OLIVER WYMAN

TEN IDEAS FROM OLIVER WYMAN

VOLUME 2

MARSH GUY CARPENTER MERCER OLIVER WYMAN

MARSH & McLENNAN COMPANIES

This second edition of *Ten Ideas from Oliver Wyman* represents our latest thinking on how customer empowerment is disrupting industries. Although the idea that commercial success depends on satisfying your customers has existed since the beginning of commerce, the speed of change today is creating risks and opportunities that will drive a new generation of business winners and losers.

Ten Ideas explores how industry leaders are turning today's challenging environment into a competitive advantage in industries ranging across energy, financial services, healthcare, retail, aviation, and logistics.

I hope you find *Ten Ideas* informative and valuable.

Yours sincerely,

Scott McDonald
President & CEO
Oliver Wyman Group

TEN IDEAS
FROM OLIVER WYMAN

VOLUME 2

INTRODUCTION

The idea that commercial success depends on satisfying your customer has existed since the turn of the 20th century. American retail magnates popularized the saying *"the customer is always right"* at about the same time French executives coined the phrase *"le client n'a jamais tort."* In Germany, business leaders pioneered the concept *"der Kunde ist König"* – the customer is king.

Yet today, few businesses can keep up with customers' shifting demands. Thanks to the Internet, consumers can easily compare products and services and can access impartial reviews in seconds. Consumers also have more choices: Twenty years ago, if you wanted a product you had to buy it from your local store. If you wanted a loan, you had to go to your local bank. And if you wanted electricity, you had one local power company to choose from. That is no longer the case.

In our era of persistently changing and ever-rising customer expectations, businesses must anticipate the preferences of their newly empowered customers. When we talk with clients, some common challenges come up: One is that growth is now a zero-sum game between competitors, in which consumer choices rule. Another is the rise of disruptive business models, which offer customers better propositions, often enabled by new technologies. A third is the shift from physical distribution to a digital or multi-channel model, which can put incumbents at a disadvantage to new entrants by forcing them to invest in digital advancements while running costly legacy physical assets.

The second edition of *Ten Ideas from Oliver Wyman* represents our latest thinking on what it takes for companies to remain relevant to their customers. We begin by looking at the importance of observing how other industries deal with empowered customers and basing innovations on customers' positive experiences. Next, we explore how both the power and banking industries cope with customers who are also competitors. We then examine how evolving customer demands force companies to overhaul not just their products and services but also how they develop and deliver them. Finally, we turn to the healthcare industry to discover what it takes to re-orient empowered consumers.

We hope you enjoy reading our perspectives and that they spark a vigorous debate.

The Ten Ideas Editorial Board

1 TRADING PLACES

What banks can learn from retailers, and vice versa

Nick Harrison and Sumit Sahni

What do banks and retailers have in common? For decades, both relied on rolling out new branches and stores and merging with competitors to improve their economics and prospects. Today, the rollout game is over in most markets, but both businesses now find themselves fighting off potentially disruptive new entrants, such as peer-to-peer lenders and online grocers.

In this cutthroat environment, advantage *can* be gained by simply executing better than competitors. But many of the biggest opportunities for differentiation will come from exploiting competitors' blind spots by using tactics from a different industry – one that is already setting a new standard for customers' expectations.

Take banks, for example. Our research shows that most customers perceive that all banks have similar services and offer less value for their money than they can find at a local grocery store, like Kaufland or Trader Joe's. That's because, unlike retailers, banks never developed a keen fear of losing customers. They didn't need to. Customers rarely switched banks. So banks grew profits by expanding the number of ways that they could extract value from customers instead of striving to offer them the best possible proposition.

CUSTOMER SATISFACTION LANDSCAPE

THE AVERAGE CUSTOMER FEELS THEIR LOCAL GROCERY STORE IS MORE SATISFYING THAN THEIR RETAIL BANK

3 KEY QUESTIONS FOR EXECUTIVES

1. What zone is your business in?
2. What zone do you want to be in?
3. How do you get there: what can you learn from other winners, regardless of their industry?

Source: Oliver Wyman analysis.

But what if banks behaved more like retailers that can lose a customer at the drop of a hat? What if they began to obsess about customer behaviors and preferences in the same way that a retailer does, eliminating hassles and discovering new ways to make them happy?

It would make a difference. As regulators make it easier for customers to switch banks and more non-financial services firms emerge as rivals, banks, like retailers, must continually improve their customer proposition by looking across sectors and geographies in order to stand out from the pack.

Banks should also take a leaf out of retailers' playbooks and focus much more ruthlessly on cutting costs that do not provide direct customer benefits. Otherwise, they will leave themselves vulnerable to new competitors by underserving some customer segments. Banks are good at designing products that address customers' financial health needs, but they often overlook chances to reach new customers by lowering the cost of their services.

By the same token, retailers can learn a lot from some of the tactics that banks have been using for years. A traditional retail model may serve customers well, but individual consumers are anonymous to the retailer. They come into the store, they buy the product, and they leave. The retailer doesn't know "who they are" and doesn't follow their behavior over long periods of time.

Banks, by contrast, have been taking a "lifetime" view of customers for years, offering products tailored to different life stages as a matter of course. They use sophisticated methods for understanding different types of customers and anticipate how their needs change over time.

Retailers should take note and figure out how to apply these tactics to their businesses. Technological advances in the collection and understanding of customer data are enabling retailers to target offers, products, and services customer by customer. But this is not enough. To thrive, retailers need to develop the ability to also take a "lifetime" view of their customers, and serve them in an even more personalized way.

For example, a food retailer with a multi-year perspective on the changing needs of a young family could offer a loyalty card with discounts on products that shift over time from diapers and baby food to breakfast cereal. A food management app could also help by suggesting menus within a set budget as options befitting their children's ages as they change over time. Years later, this offer could switch again to services such as blood tests and other health screenings conducted in a private kiosk that is automated to upload the data to a doctor. Again, this data could then be linked to a different range of suggested dietary and menu options based on a customer's specific needs.

By challenging their industries' traditional strategies and capabilities, banks and retailers can improve their customer proposition – a crucial upgrade in a world ruled by the empowered customer. If they don't, then their once-captive customers will start acting on their newly available choices – moving to online pure-play retailers to payments providers to peer-to-peer lenders. There is no time to waste.

Nick Harrison is a London-based partner in Oliver Wyman's Retail and Consumer Goods practice. **Sumit Sahni** is a London-based partner in Oliver Wyman's Strategic IT Operations practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/banks-grocery-stores-trading-places.html

2 INNOVATE THE EXPERIENCE, NOT JUST THE PRODUCT

Leading-edge brands are rethinking the whole customer journey

Randall Stone and Rick Wise

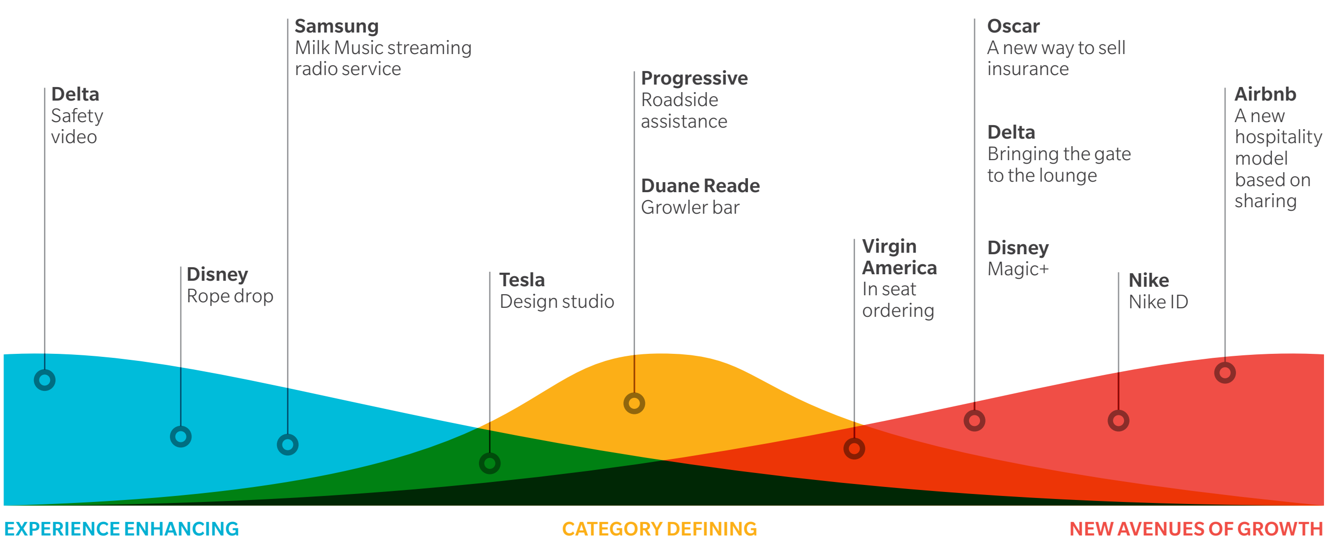
To get to the top of customer ratings of major airlines, Delta had to go beyond providing cleaner planes and fewer lost bags: The legacy carrier redesigned customers' experiences by transforming its planes into workspaces and remodeling its gate lounges to include high-tech amenities. New health insurer Oscar figured out a way to sell insurance the way Amazon sells everything else. Lodging rental site Airbnb completely redefined how people can find a place to stay.

