience due to lack of E2E order tracking

Working in parallel on the data model and platforms rationalization is of course a must. In the end, to achieve this rationalization, legacy operators have no choice but to revamp most of their IT systems. This rationalization cannot succeed without tightly linked parallel work on business rules and process simplification and, in our experience, is doomed to fail if not well sequenced in a few clear steps.

This is, for example, what the European operator realized after an initial painful false-start, building a completely new IT system via a "Big Bang" approach. Two years into this initial IT transformation, all specifications were already obsolete, delivery was only at 15% of target, and more than 50% of the budget had already been spent – hundreds of millions of euros without creating tangible value. The key to success for restarting the IT renewal for this operator was to sequence the project into 5 sub-projects (Client Accounting, Sales & Activation, Client Base, Product Offering and Billing, ending with the front-end). Each of these sub-projects was to last not more than 18 months, with detailed design done for each sub-project (e.g. internal development or an off-the-shelf solution), with clear fallback plans for each sub-project in case of deviation from initial plans, and of course, carefully anticipating the required customer migrations that need to be managed to switch from the old IT system to the new one.

Fifth lesson learned: Kill non-value-added products and carefully sequence the migration to the new system

Product portfolio rationalization is a necessary step to be able to switch to a new IT system. Trying to move legacy portfolio complexity onto a new system always leads to a breakdown in deploying the new IT.

Product portfolio rationalization success stories exist, then, when operators carry out back-end simplification in parallel. And the reverse is true: back-end simplification exists when operators rationalize their portfolio in parallel.

For example, to enable its switch to a new IT system, one European telecommunications operator estimated the potential need to rationalize its number of products by 50%. Having reached this target in just 2 years, without any negative impact in terms of revenue or churn, a more in-depth analysis has just shown additional potential for further reduction.

Of course, the risk on ARPU or churn needs to be carefully managed. Proposing migration to a new product to a customer raises the spectre of non-acceptance. Poorly defined migration plans can severely hit the top line by transferring high ARPU customers to lower ARPU new plans. Smart migration plans need to be defined: for example, fine-tuning engagement periods and locking customers in for an extended time and lower-churn products (e.g. triple or quadruple play products).

Sixth lesson learned: Put in place a CEO or CFO-led governance structure specific to the transformation effort, and allow it to adapt to business changes

Simplification programs impact virtually all functions of the organization and generate disruption. This requires specific attention to governance, involving the main decision makers impacted. Most importantly, not having CEO or CFO ownership risks diluting the message and mislabeling this as a marketing or PR effort with no fundamental operating model change.

Governance is especially crucial to manage potential course corrections to the target during the program. To keep the plan very close to market realities, a key role of the governance body is to manage gaps with the initial target in order to bring the required flexibility to the plan, while not compromising the structural decisions made at the outset.

One very important role of this governance is to sequence the program into manageable sub-projects; our experience suggests that each sub-project should not extend more than 18 months. Another key decision is to sequence the back-end programs correctly (e.g. order to activation, product catalogue, client model) versus the front-end ones (e.g. unified sales portal, customer care multi-channel experience). Decoupling the two and putting in place clean APIs between front-end and back-end is important to respect the specific pace of each, and keep a good level of autonomy for these two parts of the systems.

Seventh lesson learned: The benefits are enormous when you get it right

When it comes to impact, let's look at three real-world examples which demonstrate how transformational the potential can be, looking explicitly also out-of-sector for inspiration.

First example: A German automotive manufacturer was able to reduce its purchasing costs by 20% while enabling a significantly higher level of customer choice and personalization (which was core to their aspirational front-end value proposition), thanks to transverse platform modularization and larger volume produced with multi-model standardised components.

Second example: A US retail bank & insurer fully rationalized their back-end, primarily to improve front-end customer experience. Quality defects went down by 80% and employees' productivity went up by 40%. These results were achieved thanks to unified processes across all business lines, breaking silos and leveraging scale; re-engineering processes; implementing standard ways of doing things (training, user manuals, etc.), and tracking people performance on a daily basis. And these results were achieved with no incremental spend on IT.

Third example: A European telecommunications operator optimized and simplified its operating model. Driven by the desire for end-to-end optimization of customer-facing processes for sales & service, they designed and implemented a balanced transformation between business simplification and necessary IT transformation. The results have been convincing as roughly 20% of operational cost was taken out of the operations at the same time as they achieved a remarkable increase in customer satisfaction through improved customer experience.

In conclusion, the time has come for communications operators and media distributors to stop postponing structural simplification, and focus on the back-end to enable the front-end. Doing it right is possible, and the stakes are enormous. Ultimately, there is no other route to competing against new digital players who are rapidly setting (and constantly resetting!) the bar in terms of customer experience.

ABOUT OLIVER WYMAN

Oliver Wyman is a global leader in management consulting. With offices in 50+ cities across 25 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm's 3,000 professionals help clients optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is a wholly owned subsidiary of Marsh & McLennan Companies [NYSE: MMC].

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