Innovating in China’s automotive market: An interview with GM China’s president

Innovation by commercialization is the country’s strength, says Kevin Wale.

Glenn Leibowitz and Erik Roth
China has become the biggest market for General Motors: in 2010, GM and its Chinese joint-venture partners sold more than 2.35 million vehicles, 29 percent more than they did in 2009 and about 136,000 more than GM sold in the United States.

Given the importance of the Chinese market, GM is investing heavily in innovation there. In September of last year, the first phase of the company’s Advanced Technical Center opened in Shanghai. When completed, in the second half of this year, the facility will comprise four technical and design organizations: the China Science Lab, the Vehicle Engineering Lab, the Advanced Powertrain Engineering Lab, and the Advanced Design Center. The facility will pursue R&D not only for the Chinese market but also for GM’s operations worldwide.

Tapping into China’s innovation potential is a high priority both for Kevin Wale, the president and managing director of GM China, and for the rest of GM. Wale, who has led GM China since 2005, observes that innovation in China’s auto industry is more about commercialization models than technical achievements. But the latter will come, he says, and GM is actively preparing for that moment. In a recent interview with McKinsey’s Glenn Leibowitz and Erik Roth, Wale discussed the state of automotive innovation in China and how GM cultivates the local talent it needs to stay on the cutting edge.

The Quarterly: Can you describe innovation in China today?

Kevin Wale: There’s a natural development across all industry in China that is happening at a pace no one has ever seen. You’re going to get a lot of innovation out here. I don’t think people understand that until they live in the environment. You can tell the story and people can hear you, but the people don’t understand the scale.

There are a lot of companies here—Chinese companies in particular—that are capable of very good innovation, doing it, putting it into the market, and building a big local supply or consumer base that will extend into the rest of the world. They are well into the area of innovation in selected industries, and they will continue to do that. As good traders, they know that matching the competition won’t guarantee that they will win; they want to be ahead of the competition.

The education system is putting out massive numbers of skilled people, and a lot of them want to be involved in more technical development, more tertiary industry, and more innovation. They know the support is there to work in these areas. You’ve got the desire from the business community to innovate, the desire from the government to innovate, a very good education seed pool, and a lot of people who want to make their mark in life.
**The Quarterly:** How are automakers in China innovating?

**Kevin Wale:** There is probably more innovation in going to market and in thinking about new business opportunities than there is in technical innovation. Technical innovation is lagging behind the rest of the world in maturity. The country is trying to get there as quickly as it can but doesn't have the deep graduate research capability that the rest of the world has.

What China does better than any place else in the world is to innovate by commercialization, as opposed to constant research and perfecting the theory, like the West. When the Chinese get an idea, they test it in the marketplace. They are happy to do three to four rounds of commercialization to get an idea right, whereas in the West, companies spend the same amount of time on research, testing, and validation before trying to take products to market. The Chinese have an innovative way of doing innovation, something that the rest of the world is struggling to understand.

**The Quarterly:** Why has this model worked in China?

**Kevin Wale:** The Chinese system supports the idea that it's OK to fail if you fail in a government-sponsored direction. It's OK to make mistakes as long as you're moving forward. They're quite OK to get out there, do something, find out it's not perfect, but quickly adapt it and move forward. There's no recrimination internally for doing that if that's the direction the country wants to move in.

The electric vehicle is a good example. The Chinese view is that it's not going to be perfect, and they're not trying to make it perfect from day one. They've got a few more series of improvements to go, and they'll work on them in parallel with finding out what the customer really likes and adapting to that.

**The Quarterly:** Has GM China adopted this model of innovating through commercialization?

**Kevin Wale:** I think, yes, more than in Detroit, but not more than the Chinese, because we are governed by global legal requirements and global safety requirements, which are necessary and which we support. But because we know we have to move faster here, and because we know the market opportunity has a significant upside, we know that we have to get in there and identify the opportunity. We have to find out how to turn it into a benefit by getting out there and playing in the field, and then seeing what you've got to be doing in parallel. In our business in China, if we don't innovate through or with commercialization, we're going to lag behind our competitors.
**The Quarterly:** To find those opportunities, have you created new capabilities here?

**Kevin Wale:** On the technical side, we’re actually able to leverage our international capabilities pretty well. Our global knowledge is broader and more expansive than what we have over here on any basis you want to use: powertrain, infotainment, body structures, assembly processes.

