

THE ENTERPRISE OF THE FUTURE

AUTOMOTIVE INDUSTRY EDITION



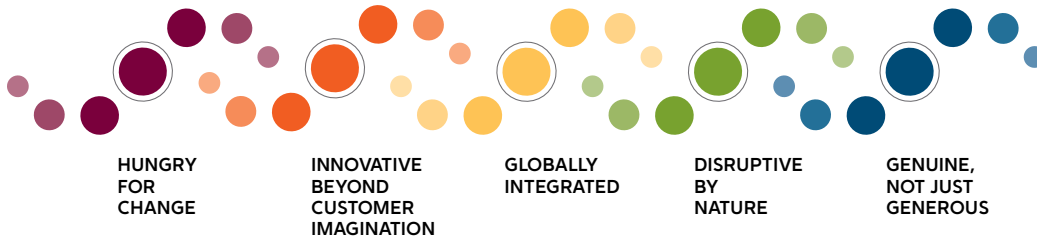
GLOBAL CEO STUDY

INTRODUCTION

What will the Enterprise of the Future look like? To answer that question, we spoke with more than 1,000 CEOs from around the world as part of our biennial Global CEO Study series.¹ Across industries, geographies and organizations of different sizes, the view was surprisingly similar: the Enterprise of the Future is hungry for change, innovative beyond customer imagination, globally integrated, disruptive by nature, and genuine, not just generous.

However, these aspirations hold specific opportunities and challenges for automotive companies. Based on the responses of the 59 automotive CEOs who took part in our study, we've taken a closer look at the implications for this industry.

These findings draw on the rich insights from our CEOs through statistical and financial analyses as well as the voices of the CEOs themselves. Each chapter concludes with thoughts about how automotive organizations can move forward toward becoming an Enterprise of the Future and a case study to illustrate a leading company.





HUNGRY FOR CHANGE

Automotive CEOs anticipate more change over the next three years than most CEOs, but they also report less past success managing it. Will they be able to shrink this growing gap?

.....
“Our company has moved from a traditional light auto maker to a comprehensive manufacturer of both commercial and passenger vehicles, from domestic markets to international markets, and from self-reliance to cooperation with foreign companies.”

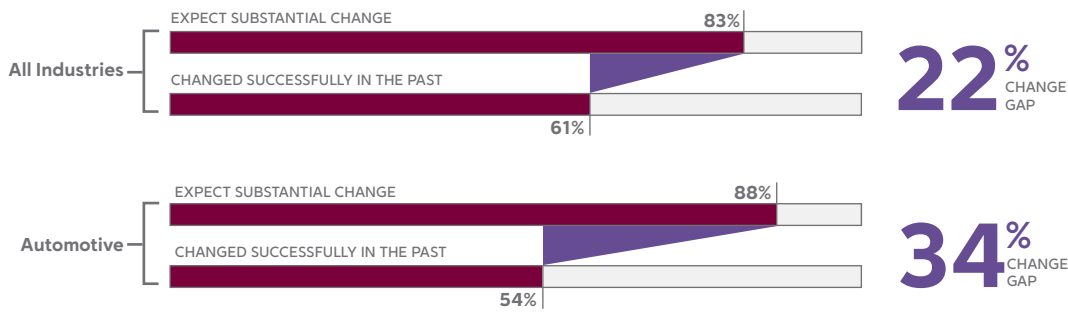
CEO, Chinese OEM
.....

Automotive CEOs are wrestling with change on many fronts: volatile market demand, escalating talent shortages and a competitive landscape that is more global than ever. Consequently, nearly nine out of ten automotive CEOs expect substantial change for their organizations over the next three years.

Yet only half say their companies have managed such change successfully in the past (see Figure 1), leaving a “change gap” of 34 percent. Automotive companies’ ability to change is simply not keeping pace with the level of change they’re confronting. In fact, automotive has one of the largest gaps of all the industries we studied – second only to the media and entertainment industry.

FIGURE 1 AUTOMOTIVE COMPANIES FACE STEEP CHANGE HURDLE

Not only does Automotive anticipate more change than other industries, it is also less successful at managing it.

