

Looking ahead

Driving co-creation in the auto industry

May 2013

At a glance

OEMs are moving to engage stakeholders like never before using the collaborative power of co-creation.



Introduction

While auto companies develop products and technologies to meet consumer demands in a 24/7 world, co-creation methods can provide outlets to engage customers, dealers, employees and suppliers. Companies that successfully tap the feedback will be able to enhance products, create in-depth customer experiences and gain a competitive advantage. How can companies better integrate technology solutions to drive co-creation that results in collaboration among various stakeholders through social media and other interactive outlets?

Overview

In recent years, existing methods of collaboration with customers have begun to evolve into “co-creation.” Stakeholders are now interacting directly with companies in a two-way dialogue. The most common examples are around discussion forums and product design. But now, services and many other company processes are also taking part in the discussion. There are already many examples where automotive Original Equipment Manufacturers (OEMs) are taking this approach.

Social media is raising the bar on co-creation by giving companies the means to interact with virtually every one of their stakeholders. Some companies are already taking advantage of channels like YouTube, Pinterest, Twitter and Facebook, or developing their own interactive online sites for customer communities. Companies that successfully tap into customer feedback and encourage interactive involvement will be able to enhance products, create in-depth customer experiences and improve their competitive position.

There’s potential to engage other stakeholders too, but these aren’t as common. For example, while a number of OEMs are actively collaborating with suppliers, relatively few are connecting in true enterprise co-creation with their supplier ecosystem. Companies may be able to reduce costs and improve quality by transforming these relationships and interactions. The same is true for dealerships. By involving the dealer networks in enterprise co-creation, OEMs are likely to gain a significant competitive advantage.

Enterprise co-creation: taking collaboration to the next level

Enterprise co-creation is a fundamentally different way of looking at value generation between the organization and its customers, suppliers, dealers, partners, employees, and public sector agencies. It is opening up business processes and reengineering them, so that they work both ways. Tangible benefits include revenue growth, improved retention, and lower operating

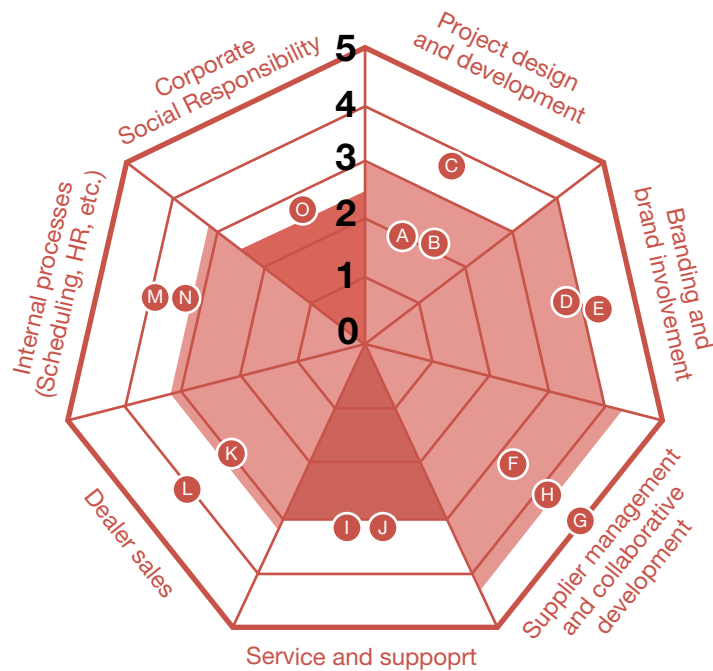
costs for enterprises, as well as increased satisfaction and loyalty for stakeholders. It’s an approach that can be especially valuable for automotive companies, who have looked to connect with customers, suppliers, and dealer networks for decades.

PwC believes that co-creation is ultimately about increasing value through innovative dialogue and partnerships. Co-creation can make a significant impact on relationships across the entire automotive value chain. From product design and development to new vehicle sales and service, co-creation fosters true multi-directional collaboration among customers, suppliers, dealers, service and support organizations and internally among employees. Even brand image can be improved when organizations use co-creation to increase effectiveness of their corporate social responsibility programs.