Across an array of industries, companies are realizing that redesigning the customer experience – not just traditional product features – is the best way to differentiate their brand and grow. For decades, companies have focused on innovating products, devoting the majority of their research and development budget to traditional product development. But adding features and incorporating new technologies are delivering less value: While research and development spending rose nearly six percent in 2013, revenue for the same companies rose less than one percent.

Thanks in large part to the greater amount of information provided by digital and social media, customers are likely to switch brands with each new alluring offer. As a result, fewer than half of the world's top brands are considered to be "unique" by customers, our research shows.

A SPECTRUM OF SIGNATURE MOMENTS

COMPANIES ARE REIMAGINING THE CUSTOMER EXPERIENCE BY INTRODUCING INNOVATIONS THAT SURROUND THE CORE OFFER, WHICH CAN RANGE FROM ENHANCEMENTS TO COMPLETELY NEW AVENUES OF GROWTH



Source: Lippincott.

In response, companies are trying to build loyalty by innovating the user experience – by looking at all of the interactions that customers have around a product, both before and after their purchase. Within these moments, companies identify the points at which customers make emotional connections and then invest in changes that customers will notice and remember.

Of course, experience innovation is not entirely new, as the long-term success of Virgin Atlantic airport clubs, Nike flagship stores, and Starbucks cafes can attest. These innovators showed that it's not just about the planes, shoes, or coffee, but rather how customers feel when they use the product or service.

But while many companies recognize this fact, few as yet deliver on it, or even approach it the right way. According to research firm Forrester, more than 80 percent of senior business leaders say that their companies are focused on improving the customer experience. Yet 85 percent have no systematic approach to determining what a differentiated customer experience looks like, let alone how to come up with a new one.

To better connect with customers, companies need to define and then mine a spectrum of "signature moments." Even minor adjustments can be surprisingly emotional drivers. For example, Disney sometimes unexpectedly opens its theme park fifteen minutes early to feed off the "I'm about to be at Disney World" thrill.

Innovating the customer experience can significantly boost efficiency, such as by taking entire steps out of processes or changing their sequence – with the bonus of reducing the cost to serve customers. For insurer Progressive's customers, on-site accident support is a perk, but it also lowers fraud losses. Eyewear retailer Warby Parker offers a streamlined buying process that also lessens the company's costs.

Healthcare innovators such as CareMore and Iora Health pay up front for wellness coaches who can help patients head off health problems – but in doing so cut acute care costs by orders of magnitude.

Armed with more detailed data on how their customers behave, some companies are even identifying new avenues of growth. For example, Apple's ancillary services such as iTunes, iCloud, and Applecare provide a consistently growing revenue stream even as new products come and go.

The bottom-line value of experience innovation can be seen in a recent study we conducted of more than 500 consumer-facing brands. The stock prices of companies that are innovating to deliver a richer customer experience have tended to appreciate eight percent faster than the laggards, as well as outperform benchmark indices such as the Standard and Poor's 500.

This gap will only grow, as leaders will continue to push the limits of experience innovation. For example, one technology client recently found that it could up its customer renewals by altering the way it conducts tasks as basic as identifying customer needs, entering contracts, and providing training and ongoing service. These experiential elements increased renewals by nearly double, whereas product improvement had a ceiling of 10 to 20 percent.

Innovating the customer experience is fast becoming a competitive necessity. Those that don't revamp their customers' experiences are likely to lose their attention and affection. And there's no excuse not to try, since new mobile and social technologies mean that a company can engage with its customers at any place and any time.

Randall Stone is the New York-based director of experience innovation and **Rick Wise** is the New York-based Chief Executive Officer of Oliver Wyman's Lippincott brand advisory practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/innovate-through-customer-experience.html

3 THE NEW MAKE VS. BUY CALCULUS

How utilities can remain relevant to customers who produce their own power

James Basden, Ponniah Vijendran, and Adam Witkowski

The days of the traditional electrical power utility are numbered. Disruptive forces – a combination of supportive government subsidies and advances in technologies such as small-scale combined heat and power boilers, solar photovoltaics, and battery storage – are making it relatively easy and cost-effective for people in developed countries to unplug from the grid. Yes, fossil fuel prices have fallen, but photovoltaic and battery storage prices are also dropping quickly.

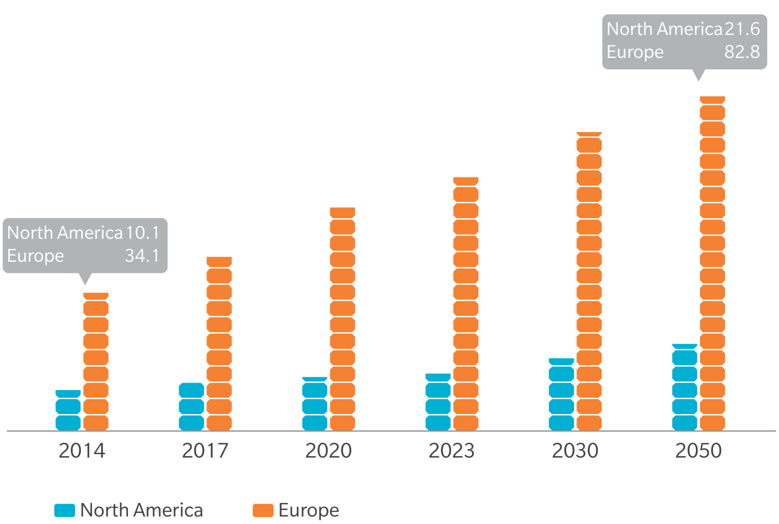
As a result, residences and small businesses are rapidly becoming more energy independent, producing electric utilities' core product – electricity. We estimate that a home or business goes solar in Europe and North America every two minutes.

If current trends hold, our research shows, the amount of power generated by utilities' residential and commercial customers in Europe and North America will rise by about 50 percent within the next five years, reaching a record amount of approximately 400 terawatt hours per year. That's the equivalent of $20 billion in annual revenues that could shift away from utilities. By 2050, that amount will reach nearly $50 billion, provided energy prices stay close to their present level, supportive regulations remain in place, and low-cost technologies become even more commonplace.

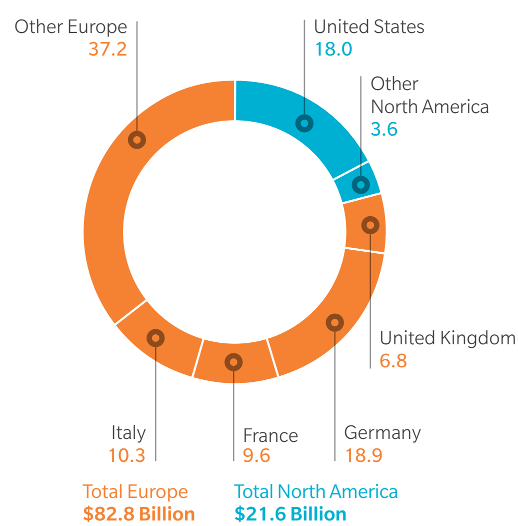
Electric utilities need not accept this fate. Other industries have experienced similar levels of disruption and have emerged stronger for it. Consider the telecommunications industry in

THE NEW BALANCE OF POWER ($ BILLION)
RESIDENCES AND SMALL BUSINESSES ARE BECOMING MORE ENERGY INDEPENDENT

Residential power generation forecasts



Prospective customer market size in 2050



Source: Oliver Wyman analysis.

the 1990s. When deregulation fundamentally reshaped the market, smart competitors refocused their attention on anticipating and meeting their customers' preferences – by pioneering a wide range of alternative products and services. Most now provide not just basic land line phone service but also Internet, cable, and applications that enable phones to communicate with, and remotely manage, everything from home security systems to car temperatures to bill payments.

To come out on top of this disruptive wave, utilities, too, will need to better anticipate and meet their customers' needs – even if that means helping them become their competition. Specifically, utilities are best positioned to understand the economics of power generation. Instead of just trying to sell their power, they should sell their knowledge, by advising a broad range of customers on whether they should invest in making their own electricity. More and more customers, ranging from businesses to households, turn to a variety of sources for energy to ensure that their power is secure, abundant, hassle-free, cheap, and sustainable. But they need technical expertise and practical support – the core competencies of utilities.

In addition, like telecoms, utilities will have to streamline and automate their legacy operations while investing in developing their people. Employees will need to be capable of articulating and delivering a much more expansive range of new products and services than is currently offered.

Finally, the electric utility of the future will have to be at the forefront of incubating, developing, investing in, and implementing new energy-related technologies. To do so, utilities will need to cooperate effectively with a much broader network of investors, researchers, government policy makers, and development programs.