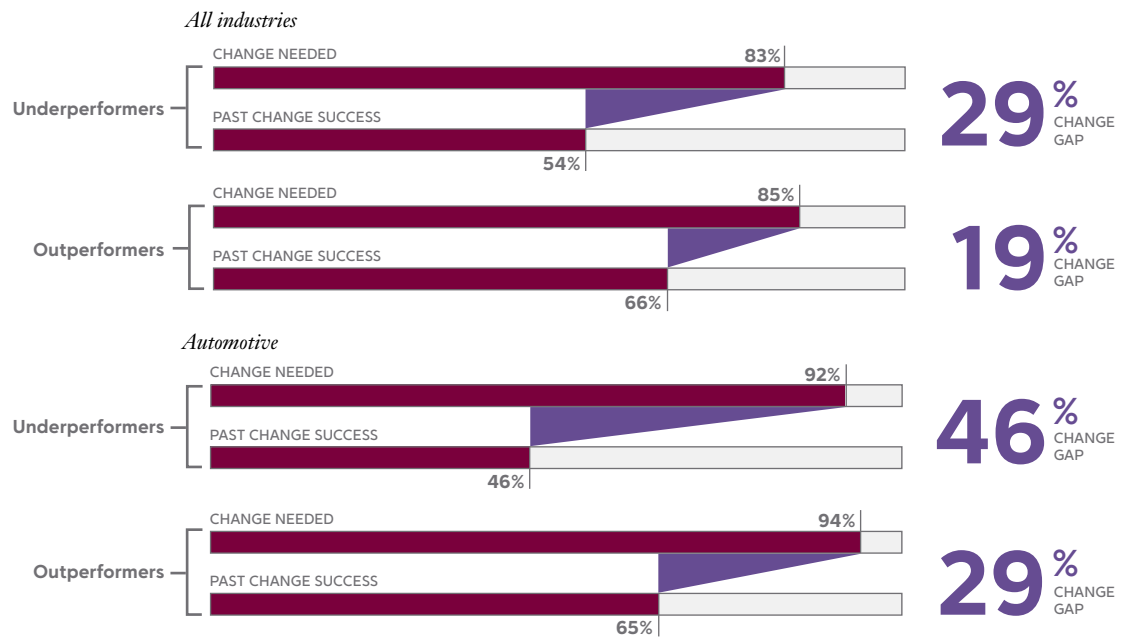


When we look at the financial underperformers across our automotive sample, the gap looms even larger (see Figure 2).² Forty-six percent of those companies lack the change management expertise necessary to respond to the turbulence they see on the horizon.

Automotive outperformers' ability to change successfully mirrors that of financial leaders across industries (65 percent versus 66 percent). But even these automotive standouts seem inadequately prepared for the staggering amount of change expected over the next three years.

FIGURE 2 EVEN OUTPERFORMERS FACE A SUBSTANTIAL CHANGE GAP

Although automotive outperformers have stronger change management track records than underperformers, they still are confronting more change than peers in other industries.



AUTOMOTIVE ENTERPRISES AS CHANGE MASTERS

Change management is clearly a strategic capability for automotive enterprises of the future. In an environment as volatile as our survey participants anticipate, change capabilities are just as critical to business success as engineering or manufacturing.

Automotive companies have a sizable gap to close. To do so, they'll need to become change masters – experts at planning and executing enterprise-wide change. Each change initiative should have a documented strategy that outlines the reasons for change as well as the specifics about what will change and how. Roles and responsibilities should be clear – and combined with measurements to produce accountability for making change happen.

.....
“Once we understand that we need to change, we’re good at making it happen. But we struggle with defining that picture of success.”

CEO, North American
.....

Case study

CONTINENTAL: RIDING ON A STRATEGY OF CHANGE

During its first one hundred years, German automotive supplier Continental AG has been known as a tire company. But over the past decade, it has become much more than that – thanks to the company’s ability to change.

Already one of the world’s largest tire makers, Continental realized in the mid 1990s that it would need to move beyond its mainline business to continue to grow. As it watched the electronics content of the typical vehicle climb by almost 50 percent in five years, the company decided to focus its expansion in that area.³ However, Continental did not leap headfirst into lines of business in which it had no experience. Instead, it followed a progressive change strategy, steadily expanding from one adjacent area to the next – from tires to brakes to the electronics that controlled the brakes and eventually to electronics used throughout the vehicle.

Through a series of acquisitions over the past decade – including ITT Automotive in 1998, followed by Temic, then Motorola’s automotive electronics business and Siemens VDO – Continental has transformed itself from tire manufacturer to strategic automotive supplier.⁴ Its future is no longer riding solely on the success of its tire business; its capabilities extend throughout the vehicle – from brake controls to telematics to infotainment.

Continental is now the fourth largest auto supplier worldwide.⁵ Between 1998 and 2008, its automotive sales grew more than 30 fold, from US\$750 million to US\$24 billion.⁶



INNOVATIVE BEYOND CUSTOMER IMAGINATION

The automotive industry's investment in rising consumer purchasing power is extremely high and still growing. Could this intense focus on new markets cause companies to neglect the needs of increasingly informed consumers?

Automotive CEOs are extremely upbeat about rising purchasing power around the world – especially among the growing middle class in developing economies. Nine out of ten believe this rising prosperity trend will have a positive impact on their businesses.

For automakers, developing economies are key target markets. Some experts contend that China will surpass Japan as the second largest automotive market in terms of sales by 2010 and will rival the top market, the United States, by 2015.⁷

Innovations such as the Tata Nano (priced at approximately US\$2,500) are prompting Indian consumers to trade their two-wheelers for their first automobiles. Some forecasts suggest that vehicle sales will triple by 2015, pushing India into the top ten automotive markets.⁸

Vehicle sales in Russia – arguably the fastest-growing new car market – increased by 35 percent in 2007 and are on course to exceed that rate in 2008. By 2012, Russia’s car market is expected to be the third largest in the world, behind only the United States and China.⁹

AUTOMOTIVE CEOS LESS ENTHUSED ABOUT MORE INFORMED CUSTOMERS

.....
 “We can’t copy what others have done and expect to be viewed as a leader.”

CEO, North American OEM

As consumers around the world become more prosperous, they’re also becoming more demanding and better informed, thanks to the Internet, with higher expectations and more discriminating tastes. As one North American OEM CEO noted, “We can’t sell old generation products in emerging markets anymore.”

Automotive CEOs are a bit more hesitant about this second trend – only 67 percent view it as positive (as compared to 89 percent for rising consumer prosperity). Across industries, companies are struggling to find new ways to serve this “information omnivore,” the consumer who has unprecedented access to information and an increasing interest in collaboration across social and business networks.