Co-creation can take place using a variety of engagement platforms, such as online communities, social network sites, crowd-sourcing techniques and contests. But co-creation is more than just getting thousands of “followers” or “fans.” A company’s goal should be to create an engaged, extended community that is committed to the product and company shown by their involvement in collaborative activities. It’s ultimately a partnership between the company and an individual, fueled by innovative experiences that can lead to positive outcomes for everyone involved.

Not all platforms are equally suited to getting there. Engagement platforms can range from simple channels for conveying information or answering questions to cooperative environments to truly collaborative systems (see Figure 1). Even companies that are already well on their way to implementing co-creation are still likely to have gaps in some areas, as the graph shows.

Figure 1: Example of a potential co-creation landscape for an OEM with relatively mature activities



Letters represent particular activities or projects. These are mapped to various levels of maturity:

1. One directional, Informational platform, unsolicited information
2. Transactional platform where information is provided (i.e. a request, and a response)
3. Platform supports co-operation where stakeholders work together toward their own separate goals with increasing interactions
4. Platform supports coordination where stakeholders begin to change their beliefs, thoughts, and most importantly actions, based on information from other stakeholders
5. Platform supports full collaboration where stakeholders work toward a common goal and openly share information.

Source: PwC analysis

While many companies are already exploring co-creation, few of them are truly making use of all the possibilities co-creation offers. For example, automakers are making great strides in co-creation with customers through product development and marketing with interested fans. However, progress in other important areas has been much slower. And though supplier collaboration is common, true co-creation with suppliers is much less prevalent. There is also significant opportunity to leverage the power of co-creation in areas like dealer relations, after-sales service and support, internal processes, and enhancing the company's reputation for corporate social responsibility.

Moving beyond focus groups

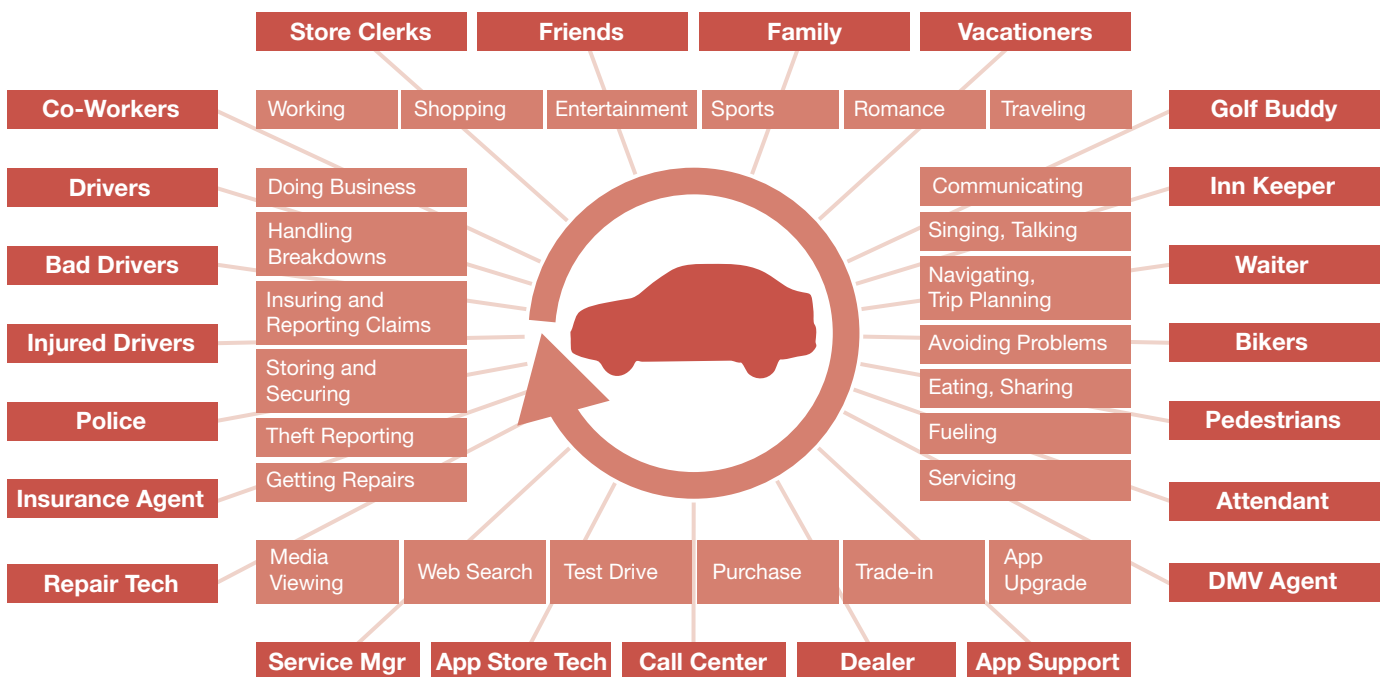
In the past, OEMs often relied on customer data obtained by surveys, focus groups, ethnography studies and secondary market research to develop new products and redevelop existing offerings. But those approaches still sometimes fell short. Although focus groups were used, some new vehicles were designed that didn't appeal to consumers. And even when vehicles were very popular initially, some failed to keep pace with changing consumer preferences and were eventually discontinued.