It's tempting for utilities to think customers' fledgling efforts to produce their own electricity are temporary. They're not. They portend a new, more diversified wave of electrification that will alter our way of life. Unless utilities become more attuned to customers' needs – and start acting as both expert providers and advisors – they'll be dropped from their old customers' new electric equation.

James Basden is a London-based partner and global head of the Utilities practice in Oliver Wyman's Energy practice. **Ponniah Vijendran** is a Nordic-based principal and **Adam Witkowski** is a Zurich-based senior consultant in Oliver Wyman's Energy practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/make-versus-buy-calculus.html

4

IN BANKING, OLD IS NEW AGAIN

Digital marketplaces are challenging the conventional saver-bank-borrower relationship

Ben Hoffman and Timothy Taylor

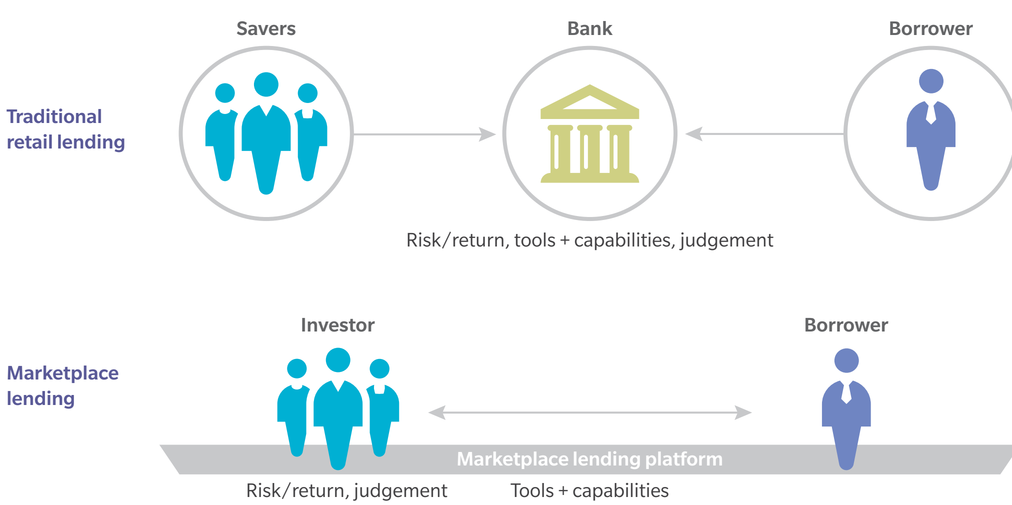
Successful businesses are built on comparative advantages in operational excellence and access. While digital technologies have transformed business operations globally and across industries, their power to reshape and redefine access has the potential to be even more disruptive. Bricks-and-mortar media retailers were the first to fall to the disruptive power of digital access, ceding positions built on convenience and efficiency to the likes of Apple and Netflix. More recent innovation in hospitality, transportation, and retail categories beyond media promises to unseat incumbents and transform industries by unlocking dormant supply and efficiently matching that supply to demand. Now even banking, which for decades if not centuries has enjoyed a virtual monopoly on connecting borrowers and lenders, is at risk of being similarly disrupted.

Banks, as we know them today, arose largely in the 13th century. However, for centuries, in parallel to their rise – and for the majority of human history before them – lenders and borrowers connected directly, in transactions ranging from small-scale exchanges of seed grain for harvest rights to large-scale cash financing of merchant voyages. Regardless of size or complexity, lending and borrowing took place in the town square or at the home of one of the families involved without an institutional intermediary.

After centuries of relying on banks as intermediaries, it appears borrowers and lenders may be returning to an older way of doing business, only rather than meeting in the town square, the marketplace has moved online. Originally called crowd-funding or

LENDING THEN AND NOW

BORROWERS CAN BYPASS BANKS ON THE MARKETPLACE



Source: Oliver Wyman analysis.

peer-to-peer lending, marketplace banking has rapidly moved from relative obscurity into the spotlight as a truly global phenomenon. Borrowers and lenders can now meet anonymously and exchange funds online in countries from Estonia (on Bondora) to China (on Creditease or Lufax) to the United States (on dozens of platforms including Lending Club and Prosper Marketplace). In addition to a meeting place, each of these platforms provides standardized credit applications, risk analytics, loan servicing, and collections. There are no banks (or other institutions) taking deposits or making loans.

The past year has seen several major events that lend legitimacy to this sector and promise continued innovation and growth. Lending Club had its initial public offering in December and at the time of writing has a market capitalization of nearly $8 billion. In addition, it recently signed potentially game-changing deals with Google and Alibaba, as well as Union Bank (a $10 billion US regional bank) and BancAlliance (a network of 195 US community banks). BlackRock, the largest asset manager in the world, is in the process of selling over $300 million in Prosper Marketplace originated loans, with over 80 percent of that securitization receiving an investment-grade credit rating from Moody's. Outside the United States, the list goes on, with Barclays taking an equity stake in a marketplace lender in South Africa and the United Kingdom's Financial Conduct Authority issuing a hundred-page document outlining a regulatory framework for this space, to name just a few recent major developments.

What makes this new model so compelling? At its core, like all good innovation, marketplace banking solves a set of fundamental problems with the current retail banking model. By reducing operating and underwriting costs and innovating in the use of data, technology, and new analytical techniques, marketplace lenders are able to increase the supply of consumer and small business loans – for which there is demand in the secondary market – and reduce the cost of borrowing for consumers and small business owners previously unable to access affordable credit.

What a few years ago seemed like a fringe alternative – operating in just a few countries and with no market validation – now appears to have the potential to reshape much of the traditional retail banking industry. Most of the world's largest banks are still on the sidelines deciding whether to compete or cooperate with these new players. In the coming years, national and international regulators will draw the boundaries within which these platforms will evolve. In this rapidly changing environment, the degree to which marketplace banking will deliver on its promises of increased efficiency and customer empowerment is still unknown. What is certain, however, is that marketplace banking is a big idea that today's industry leaders cannot afford to ignore.

Ben Hoffman is a New York-based partner and **Timothy Taylor** is a New York-based engagement manager in Oliver Wyman's Financial Services practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/banking.html

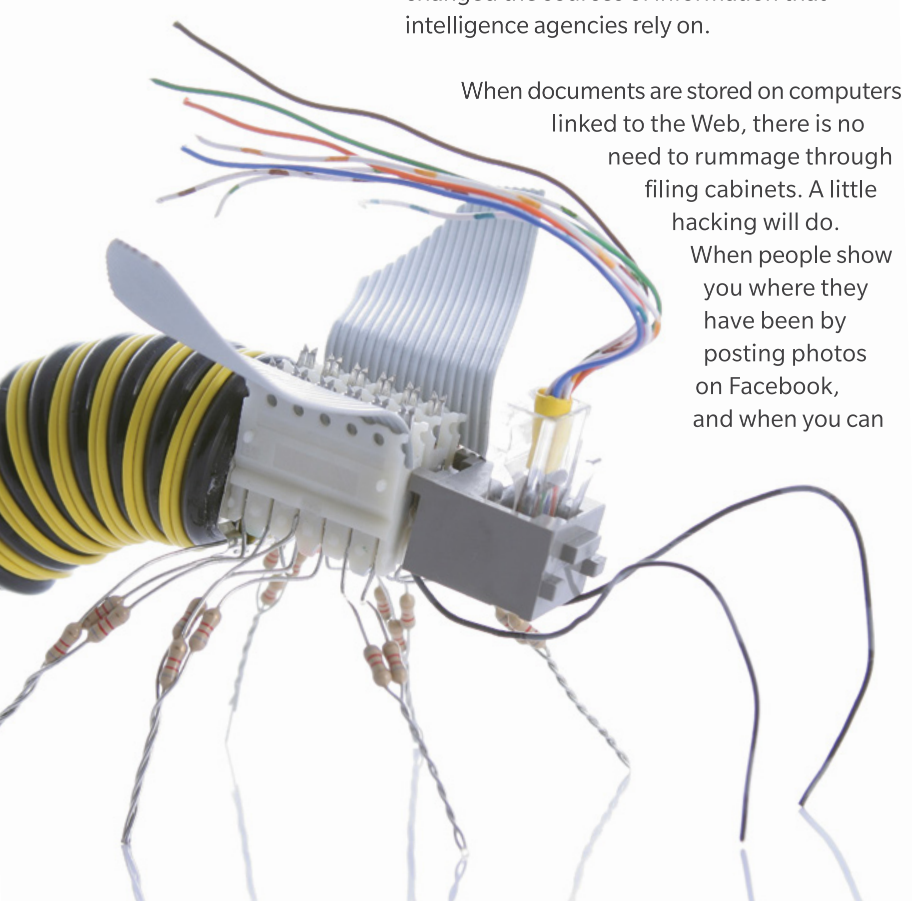
5 IT'S TIME TO THINK DIGITAL

Like intelligence agencies, insurers need fewer James Bonds and more computer nerds

Arthur White

If you take the movies seriously, spies have exciting jobs. To get the low-down on their suspects – Cold War communist double agents, power-mad dictators and the like – they sneak into offices at night to photograph documents with miniature cameras, observe underwater lairs from mini-submarines, and tease loose pillow-talk from the beautiful girlfriends of cruel warlords.