Consumers’ relentless appetite for information is about far more than just products. Through the Internet, billions can now pass judgment on the actions and decisions of automotive companies and the industry as a whole. Virtually every aspect of an enterprise’s business

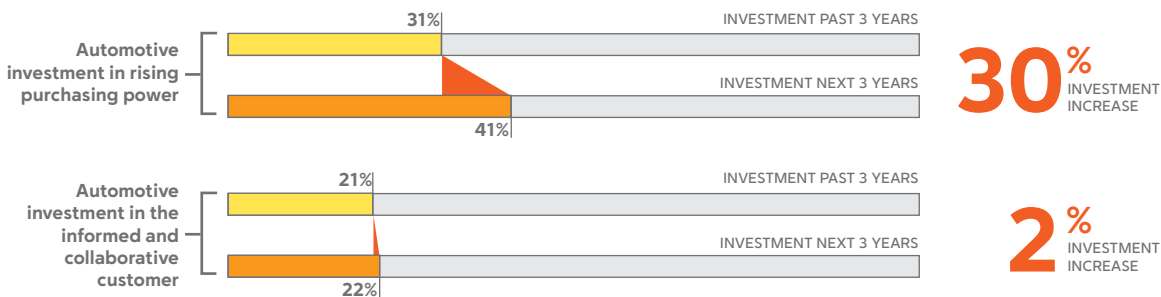
is on display – how it develops, manufactures and distributes its products; treats employees, suppliers, shareholders and activists; manages its finances; addresses societal issues and more.

INVESTMENT MONOPOLIZED BY NEW MARKETS

In terms of spending related to these two trends – rising prosperity and increasingly informed customers – automotive CEOs are decidedly more focused on the opportunities associated with greater consumer purchasing power (see Figure 3). Over the past three years, they have devoted nearly one-third of their total investments to capturing this opportunity – and are planning a 30 percent increase over the next three years.

FIGURE 3 AUTOMOTIVE INVESTMENT IS FOCUSED ON RISING CONSUMER PROSPERITY

Meanwhile, automotive CEOs are planning only a marginal increase in investment targeting today's more informed consumer.

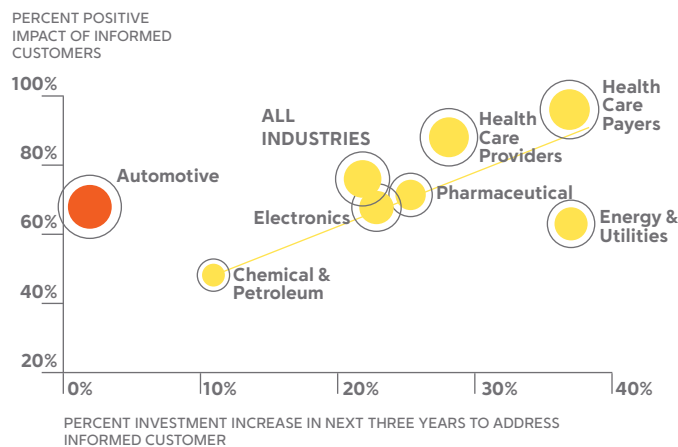


In contrast, investment growth associated with serving the increasingly informed and collaborative customer is essentially flat. In fact, it's the lowest rate of increase across all the industries we studied. Indeed, the automotive industry's investment pattern differs sharply from the norm (see Figure 4).

These findings suggest some critical questions for automotive CEOs: Could the intense focus on rising prosperity cause automotive companies to neglect the needs of informed customers? Is the growth from new markets sustainable if the expectations of more sophisticated customers are not met? How can automotive enterprises maximize the return on their substantial customer investments?

FIGURE 4 AUTOMOTIVE INVESTMENT IN CUSTOMER TRENDS DIFFERS FROM OTHER INDUSTRIES

Most CEOs are increasing investment in both areas; automotive CEOs are more single-minded.



AUTOMOTIVE COMPANIES AS CUSTOMER COLLABORATORS

Greater innovation across both developed and developing markets – for the newly affluent as well as the more informed – depends on the automotive industry’s ability to discover and apply customer insights. It’s a challenge that will involve every link of the industry value chain.

Automotive OEMs must rethink how customer information is gathered and analyzed – and have processes in place to apply the resulting insights. To drive greater innovation, OEMs will also need to involve their suppliers in the process. Collaboration will be critical, as the CEO from a Japanese automotive supplier explained. “Customers demand ‘connectedness.’ In the past, automotive OEMs drove technology into the vehicle. Now, OEMs are asking for our insights.”

Dealers are the most direct link to the consumer. But informed and collaborative consumers are not interested in a traditional transactional relationship. These buyers are more likely to walk into a dealership with purchasing decisions – perhaps even the purchase itself – already made. To them, the opinions of friends and even online reviews by strangers matter more than a dealer’s sales pitch. To influence buying behavior, dealers and OEMs must learn to engage these consumers in new ways, such as through online social networks.

.....
“Customers’ needs are changing and increasing. And so are the market opportunities – such as China’s rural market and other emerging niche markets.”
CEO, Chinese OEM
.....