That's why companies are now looking to go beyond background research and focus groups in initial design stages. Instead, the goal is to engage customers in an interactive, ongoing

dialogue. It's not optional. New car buyers are already using online information channels extensively to research different vehicles. The growing access to almost unlimited information and online communication channels has absolutely empowered the consumer. That is creating a big opportunity for automakers.

Consumers are hungry for real-time, ongoing information sharing and active collaboration. Customer and enthusiast communities are already emerging and beginning to have an impact on automotive innovation. These new and more engaged participants in the product development process are providing input into everything from design concepts and technical expertise to design drawings and technical specifications.

Figure 2: The Automobile—A Multitude of Engagement Channels





“OEMs who leave their customers out of the development process risk falling behind the competition.”

—Chad Mollin, PwC Management Consulting

Co-creating new design concepts

There are a number of examples where OEMs are getting customers involved in the design process. Customers and fans can participate in a virtual world to share ideas, participate in design contests, suggest topics of interest and more. This is an opportunity for OEMs to gain knowledge and generate innovative approaches to product design and integrated solutions. These virtual gathering places allow customers to rally around a new product launch or simply participate in the discussion. OEMs who leverage technology capabilities of the virtual websites can further drive traffic to the retailer when the product comes to market.

And while co-created design concepts aren't yet being mass-produced, the first concept cars have already created a lot of interest. Launched in Brazil in 2010, Fiat's concept car, Fiat Mio, was based on more than 11,000 ideas submitted by 17,000 subscribers in more than 120 countries.¹ Social media sites Facebook and Twitter generated some of the ideas, and videos about the “making of” the car are hosted on YouTube.

Germany's Volkswagen, in English the ‘people's car,’ decided to look to the world's largest car market for ideas. The company's ‘People's Car Project’ started up in China in 2011. Volkswagen asked users of an interactive website to submit their ideas and they did.

The official website received over 35.6 million views, nearly 13 million visitors, more than 200,000 design submissions, and the followers of its official micro blog topped 495,767. This open-innovation platform has activated a nationwide dialogue about future mobility. With the People's Car Project, the Volkswagen brand became the “most digitalized auto brand in China.”² Volkswagen turned three of the ideas into concept cars and launched them at the Beijing Auto Show in May 2012.

We think that OEMs who leave their customers out of the development process risk falling behind the competition. As these examples show, some companies are already well on their way. Automakers need to consider how to reach out and connect with customers.

1. “Is this the future of Automotive Design?” http://www.plminnovation.com/fiat_mio.php; <http://www.ideaconnection.com/open-innovation-success/Fiat-Mio-the-World's-First-Crowdsourced-Car-00273.html>

2. “Volkswagen crowdsources its way to a hover car,” <http://www.gizmag.com/vw-crowdsources-its-way-to-a-hover-car/22439/>

A co-created vehicle from enthusiasts, manufactured by hand

Local Motors takes co-creation several steps farther. It's CEO, Jay Rogers, says the company is changing the way cars are designed, built and brought to market.³ The company crowd-sources, or co-creates car designs and then manufactures the new models on a small scale in micro-factories. The company uses a co-creation approach throughout the value chain—design ideas are crowd-sourced, and suppliers exchange information on parts via an open-source network.⁴

Local Motors' co-creative challenge-based platform, The Forge, was such a successful example other companies started using it too. Paccar's Peterbilt Division is collaborating with Local Motors to conduct an online competition, RIG2—Road Icon Generation 2.⁵ The global competition sought innovative designs for a classic heavy duty truck exterior that used more aerodynamic and modern elements.