Alas (for the movies), these hands-on "intelligence gathering" techniques are becoming obsolete. The explosion of data provided by the Internet, mobile phones, and global positioning systems has radically changed the sources of information that intelligence agencies rely on.



When documents are stored on computers linked to the Web, there is no need to rummage through filing cabinets. A little hacking will do. When people show you where they have been by posting photos on Facebook, and when you can track the locations of their mobile phones, you don't need to follow them around.

As a result, intelligence agencies need fewer exploding cigars and more mainframe capacity. Fewer James Bonds and more computer nerds.

Unlikely as the comparison may seem, the insurance industry is undergoing the same transformation.

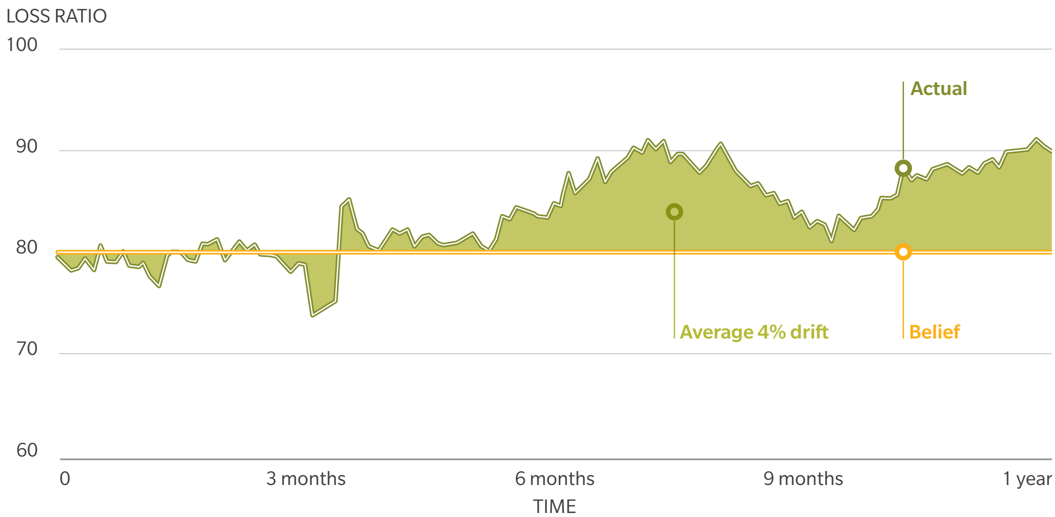
Like spies, insurers seek to make informed estimates about things that are normally hidden – not espionage or Cold War battle plans, but the probabilities of insurable events: car accidents, ill health, living to 95 years of age, being burgled, and so on. And just like spies, insurers are finding that new information technology is making many of their traditional methods of discovery redundant.

Consider car insurance. Statistics about the age, sex, and marital status of claimants has allowed actuaries to work out that single 20-year-old men typically drive more dangerously than 40-year-old married women. But, of course, this is a generalization. Some 40-year-old women are wild behind the wheel, and some 20-year-old men are highly conservative.

That should be obvious to anyone aware of the difference between group averages and individual outcomes. But the point will be made even more obvious in the future by "telematics," technology that allows insurers to observe the actual driving behavior of policyholders. The controversy sparked by the 2012 EU ban on using gender as a factor in car insurance will soon look almost quaint. When

NEW BUSINESS SCORED LOSS RATIO

IN DIGITAL MARKETS, THE QUALITY OF LOSS MODELS DETERIORATES FAST – BY AS MUCH AS FOUR LOSS RATIO POINTS PER YEAR



Source: Oliver Wyman analysis.
Note: "Belief" is the predicted loss ratio for a tranche of new business at time period X. "Actual" is the eventual actual loss ratio for the given tranche of business.

insurers can observe driving habits directly, crude generalizations using gender-based predictions will be obsolete.

Telematics is but one example. Customers' activities are increasingly recorded electronically: what we buy from whom, where we dine out, whether we pay our debts, where we are interested in going on holiday, which articles we read in which newspapers, which movies we watch. Such information can paint an extraordinarily accurate picture of a person, her lifestyle and disposition, making the old socio-demographic but impersonal information that actuaries have relied on seem archaic.

Just as intelligence agencies today sort nuggets of valuable information from ever increasing torrents of data, insurers will similarly need to sift through huge and varied quantities of data to discover relevant behavioral insights – and they will need to make agile decisions as a result.

This is not just a theoretical, future problem. In markets such as the United Kingdom, increasing flows of information and rapid "aggregator-based" trading are already the norm in motor insurance. Our data suggests insurers who cannot adapt their models fast enough could lose out by as much as four percentage points of margin per year.

Of course, not all this information will be available to insurers. But much of it will be, if only because low-risk people will benefit by making it available. Openness will be rewarded with lower premiums.

In this context, the historical insurance business model looks increasingly dinosaur-like. New commercial species – brand-led consumer-oriented companies and "information companies" such as Google, which were not merely born into this new environment but helped to create it – are better positioned to capture new opportunities. They have the right skills and cultures, and they are unencumbered by legacy assets devalued by the explosion of information and the growing willingness of people to transact online.

You only live twice, according to the title of a James Bond movie. If today's insurers are to thrive in the new world of abundant information and hands-off transactions, they will need to be reborn. They must transform into the very information companies that threaten to supersede them.

Arthur White is a London-based partner in Oliver Wyman's Insurance practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/think-digital.html

6

PREPARE FOR GREENER SUPPLY CHAINS

Customers and investors are pushing companies to use trucks that run on natural gas

Jason Kuehn and Bill Rennicke

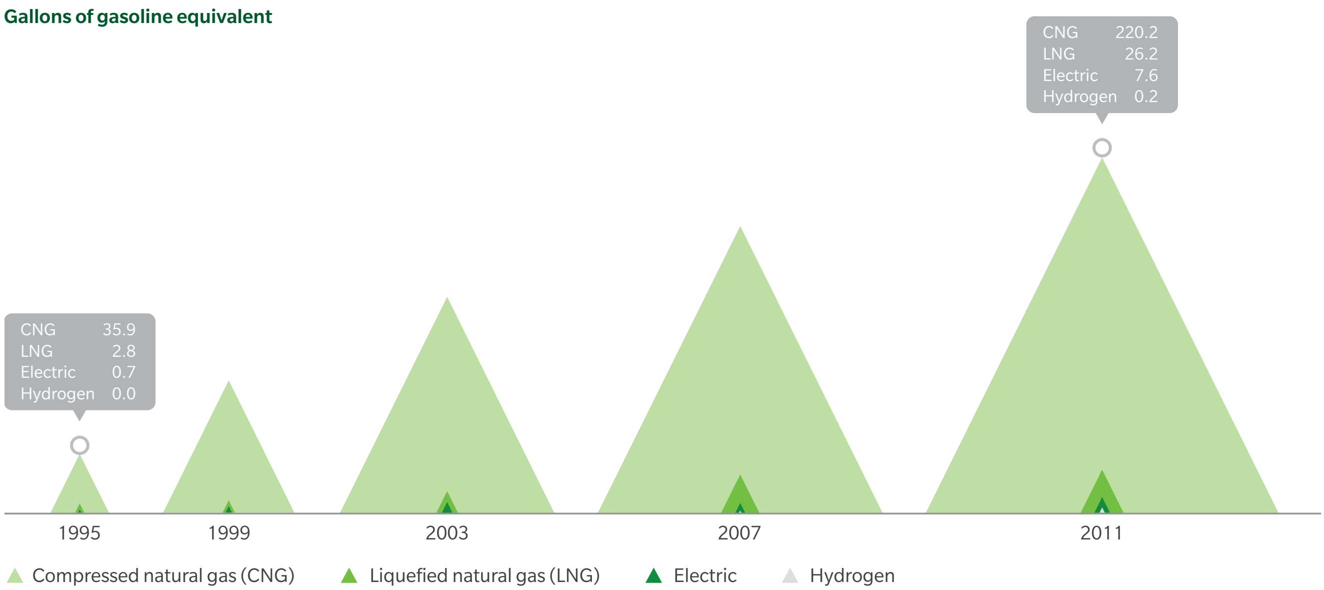
With the threat of climate change ever more apparent, every company is under pressure from customers and investors alike to show progress in reducing its carbon footprint. Many businesses that ship substantial amounts of freight have built environmental sustainability criteria into their corporate policies – and are now pushing their supply chains to fall in line.

One result of these policies has been a radical shift in the trucking industry. Trucks of all shapes and sizes, from light-duty delivery vans to the largest Class 8 trucks, are moving from dependence on oil to a broader fuel portfolio designed to lower greenhouse gas emissions. Low priced and widely available, natural gas has become a front runner in the evolution of greener trucks. UPS, for example, reports that its compressed natural gas trucks produce 95 percent lower particulate emissions and 75 percent lower carbon monoxide emissions than diesel trucks. Major freight shippers like Walmart, Lowe's, Procter & Gamble, and Owens Corning have asked trucking providers to incorporate natural gas vehicles into their fleets.