As custodian of virtually all consumer data generated during the initial years of vehicle ownership, dealers have an inherent advantage. This competitive edge grows as consumer data is aggregated and analyzed. To date, however, most dealers have been reluctant to share this information with OEMs, fearful of being “cut out of the loop.” Successful brands and dealer networks will find ways to overcome this issue and pool their collective consumer insights so that both can benefit.

Case study

BMW: SMALL CAR, BIG INSIGHTS

With its Mini Cooper, the BMW Group is piggybacking on the rising trend of the informed and collaborative customer. The company recognized that “consumers” in other industries were tiring of passive roles and were interested in becoming more active participants – and BMW bet big that the same would be true for car buyers.

Its gamble seems to have paid off. The Mini Cooper has helped create a new category of “personality” cars built to suit each buyer’s unique tastes. Customers can participate directly in the “design” by choosing from 372 interior and 319 exterior options.¹⁰ The level of customization is so vast that a buyer has only a 1 in 100,000 chance of ordering the exact same Mini as someone else.¹¹ It’s an approach that not only offers buyers a highly personalized end product – but also provides BMW with tremendous insights into its customers’ needs and wants.

For BMW, this customer collaboration is not just a surface-level gimmick. It also impacts product planning and manufacturing. Instead of runs of 10,000, Minis are built one at a time. Each car coming down the line looks different. Its parts are kitted in advance and delivered to the line just in time for assembly. Scheduling and shipping must be precise.¹²

So, are consumers interested in this level of involvement? It appears so. A remarkable two-thirds of all Mini customers choose to personalize their car – a clear sign that consumers are ready to collaborate, if OEMs, suppliers and dealers are.¹³



GLOBALLY INTEGRATED

Automotive CEOs are well aware of the impact of globalization on their industry. But what will it take to become truly globally integrated?

.....
“For Chinese automakers, market competition has not been the simple division between domestic and overseas markets. The Chinese auto market has been incorporated into the global auto market knowingly or unknowingly...”

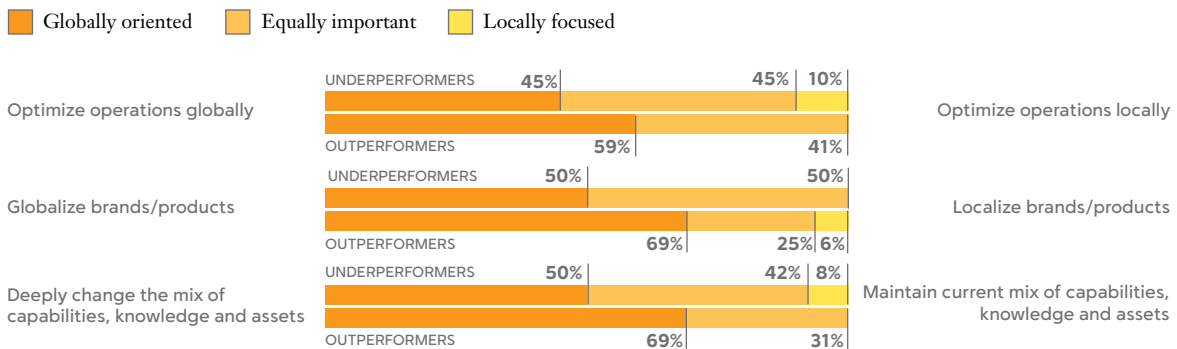
CEO, Chinese OEM
.....

Automotive CEOs ranked globalization as the external force that will have the greatest impact on their companies over the next three years. And 86 percent are reconfiguring their businesses to take advantage of global opportunities. Their responses suggest that the automotive industry intends to be one of the most global in terms of business design, trailing only the electronics industry.

Compared to our overall sample, automotive CEOs are more focused on optimizing operations globally, globalizing their products and brands, and deeply changing their mix of capabilities, knowledge and assets. Automotive outperformers are planning even more aggressive moves in these three areas (see Figure 5). In other words, the companies that are doing better financially are pursuing higher degrees of global integration.

FIGURE 5 OUTPERFORMERS IN PURSUIT OF GREATER INTEGRATION

When comparing automotive outperformers and underperformers, we found the most dramatic differences in three areas of global integration.



AMBITIONS ARE HIGH, BUT THE CHALLENGE IS GREAT

Despite automotive leaders’ strong global integration intentions, insufficient talent – particularly management skills – presents a substantial hurdle for automotive companies. “We need global managers,” the CEO of one North American automotive supplier explained. “Baby boomers do not have this skill and are learning the hard way since they grew up in the regional model. The new generation is already thinking globally, but they do not have the experience.”

.....
 “Our management talent has to be upgraded to lead in the new realities of the global automotive industry...Global integration is the biggest opportunity because there is so much value at stake.”

CEO, North American OEM

The percentage of automotive CEOs who plan to partner to capitalize on global integration opportunities is roughly the same as the overall percentage across industries – around 90 percent. But a much smaller group of automotive CEOs intend to partner extensively (32 percent versus 55 percent across industries).

Among automotive suppliers, the extensive partnering group shrinks even smaller. As the CEO of one North American supplier put it, “We invented ‘not invented here.’” The automotive industry’s moderate plans for partnering seem particularly troublesome given the financial implications we see in our overall sample. Across industries, outperformers are 20 percent more likely to partner extensively than underperformers.

AUTOMOTIVE ENTERPRISES AS GLOBAL INTEGRATORS

The strategies of outperformers suggest that automotive companies must work toward global integration, not just globalization. However, three main hurdles stand in the way: a shortage of global leadership skills, insufficient collaboration and opposing standards.