Local Motors' own first vehicle, the Rally Fighter, took just 18 months to go from a 2-D drawing to a vehicle ready for pick-up. That compares to

the industry standard of 3 to 5 years. The company wants to streamline even further, with a goal of a 12 month timeline. Customers actually help build their car; creating a unique experience.

That was not the first time an automaker has put some aspect of manufacturing directly in the hands of the car buyer. General Motors has offered buyers of its Chevrolet Corvette the chance to build the engines themselves for an extra price and under supervision—a uniquely literal take on co-creation.⁶

Using co-creation to market products and enhance the brand

Getting the car buyer involved in design and production will surely build significant brand loyalty. In fact, OEMs who collaborate with stakeholders find many ways to enhance both marketing and brand management.

In Canada, Volkswagen used a co-creation strategy to engage the company's fans in creating the third in a series of ads themed 'Drive Until' for the company's Golf compact car. Facebook users helped develop the script for the ad, choose the actors, and select the music. Fans could choose to

be anonymous or to be included in the credits. This co-creative model goes well beyond traditional marketing and buzz creation, by opening the door to a two-way conversation with key stakeholders where their ideas are turned into reality.

In today's consumer-driven marketplace, providing opportunities for the public to share their ideas, enthusiasm, and complaints is the key to building strong relationships. That may mean using existing social media networks like Facebook, Twitter and YouTube, participating in new communities set up by enthusiastic fans, or interacting on cross-industry social websites. This is a way OEMs can act as peers in these new communities, sharing ideas or just listening to what customers are saying about their vehicles. Engagement platforms like these are now shaping perceptions of car brands, so OEMs need to take them seriously.

Automotive companies do not need to be constrained to existing social media platforms either. Some OEMs now have their own interactive online communities. For example, Ford's interactive site, Ford Social helps to build customer-loyalty, promote two-way interaction and help spread key messages.

3. "Wie Co-Creation in der Automobil-Industrie funktioniert: Interview mit Jay Rogers von Local Motors", <http://www.doubleyu.com/wie-co-creation-in-der-automobil-industrie-funktioniert-interview-mit-jay-rogers-von-local-motors/>

4. "Das Case Local Motors: Co-creation and collaboration in the Automotive-industrie," Universität St. Gallen, Double Yuu, T Systems, <http://www.automotiveit.eu/wp-content/uploads/2011/12/Local-Motors-Case-Study-FINAL1.pdf>

5. "Local Motors wants your help designing the next Peterbilt rig" <https://forge.localmotors.com/pages/competition.php?co=68&tab=design-brief>

6. http://blogs.forrester.com/doug_williams/10-07-13-gm_takes_co_creation_literally

Beyond the customer

Customers are just the beginning. Co-creation has the potential to reshape interaction with virtually all internal and external stakeholders including suppliers, dealers, service and support and internal audiences.

Working together with suppliers

Co-creation platforms have been used for years to enhance relationships between OEMs and their suppliers; these run the gamut from online information sharing websites, to co-location facilities in business parks and business model transformations.

During the design stage, co-creation platforms have become particularly important. While in-person design workshops are still common for partners who are located relatively

close, virtual platforms have become dominant. Internal Team web portals and supplier portals, where people share everything from CAD drawings to test results within an environment that can be adapted by all participants, are the most common today.

Using co-creation strategies is one important way that OEMs are including their suppliers much earlier in their innovation processes, which can increase supplier commitment, transparency and trust,⁷ which leads to lower pricing, increased technology sharing and higher supplier relationship rankings.

Over the past decade, Ford has made big improvements in its working relations with suppliers,⁸ citing increased collaboration with key suppliers as one important reason.

In September 2005, Ford introduced its 'Aligned Business Framework' (ABF) to strengthen collaboration and develop a sustainable business model to drive mutual profitability and technology development.⁹ As part of the framework, Ford is involving suppliers earlier in the product development process.

And while co-creation may often start with the design phase, it doesn't end there. Shared manufacturing strategies, like just-in-sequence delivery and joint testing, can also provide great opportunities for OEMs to co-create with their suppliers. So can more transparency. Ford's ABF also includes sharing more information on forecast volumes and product plans with suppliers.