While oil prices were high, the economics made sense too, as higher premiums for new natural gas truck technology could be offset through lower per-mile fuel costs. Then in the summer of 2014, the bottom dropped out for oil prices. The net result we expect will be a slower transition to lower-emission fuels for some fleets, but natural gas investments still look to be a good deal over the long term. Natural gas is still cheaper than diesel on an energy equivalent basis, and the price premium for new engines will fall as the market grows. More important, with domestic natural gas production booming and increasing storage capacity, natural gas prices may prove to be more stable than oil prices, which have become increasingly volatile in the face of global economic instability.

Government interest in meeting emissions requirements also may help defray the costs of this shift. In the United States, from California to New Jersey and Wisconsin to Texas, states are making grant money and tax credits available to offset the price premium of the new trucks, as well as building out fueling infrastructure along major highways.

GREENER VEHICLES ($ MILLION)
MORE TRUCKS ARE USING ALTERNATIVE FUELS



Source: US Department of Energy.

Near term, natural gas trucks appear to be a good fit for fixed-site fleet operations and standardized routes: Anheuser-Busch, for example, switched to compressed natural gas for its heavy-duty trucks that make the round-the-clock beer run from its Houston brewery to wholesalers. Lowe's now runs natural gas trucks out of distribution centers in seven states. Longer term, adoption of natural gas and other alternative fuels by the trucking industry will be bolstered by technological innovations that improve economics, such as the development of lighter weight composite truck bodies and fuel-neutral engines.

Natural gas might even shift the dynamics of the truck versus train calculation: It may be more effective to use trucks on some major rail intermodal routes. Which raises the question, "Could trains also go the natural gas route?" Oliver Wyman research shows that on a large scale, such a transition would be logistically complex and very expensive, but research is ongoing into how natural gas might fit into the railroading picture. There is particular interest in technologies that would enable on-demand switching between diesel and natural gas. And compressed natural gas locomotives may prove to be both cost effective and able to reduce emissions on shorter, closed loops for heavy trains that burn a lot of fuel. Chicago's short line Indiana Harbor Belt Railroad, for example, is in the process of transitioning its entire locomotive fleet to compressed natural gas by 2019, thanks to a federal- and state-funded congestion mitigation and air quality grant.

The quest for greener logistics will only intensify over time. Countries are bringing to bear increasingly stringent emissions regulations and widening carbon pricing efforts. Freight shippers will not give their supply chains a free pass, as they seek to satisfy regulators on the one hand and their own more environmentally conscious customers on the other. The sooner that executives embrace greener supply chains, the better.

Jason Kuehn is a Princeton-based vice president and **Bill Rennicke** is a Boston-based partner in Oliver Wyman's Transportation practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/greener-supply-chains.html

7 DISRUPT YOUR LOGISTICS

Deliveries are the new front line for competition between e-tailers and bricks-and-mortar companies

Joris D'Incà, Sebastian Janssen, and Michael Lierow

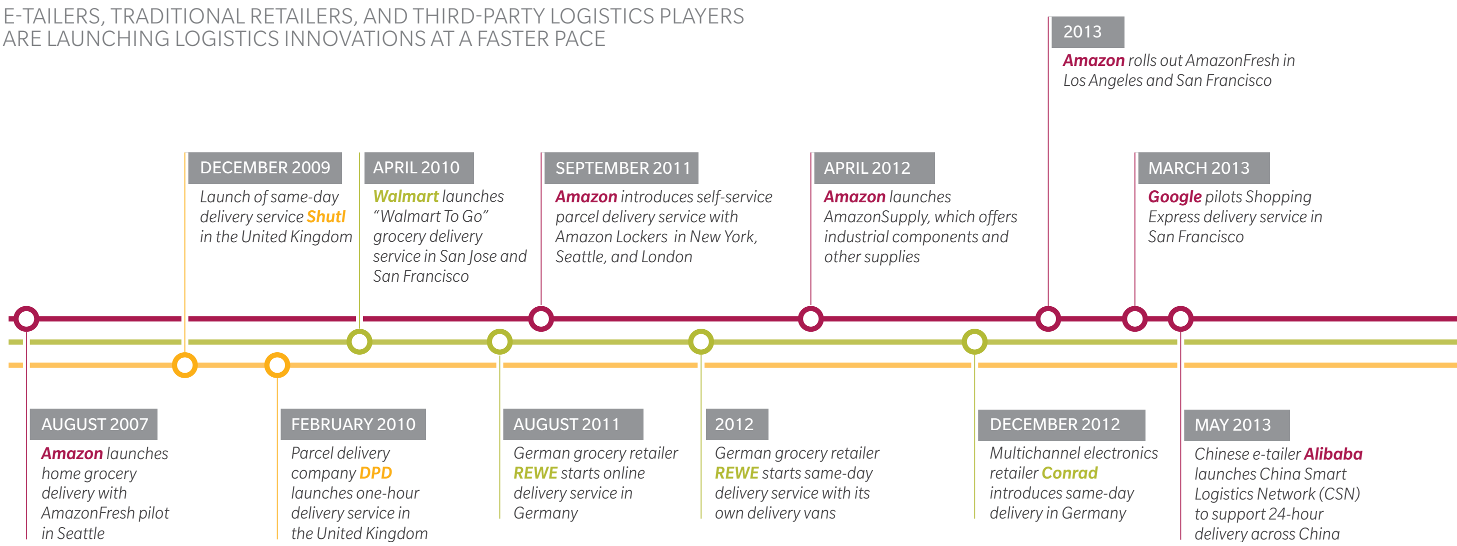
Once the stuff of science fiction, having what you desire appear almost instantly is now becoming a reality. In the past 18 months, firms as varied as German electronics retailer Media Markt, department stores Bloomingdale's and Macys, and Internet giants Google and Ebay have all launched same-day delivery services. Amazon has gone so far as to introduce one-hour delivery in major American cities, and its new Dash button can place orders to replenish specific items when pressed.

Delivery logistics, once a relatively staid business, is now the frontline of a tectonic shift that's taking place everywhere from the United States and Europe to China. The borders between retailing and logistics are blurring as a combination of technology, lifestyle changes, and attitudes is altering the way people think about parcel delivery – as a "when I want it, where I want it" service. In turn, e-tailers, traditional retailers, and third-party logistics players are looking to customer-determined delivery speeds, on-demand time slots, and flexible delivery locations as ways to separate themselves from the pack.

Hustling logistics players down the road to more customized delivery options is Amazon, which seeks to differentiate itself and keep customers under its banner throughout the entire shopping process. Continuing to invest heavily in regional warehouses and information technology, Amazon is rolling out same-day, one-hour, and Sunday delivery services, and even a nascent drone program. In 2014, it snapped up stakes in two European logistics companies – Yodel and Colis Privé – to gain partial control of 6,700 delivery trucks, handling 170 million shipments per year in the United Kingdom and France.

THE LOGISTICS RACE

E-TAILERS, TRADITIONAL RETAILERS, AND THIRD-PARTY LOGISTICS PLAYERS ARE LAUNCHING LOGISTICS INNOVATIONS AT A FASTER PACE



Source: Oliver Wyman analysis.

While such small-scale moves certainly don't erase the need for logistics companies, they could put a dent in demand. "Who owns the customer" could be up for grabs: Already, Amazon accounts for about a third of total parcels delivered by some large parcel delivery organizations, and there is speculation that the company may enter into delivery logistics under its own banner quite soon, making it both a retail and parcel delivery vendor. At a minimum, there's a chance that Amazon could start to cherry pick deliveries in the most attractive urban neighborhoods and could offer a white-label service for customers who have their goods "fulfilled by Amazon."

Logistics players and traditional retailers recognize that they can't stop this game-changing shift. In response, many are expanding their capabilities to compete with e-tail giants like Amazon and China's Alibaba head on. FedEx paid $1.4 billion to gain control of a specialist in handling returns, Genco Distribution System, as well as e-commerce shipments for 2,000 retail clients in 200 countries through the e-commerce platform Bongo International. German consumer electronics retailer Media Markt and big box retailer Walmart are aping e-tail giants by starting to deliver packages on the same day that consumers buy them.

These changes are only the start. But the message for both logistics players and retailers is clear: To continue to own their customers, they must revamp their processes from the perspective of the final customer, with a focus on quickly removing hassles. Soon, receiving packages within an hour of ordering them or at the time and place specified at no extra charge could become the new standard in cities.

For the strongest e-tailers, those that can already supply goods faster than once thought possible, these are giddy times, as their empires rapidly expand. Traditional retailers may find themselves cornered unless they can meet the demands of customers looking to shop anywhere, any time. Logistics companies, too, will need to think hard about how they can better serve their e-tail clients. They'll need to be fast, flexible, and much more innovative – or risk being pushed off the map altogether.

Joris D'Incà is a Zurich-based partner, **Sebastian Janssen** is a Düsseldorf-based engagement manager, and **Michael Lierow** is a Munich-based partner in Oliver Wyman's Transportation practice.