Automotive companies need leaders who think globally. To develop these capabilities, high potential executives need stretch assignments that test their ability to work cross-culturally – managing worldwide teams as well as understanding and serving global markets. Because the regional mindset is so pervasive and entrenched in the automotive culture, companies should also consider incorporating leadership talent from outside the industry.

To be better integrators, automotive companies must become better collaborators. They will need to develop a common partnering platform that includes rules, intellectual property protection, risk and reward sharing and the ability to quickly engage and disengage. The ability to partner will become even more critical as industries collide and converge. And as automotive companies form alliances with those outside their industry, the nature of the relationship will be different. OEMs and major automotive suppliers will no longer be able to rely on industry clout and positioning to dominate relationships. They must know how to work cooperatively as partners, not just manage suppliers. Collaborative relationships will be the nexus of innovation.

Arguably the most critical – and perhaps the most costly – obstacle to global integration is having multiple standards. Before R&D can effectively leverage expertise from anywhere in the world, before one region can adopt best practices from another, before manufacturing capacity can be used to meet both local and global demand, before true global integration can happen, the automotive industry must unite its standards.

Case study

GM: GLOBAL INTEGRATION STARTING WITH DESIGN

As the world's largest automaker, General Motors (GM) has a tremendous global footprint. But the company also understands global integration is just as important as global reach.

The company is working to unify its regional vehicle architectures, disparate components and disconnected processes. The 2009 Opel Insignia will be the first vehicle built based on the company's new midsize architecture known as Epsilon II, or Global Epsilon. The five previous platforms replaced by Epsilon II had underbody geometries and mounting points that were all within a few millimeters – and yet these slight differences meant the vehicles could not be built on the same assembly lines. With the new common global platform, GM expects to save approximately US\$1 billion. As GM introduces new global architectures for each vehicle family, it can transfer tooling among global “flex” plants and build automobiles anywhere.¹⁴

The development of these new architectures also allows GM to connect its geographically dispersed engineering teams. For example, its Korean team took the architectural lead on one of GM's small vehicle platforms. As a result, the Korean IT systems and development processes became better integrated with the whole of GM.¹⁵

The company's new organization for hybrids, extended-range electric vehicles and advanced battery technology is another example of its continuing march toward global engineering. This worldwide team will be based in four locations: two in the United States, one in Germany and the fourth in China.¹⁶



DISRUPTIVE BY NATURE

The majority of CEOs across industries are implementing extensive business model innovations. Automotive CEOs, however, seem more entrenched in current models. Will the next major transportation innovation come from outside the industry?

Despite the external forces that are unsettling the industry, only half of the automotive CEOs are planning significant business model changes (see Figure 6). In fact, Automotive is one of the least active industries in terms of business model innovation – at the back of the pack with other capital-intensive sectors such as utilities, petroleum and aerospace.

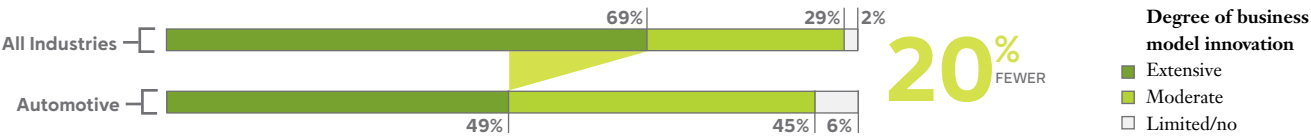
.....

“We are only doing ‘selective’ business model innovation. It is too risky to try to innovate with our largest customers and our core business.”

CEO, North American Supplier

.....

FIGURE 6 FAR FEWER AUTOMOTIVE CEOS WILL SIGNIFICANTLY ALTER THEIR CURRENT MODELS
 Across industries, more than two-thirds of CEOs are planning extensive innovations while, in the automotive industry, less than half are doing so.



Of the three types of business model innovation discussed with CEOs – enterprise model, revenue model and industry model – the one attracting the least attention is industry model innovation. This is not particularly surprising since it is the most difficult to achieve. Only 16 percent of automotive CEOs are contemplating innovations that redefine their existing industry, cross over into another industry or establish an entirely new industry.

Another 27 percent of automotive business model innovators are reshaping their revenue models with new approaches to pricing or reconfigurations of their value mix. Although the industry continues to promote a plethora of financial incentives, major breakthroughs in revenue model innovation have been few and far between.

As a result, some consumers are turning to other business models that better meet their transportation needs. Vehicle sharing and subscription-based mobility services – such as Zipcar in the United States – provide drivers the flexibility to choose the type of vehicle they need on a particular occasion, and avoid the maintenance burden of vehicle ownership.¹⁷ And as budgets tighten and citizens become more environmentally conscious, adoption is likely to accelerate. The rising popularity of these services on college campuses is particularly critical; the next generation of automotive customers may be predisposed to alternatives that eliminate the need to buy a car.

Enterprise model innovation is the focus of the largest percentage of automotive CEOs (36 percent). These innovators are attempting to specialize and deliver greater value by rethinking what is done in-house and through partners.