We’ve probably been able to do things out here in low-cost engineering that we wouldn’t have done anywhere else, simply because we’re in a market where the opportunity exists and the requirement exists. You have to go out and figure how you manage to innovate with new processes and practices, while maintaining the same standards that an international company has to maintain. That’s how we get a competitive advantage.

**The Quarterly:** How have you acquired the talent to meet these needs?

**Kevin Wale:** For most of our local people, we rely on our partners because they have a very deep understanding of these opportunities. By working with them, we’re able to leverage their knowledge with our international capability. From our side, we’ve brought in people who are flexible with their thinking. We bring in people from Latin America and different places around the world. It’s helpful to have people who have been comfortable working in environments where things are different, where there’s a range of living conditions.

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**Kevin Wale**

**Vital statistics**
- Born October 30, 1954, in Melbourne, Australia
- Married, with 2 children

**Education**
- Graduated with a bachelor’s degree in commerce in 1975 from Melbourne University

**Career highlights**
- General Motors (1975–present)
  - President and managing director, GM China Group (2005–present)
  - Vice president, GM Europe (2001–05)
  - Managing director, Vauxhall Motors (2001–06)
  - Executive in charge of operations, GM Asia Pacific (1998–2001)
  - Director of sales, marketing, and aftersales, GM Holden (1993–98)
  - Director of finance and strategic planning, GM Holden (1985–93)

**Fast facts**
- Received the Magnolia Award, which recognizes contributions to the economic and social development of Shanghai, from the Shanghai government in 2009
- Elected to serve on the American Chamber of Commerce Shanghai Board of Governors in 2009
standards, a range of requirements, a range of sophistication, so you can’t always go to the
perfect solution and make it happen. You just have to adapt to the tools you’ve been given.

A person who needs a passport for their first assignment over here, we’re usually
educating them. That’s fine if it’s a clear functional role, and it’s worked very well. But
when you want people to explore and run by themselves, it really helps if you’ve got people
who understand the complexity of living in different countries and have had multiple
experiences, people who try and use their natural capability to work to solutions that aren’t
natural for our business. Someone like that has a huge advantage.

**The Quarterly:** Have you made any structural changes to encourage these capabilities?

**Kevin Wale:** We’re trying to set up a small unit that is designed to focus on what some
people call “innovation,” but what I call “predator versus prey.” Everyone’s coming after
us, and we want to stay the predator. The only way to do that is by having people who are
focused on who is doing what to us and where the opportunities are.

We find the deployment of small task teams is by far the best approach to drive these
innovative ideas. Take OnStar,\(^1\) for instance, which was actually quite innovative for this
market. The way we did it was well ahead of others. These systems are released by code,
and they’re now up to OnStar 8. We deployed the absolute latest and went straight to 8; we
didn’t start at 1. It was a calculated risk that we could make a business model that could
benefit from this technology and cover the significant cost and technical support required
to support that. Being out there, it feels like you’re in the Wild West. Four to five of you are
in a team. You don’t have a lot support, but a lot of responsibility.

**The Quarterly:** What qualities do you look for in team leaders?

**Kevin Wale:** They’ve got to be flexible. They’ve got to be able to build great relationships.
They’ve got to have terrific persistence, particularly in this market. They need to be tough—
we call it “assignment hardiness.” They need to be able to survive without babysitting. And
they need to be smart. Since they don’t have a lot of support staff, their job is to go solve
the problem, to go out and do things. We look for the smartest people who can build good
relationships, who want to be creative, and who can deal with the uncertainty of a market
like this, are willing to take some business risks, and are comfortable in that environment.

**The Quarterly:** In general, has staff retention been a problem?

**Kevin Wale:** We expected it to be a bigger problem because obviously we’re a target
company, but it hasn’t been. Our turnover is somewhere around 5 to 7 percent a year. Part

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\(^1\) OnStar, a subsidiary of GM, is a vehicle safety, security, and information service system.
of it comes from fulfilling work. Not many of the research places in China are truly global in a truly global industry. It’s pretty exciting to be able to say you’re working on the exterior design for a Buick LaCrosse that is going to be featured at the Detroit auto show. It not only makes your heart pump, but it’s also a great tick in personal development.

Also, it’s always great to be part of a successful and stable company. A lot of the other jobs tend to be either overpromised or somewhat transitory. A lot of these people are learning faster than they thought they could learn and doing more work than they thought they were capable of doing. Professionally, they are pretty fulfilled.