OCTOBER 2013
__Ebay__ acquires same-day delivery service __Shutl__

NOVEMBER 2013
__Amazon__ begins Sunday delivery in the United States (via __United States Postal Service__)

JANUARY 2014
__Walmart__ begins testing online grocery shopping with local store pick-up option in Denver

__Amazon__ begins Sunday delivery in the United Kingdom (via parcel delivery company __DPD__)

FEBRUARY 2014
German consumer electronic retailers __Media Markt__ and __Saturn__ launch same-day delivery service

MARCH 2014
__Amazon__ acquires a 5 percent stake in the delivery service company __Yodel__ in the United Kingdom

MAY 2014
__Google__ rolls out same-day shopping service Shopping Express in Los Angeles and New York

__Amazon__ launches Amazon Cart, allowing users to add items to their Amazon shopping list by replying to any Amazon product tweet and tagging it with the "#AmazonCart" hashtag

__Amazon__ acquires a 25 percent stake in the delivery service company __Colis Privé__ in France

JUNE 2014
Chinese e-tailer __Alibaba__ signs logistics cooperative deal with __China Post__, the official postal service of China

SEPTEMBER 2014
__Amazon__ joins railway station parcel pick-up service in the United Kingdom

NOVEMBER 2014
German express mail company __DHL__ and __Ebay__ launch same-day delivery pilot in Berlin

DECEMBER 2014
__Amazon__ launches Prime Now, which offers one-hour delivery service in Manhattan

DECEMBER 2014
__Fedex__ acquires reverse logistics firm __Genco__ and e-commerce IT service provider __Bongo International__

JANUARY 2015
__Uber__ launches Uber Cargo service in Hong Kong

MARCH 2015
__Amazon__ tests delivery drones in Canada

__Amazon__ launches "Dash" home ordering kit in the United States

MARCH 2015
British supermarket chain __Sainsbury's__ launches grocery click and collect service in stores in the United Kingdom

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/disrupt-your-logistics.html

8 BECOME AN OPEN INNOVATOR

More companies should tap into the wellspring of great ideas outside their walls

Gregory Kochersperger and Xavier Nougues

Ever since Thomas Edison pioneered open innovation – by reaching out to scientists, economists, and politicians for inspiration for his inventions – companies have tried to follow suit. But most attempts to normalize the process of sourcing innovative ideas from outside of their organizations have failed.

Only a handful of players in industries as varied as consumer products, fashion, autos, and pharmaceuticals have managed to produce a blockbuster product this way. But even these leaders in open innovation are discovering their processes are falling short.

Rapidly changing customer demands force companies to constantly reinvent and improve their products. Today's cutting-edge products become obsolete in months, not years. Companies draw upon hundreds of patents to produce phones, instead of dozens. All the while, research and development costs are doubling every five years.

So in this harsh, hyper consumer-driven environment, what separates the superior innovators from the rest? Strategists have developed some well-known rules for adopting open innovation practices. These rules have provided a playbook for success for leaders such as Procter & Gamble.

But we've also observed a disturbingly large number of cases in which companies blame external forces, such as poor supplier quality, for failures when their real hurdles are internal.

RETHINKING THE INNOVATION NETWORK
COMPANIES NEED BROADER, OPEN INNOVATION NETWORKS FOR BEST-IN-CLASS INNOVATIONS

Source: Oliver Wyman analysis.

Companies often cast off external ideas because they do not have a clear strategy for what should be insourced or outsourced. As a result, great ideas are not developed because they are "not invented here," appear too risky, or must draw upon resources that companies don't already have.

Before companies can truly excel at open innovation, they need to take a look in the mirror and revamp their internal processes. Here are three ideas for meeting the most common challenges:

1. **Rethink procurement.**
   Executives can tell their managers to source innovative ideas from outside of their companies. But ultimately their procurement teams are the ones who must identify and adopt them.

   Unfortunately, the mandate of most procurement divisions is often solely to reduce costs. Fewer than half of the Euro Stock 50 companies have an in-house "innovation group" to identify market solutions and co-design new offers. "Innovation groups" act as catalysts by helping procurement teams to better assess if an advance is a core capability for a company to develop on its own or not. They also encourage collaboration across functions such as finance, legal, and marketing.

2. **Collaborate in radical new ways.**
   Many companies have attempted to put open innovation into practice by holding innovation contests with suppliers and academics. But they merely scratch the surface of what can now be done.

   Using digital platforms, companies can reach hundreds of thousands of people all over the world. Virtual idea markets connect people who have never been in contact before – including customers – to tackle not just minor challenges but even long-term strategic stumbling blocks. Every day, Massachusetts-based crowd sourcer InnoCentive teams up thousands of "solution seekers" with more than 200,000 "problem solvers."

The following three questions form a starting point for a diagnostic to discover if your company has the right strategy, supplier management process, and overarching organizational structure to adopt great ideas from outside:

- How aligned is your procurement strategy with the key value drivers of your business?
- How well do you leverage supplier innovations?
- Does your company have the critical organizational capabilities it needs to conduct world-class open innovation?

3. **Create an open culture.**
   All too often we hear of middle managers who learn of, and then discard, outside inventions only for them to be picked up by a more savvy competitor. The main culprit is usually the company's culture. Some companies have a tendency to try to master all of the patents used in their products. Others reject outside advancements due to potential legal concerns.

   Strategies fail when they don't account for the fact that companies' cultures are as varied as the people who work for them. But even the most risk-averse companies can become nimble open innovators by understanding and accounting for these differences. One way to do this is to first define what a company can do well. Then people should be assigned to forge customized pathways for ideas to be easily sourced from outside and evaluated across divisions.

In some cases, companies may only realize they miss chances to openly innovate after a painful product failure shows what the company is doing wrong. But executives need not wait that long. A diagnostic exercise targeted at identifying if a company has the right strategy, supplier relationship management process, and overall structure to adopt external innovations can illuminate how much hidebound behavior prevents outside ideas from improving a company's bottom line. These can often match or surpass procurement teams' cost-focused initiatives.

Gregory Kochersperger is a Zurich-based partner and head of Oliver Wyman's Value Sourcing and Supply Chain practice. **Xavier Nougues** is a Paris-based partner in Oliver Wyman's Value Sourcing and Supply Chain practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/become-an-open-innovator.html

9 STOP MULTIBILLION DOLLAR DEVELOPMENT DELAYS

People are pushing aircraft and train manufacturers to rethink product development

Bernard Birchler, Eric Ciampi, and Archag Touloumian

There's a simple way to forecast the future: Look at what the super-affluent own now. According to Google's chief economist, Hal Varian, what only the wealthy can afford today is what people who are merely comfortable will want tomorrow. Flat-screen televisions, mobile phones, anti-lock brakes, and airbags were all once considered luxuries for the elite before they became commoditized and commonplace.

For companies in the business of making products, a corollary to Varian's rule might be this: If mismanaged, creating the products of the future for ordinary consumers could make them poor – the result of cost overruns and compounding delays.

Consider what's happening with aircraft and trains. Consumers crave faster, quieter, fuel-efficient, safe, and hassle-free travel, with easy access to the latest technology. They want the comfort of private suites, deluxe lounges, and relaxing seats and beds. But manufacturing a train or a plane is an incredibly complex operation, involving rings of hundreds of small and often financially stretched suppliers that all must perform complex, synchronized movements. Pulling this off requires manufacturers to redefine product development to prevent costs and delays from escalating, especially as they pack in new technologies, each of which can require hundreds of thousands of engineering hours to be stabilized.

There is not a moment to lose: Rising demand for transport worldwide and an aging installed equipment base are driving a large number of new projects. In the next 20 years, global aircraft demand is projected to rise by 20 percent versus orders received in the past decade. Orders for rail equipment look set to jump by 20 percent, too, to $213 billion for 2015-2017, up from $180 billion for 2007-2009, according to the Association of the European Rail Industry (UNIFE).

All the while, the costs of developing game-changing planes and trains keep rising. Aviation and rolling stock development programs are seeing delays of as much as four years, resulting in hundreds of millions of dollars in cost overruns. Add in contractual penalties and the total bill for ongoing delivery problems in the aircraft industry alone has risen to about $20 billion over the past several years. These days, the cost of developing an aircraft from its preliminary design to its final delivery can often jump by 48 percent.

The fundamental problem is that most manufacturers try to prevent product delays by improving their own product development and manufacturing processes in isolation.

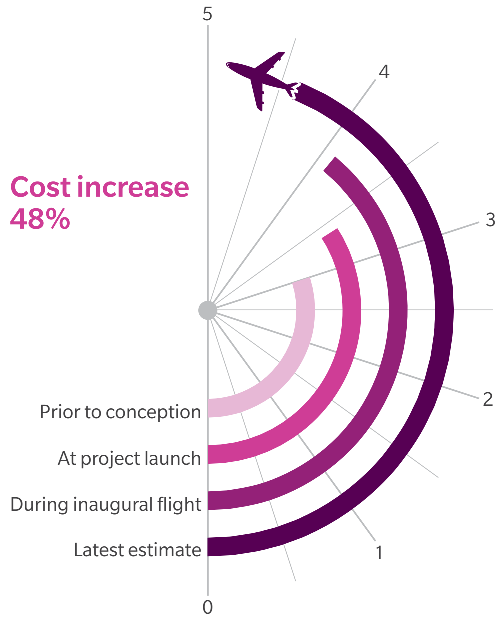
Instead, manufacturers must take a broader view to produce planes and trains that are becoming much more complicated, and thus more difficult to deliver on time and within budget. Manufacturers must re-evaluate how they manage everything with their contractors, suppliers, and other outside parties – from product development and the supply chain to the ramping up of production.