AUTOMOTIVE CEOS FOCUSED ON DIFFERENTIATING ENTERPRISE MODELS

Three-quarters of those pursuing enterprise model innovations told us they intend to specialize in areas that are truly differentiating. One example of an automotive company that has successfully followed this strategy is mirror maker Gentex. It specializes in high-value mirrors with high-tech safety and convenience features. This single-minded focus has helped the company achieve superior financial performance in what most would consider a commodity business.¹⁸

Among the enterprise model innovators, two-thirds are planning major collaborations with external partners over the next three years. Historically, the automotive approach to partnering has been rather insular – with OEMs developing strategic relationships mainly with traditional automotive component suppliers. But some unconventional collaborations are beginning to appear, such as Ford’s tie-up with Microsoft on Sync, its voice-activated in-car technology.¹⁹ We expect to see even more cross-industry partnering as traditional boundaries blur.

.....
“We must focus on applying investments uniquely to differentiate ourselves, not inventing things we shouldn’t be.”
CEO, North American OEM
.....

AUTOMOTIVE COMPANIES AS DIFFERENTIATORS AND DISRUPTORS

Growing concerns about the economy and the environment are significantly altering consumer expectations about transportation – and overturning some fundamental tenets of the automotive industry. These shifts are creating tremendous opportunity for automotive leaders to differentiate and disrupt the competitive playing field through innovative revenue, enterprise and industry models.

For example, consumers today often feel compelled to purchase vehicles based on their “peak” requirements. They buy a truck because of an occasional need to haul large loads or a midsize sedan for added comfort during family vacations. But new revenue models could offer consumers access to a garage of vehicles rather than just one – different vehicles for a variety of uses, a transportation time-share of sorts.²⁰ Widespread adoption of alternative power trains may also spark revenue model innovation. For instance, the purchase, lease or financing of a battery could be separate from the vehicle it powers.

As personalization and driving “experiences” become more important to consumers, automakers will have greater incentive for enterprise model innovation. Differentiation will increasingly depend on innovative partnerships and alliances – particularly with those outside the industry.

In fact, the intersections between industries are fertile ground for industry model innovation. In coming years, overlap among the automotive, telecom, electronics, media and entertainment, and energy industries is likely to yield entirely new types of businesses.

Although major industry upheaval is unlikely in the short term, automotive leaders are already preparing for significant business model innovation. They are making their businesses more flexible and adaptable, experimenting with new models and building relationships and alliances with an eye toward a very different future.

Case study

BUYING MILES LIKE MINUTES: A NEW INDUSTRY MODEL FOR ELECTRIC CARS

A joint venture (JV) between the Renault-Nissan Alliance and California-based Project Better Place is piloting a new business model for electric cars, which is similar to that of mobile phones. Consumers buy subsidized hardware, in this case a car, and pay a monthly fee based on miles driven.²¹

As part of this agreement, Project Better Place provides the batteries and recharging infrastructure – plugs on city streets and service stations along highways to replace spent batteries with fresh ones.²² Renault and Nissan provide the cars. And governments – Israel, Denmark and Portugal so far – provide incentives, such as tax breaks, that make it cheaper to buy electric-powered vehicles than gasoline-engine alternatives.²³

In Israel, the JV estimates the cost of operating an electric car to be half that of a traditional automobile. In 2009, the partners expect to be serving a few thousand Israeli consumers, growing to 100,000 by 2010.²⁴

In July 2008, the Renault-Nissan Alliance announced another partnership that involves the State of Tennessee and the Tennessee Valley Authority (the largest public power provider in the United States).²⁵ These partners will conduct an electric vehicle feasibility study, which will include a local electricity-charging network. As negotiations with other entities across North America, Europe and Asia continue, the Renault-Nissan Alliance is adapting both its products and its business model to suit each market's specific needs.



GENUINE, NOT JUST GENEROUS

Automotive CEOs are working hard to reduce the carbon footprint of their products, with more hybrid, electric and fuel-efficient models available than ever before. But is the industry ready to take on a much broader set of social responsibilities?

It's no surprise that automotive CEOs are more concerned than CEOs in other industries about environmental issues. However, the degree of difference is dramatic – 32 percent of automotive CEOs see this as a major change driver versus 18 percent across the full sample.

What's even more intriguing is that 83 percent of automotive CEOs – as compared to the 69 percent cross-industry average – believe customers' rising corporate social responsibility (CSR) expectations will have a positive impact on their businesses. And automotive CEOs are planning a 35 percent increase in investment over the next three years to capitalize on this opportunity (see Figure 7). Much of this investment is focused on new markets and segments. As the CEO of one automotive supplier based in Australia told us, "Environmental issues are driving entry into new market segments as avenues of growth."

.....
"One percent of our profit after tax goes to address CSR, health, education and environmental issues."

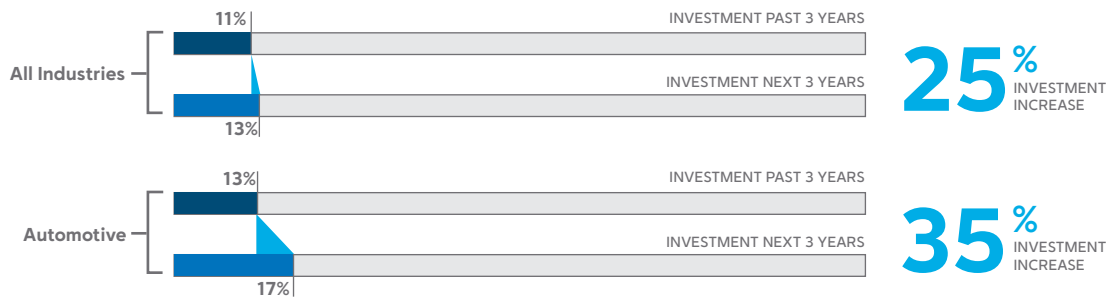
CEO, Indian OEM
.....