**The Quarterly:** What is the thinking behind building an R&D center in China?

**Kevin Wale:** There’s actually a business reason as opposed to necessarily a research reason for building the R&D center. We wanted to take advantage of some of the great talent that’s going to be coming out of the universities. They’re going to be coming out in droves. They’re not at the advanced graduate stage, simply because they don’t have the mentors in the system, but they will be coming out, and there’s plenty of good talent now that we can staff.

We also want to do research and applied development that is close to the biggest market in the world. It really is very easy to ignore the realities of life when you don’t confront them every day. So we want to make sure that we have activity in the market, with people who speak the language, understand the culture, and confront that culture every day. The first building that’s going up is a battery lab. With the electric vehicle, there will be a lot of suppliers, a lot of government support; the rules will be different, and the applications will be different. We want to be here, where we will be learning that every day and reacting to it every day. It’s the same research capability we have in Detroit, but we’re able to do the work here and frame it around real local knowledge.

We also will have an advanced design center here for the same reason. It’s hard to imagine doing advanced design without taking into account the influence of the largest and fastest-growing market in the world. So we’re putting in a starting point where we will have the basis for future creativity in the country.

**The Quarterly:** How will you be sourcing talent for the center?

**Kevin Wale:** The leader of our R&D is a local Chinese who has worked in R&D in China and has excellent connections with the local universities. We also have excellent connections with universities, and we run multiple projects through a program called “PACE” and through cooperative development. That will be the starting ground for recruiting.

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2 Officially the North American International Auto Show.
3 Partners for the Advancement of Collaborative Engineering Education.
Also, we’re offering more internships than we normally do because we want to take the best young technical talent. Initially, we will supplement them with skilled researchers from the rest of the world, primarily the United States. But at the end of the day, we will use local skilled talent. We don’t see a problem for the size of what we’re doing here. It’s a big site, but it’s not a big number of people at a particular time—probably 300 people to start with—among all those areas: design, advanced research, powertrain engineering.

The Quarterly: What timeframe do you see for getting the center up and running?

Kevin Wale: For me, it’s an ongoing journey, but in five years we’ll get over the hump. We’ve had a research facility here for 15 years, and we know they can develop much more quickly than other people think they can. If you take a highly skilled person in their mid- or late twenties, give them five years of intensive work, they’ll be at their peak of creativity, brainpower, and energy. I think in five years, we’re going to have a very solid team out here.

What has worked best for bringing product development and research and design along has been very structured on-the-job training programs and strong mentoring. Then we give them more and more work.

The Quarterly: How does this fit into GM’s global program?

Kevin Wale: I’d say with a fair degree of confidence that we integrate our Chinese operations fully into our global operations better than anyone else in the world. If we’re working on a global program, we’ll be doing serious work down the road the same way as they’re doing it in the United States or Germany.

Our engineering centers two years ago introduced the subcompact [Chevrolet] Sail, which was completely designed here. The latest [Buick] GL8 minivan was introduced here and was done pretty quickly through capability that is built here in China, using a combination of on-the-job mentoring, coaching, and expert assistance from overseas, as well as a very structured development process from our global team.

The Quarterly: How do you determine whether to innovate locally or take from GM’s global portfolio?

Kevin Wale: If there’s a great product available off the shelf, why bother reinventing it? If there’s not, invent it. Key areas of local product innovation have been built around opportunities not supplied by global capabilities.

The first was minicommercial vehicles, low-cost cars. People said we couldn’t do low-cost cars, but we invested in welding and learned how to do low-cost cars better than perhaps anyone in the world. The low-cost passenger vehicle was difficult to provide out of a
global solution because we were trying to cater to too many global needs. That opened the opportunity for the Sail. We were able to focus on addressing a solution that wasn’t going to come out of a global package.

The GL8 is an old GM architecture that no one else wanted, but it’s a terrific product for China. It has turned into an unbelievably good-looking and highly desirable car. I can’t tell you how many senior executives and CEOs ring me up trying to speed up their provision of the GL8.

There is also the Baojun brand, which is a lower-priced sedan aimed at consumers who live outside of China’s major markets. It’s just a massive opportunity in China, and the ability to meet the income needs and transportation needs of that group of people was never going to be met by GM in a traditional sense.

**The Quarterly: Do you source innovation from outside GM China?**

**Kevin Wale:** The answer depends on whether you’re talking about joint ventures or GM. In our joint ventures, we’re happy to take innovation from suppliers any day of the week. We actually encourage suppliers to come up with new ideas. We have a lot of local technology in our cars. Our people wanted to lead and they worked with suppliers to develop new ways of doing things. Lighting systems and infotainment are pretty much at the cutting edge of what’s available.