To better anticipate and manage their customers' needs, airplane and train manufacturers should implement systems engineering methods that challenge current functional requirements – right from the moment that an airplane or train is only a concept. They can, for example, expand their pool of choices for cutting-edge concepts and accelerate the shift into the development process by inviting suppliers, customers, and others to submit new ideas through "open innovation" forums. They can then develop the best concepts in parallel with cross-functional teams made up of suppliers and in-house experts in engineering, quality, and manufacturing.

Other best practices need to be put in place at every step: Manufacturers should standardize engineering processes and modularize components and assemblies. They need to rely more on upfront digital simulations to reduce the number of physical tests. A "design authority" comprising senior experts can be created to track and monitor engineering teams' progress. Establishing and implementing key milestones, or "maturity gates," that are linked to concrete deliverables, is also crucial for tightening up management oversight and validating each step in product design.

Finally, manufacturers must take the lead in strengthening their fragile and fragmented supplier networks. They will need to learn to identify tomorrow's leaders, assist them in spotting potential acquisition targets, and draw up a plan with them for progressive improvement. At the same time, manufacturers should be prepared to coach these "best of breed" suppliers on their journey toward product development and manufacturing excellence.

COSTS AND DELAYS TAKE OFF ($ BILLION)
RECENT AIRCRAFT PROGRAM DEVELOPMENT COSTS, FROM PRELIMINARY DESIGN TO 2014



Source: Oliver Wyman analysis.

Manufacturers already have many of the tools and resources required to create the next generation of travel experiences, turning the elite into the everyday. If they can transform their product development process and coax their suppliers to join them on the journey – those planes and trains we all want will get here a little sooner.

Bernard Birchler is a Paris-based partner, **Eric Ciampi** is a Paris-based principal, and **Archag Touloumian** is a Paris-based associate in Oliver Wyman's Manufacturing, Transportation, and Energy practice.

For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/stop-multibillion-dollar-development-delays.html

10 HELP PATIENTS TO HELP THEMSELVES

Healthcare is about not just treating people but also getting them to change how they live

Terry Stone

Since the 1970s, American healthcare has been a market like almost no other. It's not just that healthcare is afflicted by bloat, waste, and inefficiency. It's that the whole system behaves irrationally, as if it were exempt from the basic laws of economics. The magic of competition, in particular, has failed in healthcare, leading to sagging value and runaway costs.

What would it take to make healthcare more rational? A good place to start would be to help consumers make better choices about the things that drive the majority of costs – doctors, hospitals, and treatments. They already have the power to choose, but not much in the way of information or incentives. Yes, there are rankings of doctors and hospitals, but they leave out as much as they consider. Prices are all but invisible. And because consumers have been financially insulated by employer-sponsored health insurance, they have no real reason to make a value-based choice.

Change those factors and consumers do a better job. Consider: CalPERS, the California public employee pension plan, determined that its costs for exactly the same hip and knee replacement ranged from $20,000 to $120,000. It decided to give consumers an incentive for choosing lower-cost care; it announced that the highest rate it would pay for the procedure was now $30,000. Within one year, the number of CalPERS members seeking treatment at lower-cost hospitals increased by 15 percent.

But what if we could take the next step? What if the health system could enable and encourage good decision making not just about doctors and treatments but about healthy living – about diet and exercise and lifestyle and compliance with treatment plans? What if healthcare organized itself not just around healing the sick but around guiding people to live better lives? If the industry could figure out how to do that at scale, backed by the enormous market power of employers and the government, the impact would be measured not just in dollars (roughly half of healthcare costs are related to lifestyle choices) but in years of better living across the population.

We know it can be done, at least on a small scale. Iora Health, an innovative provider of primary care, reduced hospitalizations for its patients by 40 percent compared to a control group, emergency room use by roughly 50 percent, and use of specialists by 80 percent by using "smart" care teams, health coaches, "clubs" for certain chronic conditions, and biometric feeds to alter how patients interact with their medical conditions and risk factors.

Senior care specialists at CareMore use strength and balance training in a community atmosphere to avoid hip fractures among frail elders. They avoid costly hospitalizations and high death rates while addressing depression among a vulnerable group. Scaling programs like Iora and CareMore across

broader populations nationally is difficult. But if accomplished, we estimate the United States could save nearly $500 billion in healthcare costs. That's more than 15 percent of the $3 trillion health market.

This is the challenge healthcare faces, or rather a complex set of changes: Align incentives so that doctors and hospitals only profit when the patient benefits (a hard step on its own), increase transparency, apply technology to create a more efficient, more consistent patient experience, use market power to drive innovation and organizational change, teach consumers to use their own purchasing power wisely, and learn the art of changing individual behavior.

That last challenge is in many ways the greatest of all. Think: In most industries, the effort to change behavior extends only to the level of getting someone to choose one product rather than another. In a few, like technology, the goal is to get consumers to start using products that contain the seeds of behavior change – smartphones or social media, for instance.

Healthcare needs to go even further. It needs to get consumers to change what they eat, how they exercise, how much they sleep, and how they take responsibility for their own health. Behavior change is at the heart of such efforts by innovative healthcare providers. Education, as one might expect, is the foundation, though it is usually insufficient. Incentives are useful, but they have limits. The most successful models rely on social interaction, close relationships with patients, high touch, quantified-self-help tools, and even fun to keep patients engaged.

As healthcare companies (and others) learn to meet these difficult challenges, they will fundamentally alter our understanding of what an effective, well-functioning healthcare marketplace looks like. I'd go further: They will change our understanding of what it means to have a relationship with customers.

BETTER ENGAGEMENT + INCENTIVES = HEALTHCARE SAVINGS

ENCOURAGING CONSUMERS TO MAKE HEALTHIER CHOICES WILL YIELD BIG SAVINGS AND BETTER OUTCOMES

Total savings

$483 Billion

$200
Increase care adherence, particularly for chronic conditions

$148
Improve diet and exercise and **reduce smoking** to cut down on lifestyle diseases

$111
Intervene earlier and **increase access, leading to care** in lower acuity settings

$24
Improve cost transparency and **set limits** to encourage provider price competition

Source: Oliver Wyman analysis.

Terry Stone is a Dallas-based partner and head of Oliver Wyman's Health & Life Sciences practice.

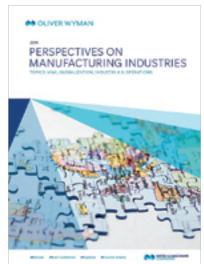
For this idea at length visit
http://www.oliverwyman.com/insights/publications/2015/jun/healthcare-patients.html

RECENT PUBLICATIONS
FROM OLIVER WYMAN

For these publications and other inquiries, please email tenideas@oliverwyman.com
or visit www.oliverwyman.com.

IN COMMERCIAL DRONES, THE RACE IS ON

With reasonable and globally competitive regulations, the United States could still become a leader in the commercial drone industry.

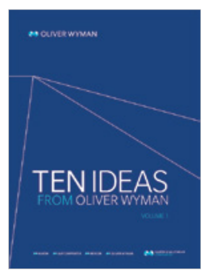


PERSPECTIVES ON MANUFACTURING INDUSTRIES

A collection of viewpoints on industrial companies' challenges and trends as well as their opportunities and potential courses of action.

RISE OF THE CHAMELEON

This paper addresses a new service operations challenge – delighting customers and reducing cost in the new front office.

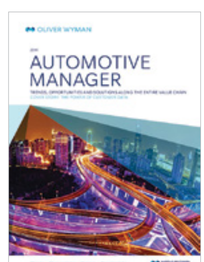


TEN IDEAS FROM OLIVER WYMAN, VOL. 1

In this collection of articles, we showcase ten ideas from across our firm for how business leaders can improve and grow their businesses.

THE OLIVER WYMAN AND MORGAN STANLEY WHOLESALE INVESTMENT BANKING OUTLOOK 2015

The liquidity conundrum: Shifting risk, what it means.

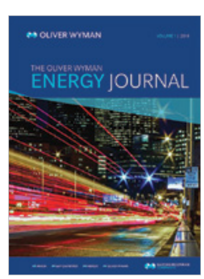


THE OLIVER WYMAN AUTOMOTIVE MANAGER 2014

A magazine for automotive industry leaders which provides insights into trends, prospects, and solutions for manufacturers, suppliers, and dealers.

THE OLIVER WYMAN CMT JOURNAL, VOL. 2

The second edition of the Oliver Wyman CMT Journal is devoted to insights on how to navigate increasingly competitive and digitized markets.