Through ongoing product innovation, automotive companies are playing an important role in reducing our planet’s dependence on fossil fuels and helping clear the air of pollution and noise. The number of hybrid and electric vehicles in use is growing rapidly; although still a small percentage of the market, global sales are expected to triple between 2007 and 2012.²⁶

However, green cannot be the only color in automotive CEOs’ palettes. As the CEO of one Chinese OEM warns, companies must “also pay close attention to socioeconomic factors.” An emerging generation of socially minded consumers, workers and investors has growing expectations for ethical corporate behavior and increased transparency across a broad spectrum of issues. “Consumers are driving OEMs to do more,” explained the CEO of a Japanese automotive supplier. “OEMs are taking a more active role – for instance, ensuring no child labor is used anywhere across the extended value chain.”

FIGURE 7 CSR INVESTMENT CONTINUES TO RISE

Automotive CEOs have already invested heavily in CSR, and their spending shows no signs of slowing.



AUTOMOTIVE ENTERPRISES AS CSR LEADERS

With the average passenger vehicle emitting somewhere between 21 and 35 tons of carbon over its ten-year lifecycle, automotive companies have justifiably focused their CSR efforts on making their products more environmentally friendly.²⁷ However, this is only the tail end of the challenge. Factoring in component sourcing, inbound and outbound logistics and vehicle manufacturing, the typical automobile’s carbon footprint grows by another 9 tons.

To attack the environmental problem holistically, automotive companies must examine their operations end to end. A host of decisions come into play – the type of energy consumed in manufacturing and distribution, the materials used for packaging, inventory policies, logistics options and more.

But perhaps even more critical, automotive companies need to think beyond their ecological impact and consider the overall “footprint” they leave on the communities in which they operate and from which they source. For many consumers purchasing vehicles, investors managing portfolios and employees choosing where to work, decisions are no longer made based solely on a company’s products, but also its demonstrated concern for society. In an industry in which product innovation and new service offerings are rapidly emulated by competitors, true differentiation may very well come from a company’s approach to corporate social responsibility.

.....
“CSR – in this industry – by default will be the dominant driver.”
CEO, North American Supplier
.....

Case study

TOYOTA: MOVING TOWARD SUSTAINABLE TRANSPORTATION

Toyota Motor Corporation – one of the world’s most respected automotive brands – is tackling environmental issues head on in one of its largest markets: North America. It’s approaching the challenge like any other business plan, by setting aggressive targets and measuring its progress. The company’s comprehensive environmental action plan attacks the problem along a number of fronts: energy and climate change, recycling and reduced use of resources, substances of concern, atmospheric quality, environmental risk management and cooperation with society.²⁸

Its goals are specific and measurable. For example, between 2002 to 2011, the company aims to reduce total energy use in North American manufacturing and operations by 27 percent per vehicle produced.²⁹

Toyota’s vision for sustainable transportation has made it a leader in hybrid vehicle technology. More than one million Toyota hybrids have been sold worldwide.³⁰ The company’s proactive position on an issue of critical importance to society at large has not only elevated the perception of its brand, but also boosted its bottom line. From 2002 to 2007, Toyota’s net income has increased at a compound annual growth rate of more than 21 percent.³¹

BUILDING YOUR ENTERPRISE OF THE FUTURE

Automotive CEOs fundamentally agree with the CEOs in our overall survey sample about the characteristics that will distinguish successful businesses in the future. Their responses suggest that the Enterprise of the Future – as we have called it – will be hungry for change, innovative beyond customer imagination, globally integrated, disruptive by nature and genuine, not just generous.

However, the challenges automotive CEOs face differ from those of other CEOs in various respects. They anticipate more change but feel less confident about managing it successfully. The asset-intensive nature of their industry makes business model innovation more difficult. They're a bit more uncertain about how to respond to today's increasingly informed and collaborative consumer. And they're under tremendous pressure to help solve the world's environmental challenges.

The critical question is: are automotive companies adequately prepared? Do they have the adaptable processes and infrastructure they need to manage more change at a faster pace, and capitalize on the new opportunities that globalization, increasing affluence and greater connectivity are creating? The partners they need to innovate? The flexibility they need to adapt business models? Integrated global execution to seize opportunities wherever they appear?

FIGURE 8 ARE YOU READY?

We've plotted the industry's overall progress toward the Enterprise of the Future below. Where would you place your organization?



We look forward to learning more about where you think the automotive industry is heading – and working with you, as you build your Enterprise of the Future.