7. 2011 PPI NA Automotive OEM—Supplier Working Relations Study

8. Ibid.

9. "FORD, KEY SUPPLIERS ROLL OUT INNOVATIVE BUSINESS MODEL" http://media.ford.com/article_display.cfm?article_id=21677

Interacting with dealers

A strong relationship with the dealer network has long been seen as critical to OEMs' success. By collaborating with dealers, companies can market vehicles more effectively. Excellent customer service at the dealer level is also critical to developing a strong brand.

It's not always smooth sailing though. In the US, for example, recent hard times in the automotive industry drove thousands of dealerships out of business. Many OEMs found that relationships with the surviving dealerships were tense as a result. By implementing co-creation platforms together with dealers, OEMs can actively foster collaboration downstream. That can help them reach out to the customer together with dealers, and enhance relationships with dealer networks too.

That's especially important, since all around the world dealers are facing new challenges that go well beyond the economic environment. Consumer shopping behavior is changing significantly. Online information resources mean that new and used car buyers now have instant access to vehicle inventory availability and price transparency through online

search engines such as Auto Trader.com, Edmunds.com and KBB.com. That means more pressure on prices, since new car buyers can comparison shop in a way they never could have in the past.

In the past, the dealership was the primary site of interaction with a car brand, but that's expanding now. Third-party sites and the OEMs' own digital platforms—particularly mobile and social—provide the potential for a whole host of other interactions. Making sure that dealers are linked into such efforts is critical. When dealers work together with OEMs and develop robust co-creation platforms, they can enhance traffic into dealer storefronts, improve how the customer interacts with both the dealer and the OEM, increase sales and build the relationship between the dealer and the OEM too.

Connected cars

Just how interactive will cars be? Automakers are starting to explore the possibilities.

Toyota's "Fun Vii" concept car—Vii stands for vehicle interactive internet—made waves at the Tokyo Auto Show in 2011. Its touch screen exterior can change to suit the drivers' mood. The concept car can also connect to the dealer's website for a check-up.

In 2007, Ford and others developed a connectivity platform, called SYNC that allows users to make hands-free telephone calls, control music and perform other functions with the use of voice commands in the vehicle. Now, the automaker is working on incorporating a series of in-car health and wellness apps and services aimed at monitoring people with chronic illnesses, into vehicles.

In the area of diabetes, Ford researchers have developed a prototype system that allows Ford SYNC to connect via Bluetooth to a continuous glucose monitoring device and share glucose levels and trends through audio alerts and visual displays for drivers or passengers. The systems envisioned would be able to interact with drivers' other devices, like smart phones and then relay this information to health care providers by storing the data in the cloud.

Using a co-creation approach to get input not only from customers, but also from a whole range of other stakeholders, will be vital in moving other innovations like these forward.

OEMs and suppliers are already working together to make vehicles more connected—cars are starting to become a “social” product.

Big opportunities in service and support

In the US, a recent survey reported that only around 33% of customers trust dealer repair and service facilities to conduct their repairs.¹⁰ Further, over 80% of respondents indicated they wouldn't use dealers for out of warranty repair work. That's a lot of lost potential opportunity for dealers.

OEMs and suppliers are already working together to make vehicles more connected—cars are starting to become a “social” product. There's a big opportunity to build in connectivity with dealers and other after-sales support providers too. New infotainment and other electronic systems should also work together with dealers and customers to identify the best way to provide transparency to the vehicle operation and service requirements. They'll need to take into account the driver's desire for privacy and leave freedom for selecting a preferred service location, but still connect interactively with dealer networks (and potentially other service providers as well). Some automakers are already working on such concepts (see Connected cars).

When the tire pressure is low or the oil needs a change, for example, the car could not only alert the driver—it could potentially show possible locations to have the service done. If dealers see that a car will be in need of service, they can reach out to the driver and let them know. That might include offering a discount at the right time or including functionality that lets drivers make service appointments directly from the vehicle's interface. Customers benefit too, by obtaining a clear view of what their service requirements are, and can quickly identify a dealer that can perform necessary maintenance or repairs at an acceptable cost.