THE OLIVER WYMAN ENERGY JOURNAL, VOL. 1

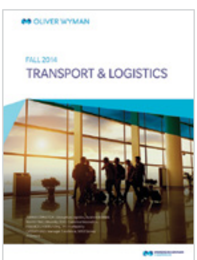
This inaugural issue of the Oliver Wyman Energy Journal reflects the latest thinking across Oliver Wyman's energy practice on how shifts underway will create new risks and opportunities not just for the energy sector, but also for every company and person that depends on it.

THE OLIVER WYMAN ONLINE RETAIL REPORT

This selection of articles explains how existing bricks-and-mortar retailers can resist the loss of revenue to online players and how they can build their own successful online offer.

THE OLIVER WYMAN RISK JOURNAL, VOL. 4

A collection of perspectives on the complex risks that are determining many companies' futures.



THE OLIVER WYMAN TRANSPORT & LOGISTICS JOURNAL 2014

A publication that discusses issues facing global transportation and logistics industries.

THE PATIENT-TO-CONSUMER REVOLUTION

How the tech attack radically advances US healthcare – and creates a clear path to market sustainability – by unleashing consumer demand and forever changing the basis of competition.

THE PROCUREMENT PLAYBOOK

Strategies and plays from 100 chief procurement officers.

THE STATE OF FINANCIAL SERVICES 2015

Managing complexity: The 18th edition of this annual report explains how financial firms can reduce the costs of complexity while reaping its benefits.

WELCOME TO THE HUMAN ERA

A new model for building trusting connections, and what brands need to do about it.

WOMEN IN FINANCIAL SERVICES

From evolution to revolution: The time is now.

GLOBAL DIRECTORY

AUSTRALIA

SYDNEY
+61 2 8864 6555

BERMUDA

HAMILTON
+441 297 9737

BRAZIL

SÃO PAULO
+55 11 5501 1100

CANADA

MONTREAL
+1 514 499 0461

TORONTO
+1 416 868 2200

CHINA

BEIJING
+86 10 6533 4200

HONG KONG
+852 2301 7500

SHANGHAI
+86 21 6084 6599

FRANCE

PARIS
+33 1 45 02 30 00

GERMANY

BERLIN
+49 30 399 945 0
+49 30 700 150 602

DÜSSELDORF
+49 211 8987 680

FRANKFURT
+49 69 97 17 30

HAMBURG
+49 40 376 92 57

MUNICH
+49 89 939 49 0

INDIA

MUMBAI
+91 22 6651 2900

NEW DELHI
+91 124 4175 656

ITALY

MILAN
+39 02 3057 71

ROME
+39 06 488 8101

JAPAN

TOKYO
+81 3 3500 4960

MEXICO

MEXICO CITY
+52 55 1207 7450

NETHERLANDS

AMSTERDAM
+31 205 419 750

NEW ZEALAND

AUCKLAND
+64 9 928 3288

WELLINGTON
+64 4 819 2550

POLAND

WARSAW
+48 22 456 40 20

RUSSIA

MOSCOW
+7 495 783 8029

SAUDI ARABIA

RIYADH
+966 11 4347595

SINGAPORE

SINGAPORE
+65 6510 9700

SOUTH KOREA

SEOUL
+82 2 399 5400

SPAIN

BARCELONA
+34 93 507 9000

MADRID
+34 91 531 7900

SWEDEN

STOCKHOLM
+46 8 546 240 70

SWITZERLAND

ZURICH
+41 44 5533 333

TURKEY

ISTANBUL
+90 212 355 4404

UNITED ARAB EMIRATES

ABU DHABI
+971 2 406 9781

DUBAI
+971 4 425 7000

UNITED KINGDOM

LONDON
+44 20 7333 8333

UNITED STATES

ATLANTA
+1 404 239 6410

AUSTIN
+1 512 383 4800

BOSTON
+1 617 424 3200

CHICAGO
+1 312 345 3300

COLUMBUS
+1 614 227 5509

DALLAS
+1 214 758 1800

DENVER
+1 303 357 4781

HOUSTON
+1 713 276 2199

KELLER
+1 817 380 2816

LOS ANGELES
+1 213 346 5625

MELVILLE
+1 631 577 0500

MILWAUKEE
+1 414 223 7989

NEW YORK
+1 212 345 8000

NERA
+1 212 345 3000
Lippincott
+1 212 521 0000

PHILADELPHIA
+1 215 246 1000

PITTSBURGH
+1 412 355 8840

PRINCETON
+1 609 419 9800

SAN FRANCISCO
+1 415 743 7800

TROY
+1 248 906 7910

WASHINGTON D.C.
+1 202 263 6764

WHITE PLAINS
+1 914 448 4000

AUTHORS

JAMES BASDEN
Partner
Phone: +44 7770 638 900
Email: james.basden@oliverwyman.com

BERNARD BIRCHLER
Partner
Phone: +33 1 45 02 32 28
Email: bernard.birchler@oliverwyman.com

ERIC CIAMPI
Principal
Phone: +33 1 45 02 32 34
Email: eric.ciampi@oliverwyman.com

JORIS D'INCÀ
Partner
Phone: +41 44 5533 749
Email: joris.dinca@oliverwyman.com

NICK HARRISON
Partner
Phone: +44 20 7852 7773
Email: nick.harrison@oliverwyman.com

BEN HOFFMAN
Partner
Phone: +1 646 364 8546
Email: ben.hoffman@oliverwyman.com

SEBASTIAN JANSSEN
Engagement Manager
Phone: +49 211 8987 682
Email: sebastian.janssen@oliverwyman.com

GREGORY KOCHERSPERGER
Partner
Phone: +41 44 5533 771
Email: gregory.kochersperger@oliverwyman.com

JASON KUEHN
Vice President
Phone: +1 609 520 2545
Email: jason.kuehn@oliverwyman.com

MICHAEL LIEROW
Partner
Phone: +49 89 939 49 757
Email: michael.lierow@oliverwyman.com

XAVIER NOUGUES
Partner
Phone: +33 1 45 02 33 11
Email: xavier.nougues@oliverwyman.com

BILL RENNICKE
Partner
Phone: +1 617 424 3510
Email: bill.rennicke@oliverwyman.com

SUMIT SAHNI
Partner
Phone: +44 20 7852 7424
Email: sumit.sahni@oliverwyman.com

TERRY STONE
Partner
Phone: +1 214 758 1878
Email: terry.stone@oliverwyman.com

ARCHAG TOULOUMIAN
Associate
Phone: +33 1 45 02 35 58
Email: archag.touloumian@oliverwyman.com

ARTHUR WHITE
Partner
Phone: +44 20 7852 7597
Email: arthur.white@oliverwyman.com

ADAM WITKOWSKI
Senior Consultant
Phone: +41 44 5533 592
Email: adam.witkowski@oliverwyman.com

RANDALL STONE
Director Experience Innovation
Phone: +1 212 521 0039
Email: randall.stone@lippincott.com

TIMOTHY TAYLOR
Engagement Manager
Phone: +1 646 364 8540
Email: timothy.taylor@oliverwyman.com

PONNIAH VIJENDRAN
Principal
Phone: +44 7702 443 261
Email: ponniah.vijendran@oliverwyman.com

RICK WISE
Chief Executive Officer
Phone: +1 212 521 0035
Email: rick.wise@lippincott.com

TEN IDEAS FROM OLIVER WYMAN

EDITORS

EILEEN AHUJA
Senior Editor
Phone: +1 617 424 3554
Email: eileen.ahuja@oliverwyman.com

REBEKAH BARTLETT
Senior Editor
Phone: +1 617 424 3416
Email: rebekah.bartlett@oliverwyman.com

EMILY THORNTON
Director of Research
Phone: +1 646 364 8279
Email: emily.thornton@oliverwyman.com

DESIGN

BRENT FELKER
Video Manager
Phone: +1 646 364 8295
Email: brent.felker@oliverwyman.com

SUJIN LEE
Design Lead
Phone: +1 646 364 8283
Email: sujin.lee@oliverwyman.com

JAMES TROXEL
Designer
Phone: +1 212 345 3071
Email: james.troxel@oliverwyman.com

MELISSA UREKSOY
Designer
Phone: +1 941 751 5896
Email: melissa.ureksoy@oliverwyman.com

DIGITAL PRODUCTION

TOM GROPPE
Director of Digital Marketing
Phone: +1 212 345 1340
Email: tom.groppe@oliverwyman.com

CAROLINE SUN
Associate Business Systems Analyst
Phone: +1 212 345 7011
Email: caroline.sun@oliverwyman.com

To read the digital version of **Ten Ideas** from Oliver Wyman, visit

www.oliverwyman.com/ten-ideas-vol-2.html

ABOUT OLIVER WYMAN

Oliver Wyman is a global leader in management consulting. With offices in 50+ cities across 26 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm's 3,700 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]. For more information, visit www.oliverwyman.com. Follow Oliver Wyman on Twitter @OliverWyman.

www.oliverwyman.com

OLIVER WYMAN