FOR MORE INFORMATION

For additional information about the IBM Global CEO Study, please visit ibm.com/enterpriseofthefuture

To discuss these industry implications further, we invite you to e-mail one of the following contacts:

Global	Sanjay Rishi	sanjay.rishi@us.ibm.com
Americas	Mahesh Lunani	mlunani@us.ibm.com
	Karen Newman	newmank@us.ibm.com
Asia Pacific (excluding Japan)	Seong Yol Kim	ksyol@kr.ibm.com
Japan	Tomoaki Takemoto	TTOMOAKI@jp.ibm.com
Northeast Europe	Alexander Scheidt	SCHEIDT@de.ibm.com
Southwest Europe	Olivier Payraud	olivier.payraud@fr.ibm.com
IBM Institute for Business Value	Kalman Gyimesi	gyimesi@us.ibm.com

ACKNOWLEDGMENTS

We would like to thank the Automotive CEOs from around the world who generously shared their time and insights with us. We'd also like to acknowledge the contributions of Gloria Lara and Kalman Gyimesi who led the development of this Automotive Industry Edition of the IBM Global CEO Study.

ABOUT IBM GLOBAL BUSINESS SERVICES

With business experts in more than 170 countries, IBM Global Business Services provides clients with deep business process and industry expertise across 17 industries, using innovation to identify, create and deliver value faster. It offers one of the largest Strategy & Change practices in the world, with over 3,250 strategy professionals. The IBM Institute for Business Value, part of IBM Global Business Services, develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues.

NOTES AND SOURCES

- ¹ "The Enterprise of the Future: The IBM Global CEO Study." IBM Institute for Business Value. May 2008.
- ² For companies with publicly available financial information, we compared revenue and profit track records with the averages for those in the same industry across our sample. Companies that performed above average on a particular financial benchmark were tagged as *outperformers*, and those below the average were labeled as *underperformers*. Throughout our analyses, we looked for insights based on these top- and bottom-half groupings.
- ³ Kozyra, William. Presentation at the Automotive News World Congress. January 22, 2008; Kranz, Rick. "Continental CEO: Our diversification worked." *Automotive News*. January 28, 2008.
- ⁴ Kozyra, William. Presentation at the Automotive News World Congress. January 22, 2008.
- ⁵ "Top 100 Global Suppliers." *Automotive News supplement*. June 23, 2008.
- ⁶ Kranz, Rick. "Continental CEO: Our diversification worked." *Automotive News*. January 28, 2008.
- ⁷ Ban, Linda, Bruce M. Belzowski, Stefan Gumbrich and Jimin Zhao. "Inside China: The Chinese view their automotive future." IBM Institute for Business Value. November 2005.

- ⁸ Belzowski, Bruce M., Allan Henderson and Penny Koppinger. "Inside India: Indians view their automotive future." IBM Institute for Business Value. June 2007.
- ⁹ Bush, Jason. "Russian Auto Market Now Europe's Largest." *BusinessWeek*, July 11, 2008.
- ¹⁰ Maynard, Micheline. "BMW Has Maxi Expectations for Its Next, Slightly Larger Mini Cooper." *The New York Times*. October 11, 2006.
- ¹¹ "Individuality. Your wish, our command." <http://www.mini.com/com/en/manufacturing/index.jsp>
- ¹² Maynard, Micheline. "BMW Has Maxi Expectations for Its Next, Slightly Larger Mini Cooper." *The New York Times*. October 11, 2006.
- ¹³ Ibid.
- ¹⁴ Brooke, Lindsay. "Pushing the envelope." *Automotive Engineering International*. May 2008.
- ¹⁵ Ibid.
- ¹⁶ "GM Forms New Vehicle Engineering Organization For Hybrids, Extended-Range Electric Vehicles And Batteries." General Motors Press Release. January 24, 2008.
- ¹⁷ Fowler, Bree. "Zipcars taking off in urban areas, as popularity of car-sharing grows amid higher gas prices." Associated Press Market Spotlight. http://biz.yahoo.com/ap/080519/zipcar_market_spotlight.html?.v=1
- ¹⁸ IBM Institute for Business Value analyses based on Thomson ONE Banker financial data.
- ¹⁹ Sync Web site. <http://www.syncmyride.com>
- ²⁰ Rishi, Sanjay, Benjamin Stanley and Kalman Gyimesi. "Automotive 2020: Clarity beyond the chaos." IBM Institute for Business Value. September 2008.
- ²¹ Erlanger, Steven. "Israel Is Set to Promote the Use of Electric Cars." *The New York Times*. January 21, 2008.
- ²² Ibid.

- ²³ Wortham, April. "Nissan launches zero-emission partnership." *Automotive News*. July 22, 2008.
- ²⁴ Erlanger, Steven. "Israel Is Set to Promote the Use of Electric Cars." *The New York Times*. January 21, 2008.
- ²⁵ "The Renault-Nissan Alliance & Tennessee Form Zero-Emission Vehicle Partnership." Renault-Nissan Alliance Press Release. July 22, 2008; Wortham, April. "Nissan launches zero-emission partnership." *Automotive News*. July 22, 2008.
- ²⁶ "Outlook for hybrid and electric vehicles." International Energy Agency – Hybrid & Electric Vehicle Implementing Agreement. June 2008.
- ²⁷ IBM analysis.
- ²⁸ "Environmental vision and action." Toyota. 2007. http://www.toyota.com/about/our_commitment/environment/index.html
- ²⁹ Ibid.
- ³⁰ "Toyota Motor Corporation Surpasses 1 Million Global Hybrid Sales." Toyota press release. June 7, 2007. <http://www.toyota.com/about/news/product/2007/06/07-1-hybridsales.html>
- ³¹ IBM analysis of Thomson Financial data.



© Copyright IBM Corporation 2008

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
December 2008
All Rights Reserved

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at [**ibm.com**/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.