10. Source: AutoMD.com

Internal collaboration and employee innovations

Co-creation can also be a useful tool to build relationships within an organization. Establishing the right interactive engagement platforms to reach out to employees can be especially powerful as part of internal change programs, or as a way to foster an innovation culture throughout the organization. When companies really engage their employees and not only ask for their ideas, but also implement them, employee satisfaction and morale goes way up. And since satisfied employees are more productive and less likely to leave the company, there's a direct impact on the bottom line.

New tools and resources can take internal collaboration to an entirely new level. But good online collaboration tools alone aren't enough to really fuel an internal culture of co-creation or gain efficiency benefits. Automotive companies also need to listen to the voices of employees who will actually use these tools in their day-to-day interactions. Indeed, collaboration tools work best when they are co-created with employees. Implementing new HR systems to streamline time reports, for example, can potentially save companies a lot of administrative time. But they need to make sure that systems work well for employees. That's easier if staff is included in the development process.

There are many other ways to co-create with employees. With many companies now operating with a smaller staff, looking to every employee as a possible source of new ideas and information can make the difference between surviving and thriving.

Working with stakeholders in the community

Consumers and society in general have become increasingly focused on a firm's economic, social and environmental impact, or the "triple bottom-line". With information that is easy to share, companies that don't uphold high standards in these areas quickly suffer damage to their reputation and subsequently their profitability. The continued growth of Corporate Social Responsibility programs (CSR) across many industries has shown how firm profitability improves with the "greening" of a firm's business. However, while many companies have developed CSR programs, there is a growing sense of complacency in communicating them and their impacts. Further, there is a risk of the perception of "greenwashing"—where what is reported in terms of impact is not the true performance.

With multiple reporting standards that can be used, such as: Global Reporting Initiative (GRI), ISO 26000 and 14000 and Social Accountability International (SAI) just to name a few, there is a significant challenge for firms in deciding what to report and how to report it. Firms that have a co-creative mind set, recognize that social media can be a very effective platform for moving beyond the often long and dull annual CSR reports to more dynamic, transparent and targeted reporting.

Some firms are even now beginning to utilize social media platforms such as facebook and twitter to report their CSR performance¹¹ with a goal to engage actively with participants who become a following to a firm's CSR performance. This not only helps build trust with stakeholders and interested parties but also allows firms to better gauge overall sentiment early on.

OEMs recognize that they are often under the spotlight when it comes to the impacts that automobiles have on society at large. Cars are intimately linked to environmental concerns, public safety and economic sustainability. By leveraging many of the same platforms and techniques used to reach out to consumers, suppliers and dealers, OEMs could build interactive dialogues with other stakeholders that may not be so interested in what the design of a vehicle looks like, or how it's put together, but are rather interested with the impacts on the environment and society that comes with building and adding another vehicle to the road. Through cocreation and the utilization of social media platforms, OEMs can gain the capability to quickly identify what needs to be communicated, gauge overall sentiment and react earlier to concerns that may emerge.

11. <http://www.forbes.com/sites/forbesleadershipforum/2012/01/18/the-top-10-trends-in-csr-for-2012/>



What's next?

Co-creation is already starting to emerge as a mainstream method of collaboration and idea generation in the automotive industry. We believe the pace of implementation will increase significantly over the next five years. Automakers should embrace this new level of openness and stakeholder interaction and leverage the significant tools and resources available. We think those that do this most effectively will be well-positioned to create a sustainable leadership position for the future.

How PwC can support your co-creation effort

We help our clients give stakeholders more active and direct responsibility in planning, innovation, operations, and delivery. PwC Management Consulting can work with your organization to explore how co-creation can propel your business to the next level in various ways:

- Enterprise Co-Creation Assessment
- Customer Experience Co-Creation
- Supply Chain Co-Creation
- Product and Service Co-Creation
- Public-Sector and Multi-Stakeholder Policy Co-Creation
- New Business, Ecosystem, and Business Model Co-Creation
- Business Interaction Redesign

***To hear how our services could
benefit your organization,
please contact:***

Dietmar Ostermann
Global Automotive Advisory Leader
+1 313 394 3220
dietmar.ostermann@us.pwc.com

Doug Billings
Principal, Co-Creation Specialist
617 530 6163
douglas.s.billings@us.pwc.com

Chad Mollin
Manager, NA Automotive Management
Consulting Practice
+1 847 430 9020
chad.a.mollin@us.pwc.com