



Ralph Szygenda, Group VP and CIO, on Driving Change at General Motors

Ralph Szygenda should be able to rest on his laurels. Since becoming CIO of GM in 1996 he's helped the company achieve dramatic increases in efficiency, cycle time and quality. But with the current challenges facing GM, Ralph and his team are continuing to raise the bar. We found Ralph to be passionate, persuasive and determined as he talked to us about his models for business transformation, his opinions about the future of IT, and of GM.

On GM in 1996 ...

"GM is an American icon that's been around for close to 100 years. It's large and has significant U.S. legacy employee healthcare and pension costs. In 1996, GM was in the process of spinning off its information technology company (EDS) as an independent company. This presented an opportunity for a clean sheet of paper to design GM's IT organization of the future. GM was a very decentralized company, starting to move to a more common streamlined one. GM was *regionally* global ... it designed, developed, manufactured and distributed vehicles mostly regionally.

GM knew it had to transform. There were competitors that were running streamlined centralized operations and GM had automotive companies running independently with their own engineering and manufacturing. It just didn't work. So if we were going to compete, we had to change. There was still the question: can GM change? Realize that in the 50s and 60s GM was dominant in the automotive industry. It was kind of the Wal-Mart of its day. What happens when you are that successful?

GM's automotive senior management had little knowledge of the workings of IT. EDS had this responsibility. There was no real understanding of the IT spend across the company."

On getting buy-in for change ...

"You have to determine whether a company is ready for change. I had been in corporate America in IT positions at various companies for 26 years, so I knew the issues with making change. I knew certain ground rules had to be agreed

About CIO Leadership Notes

Welcome to CIO Leadership Notes, a series of interviews with leading CIOs focused on strategic management issues, published by the Tuck School's Center for Digital Strategies and San Francisco-based Enterprise Insight. Our goal is to provide provocative and relevant thought-leadership content to the community of large-enterprise CIOs.

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upon before I would come to GM. If you are going to be a change agent, you have to determine 'can it be done in the present environment?' If a company is not ready for change, then you have big problems not only in information technology, but with everything else.

I talked to every senior executive of GM before I came to GM—which is pretty much unheard of. I started in the morning and went through the night, one-on-one with every senior executive including the international lead executive who flew in from Zurich. The Chairman, CEO, CFO, everybody else. That is when I asked, do you really want to change? If I come here are you going to support this change and the information technology that might be required? I need to recruit the right people, and are you willing to have them report to you and other business unit leaders? Are you ready to pay the required compensation? There are a lot of CIOs that take a job and never ask these questions. I was lucky because senior management at GM wanted to change, so they were very engaged in these discussions. A lot of CIOs are just happy to be a CIO and get the job. I would never take a CIO job if I didn't get some agreement up front about change."

On learning and level-setting ...

"How could I learn the automotive industry quickly so that I was credible to the company? I hired three consulting firms: AT Kearney, Deloitte & Touche, and Ernst & Young. I told all three, 'You have 90 days. Tell me how GM's business processes compare to its competitors and how its information technology compares to its competitors.' I picked three because one might not have given me the correct answer. At a minimum, I could compare. Back then the answer was GM's processes were average in most cases ... it was leading in Saturn for sales and marketing, but the processes in the rest of the company weren't at a leadership level. Processes were very localized, not common across the company. We were spending more money on information technology than any other automotive company and we were 25% higher than our closest competitor. So spending more money on IT was the last thing I wanted to do, since we were already spending more than anybody on IT and delivering processes that weren't at the leadership level.

To change something, unless you have a baseline to compare, is a dangerous move—you have to be credible. So we started with the baseline that we have to get costs out, add efficiency and not ask for more money. There were about 30,000 IT contract people supporting General Motors. (Today it is probably about 10,000.) We had 7,000 information systems in 1996. Business units wouldn't want to use anybody else's payroll system, so they would build a unique payroll system. This happened over and over again. We had to 'clean the attic out first'—but how do you do that? Taking away someone's information system is like taking their firstborn away."

On building executive relationships ...

"I met with the top GM officers one-on-one. As a CIO, if you're involved in change management you report to everybody. Your job is to help change all their businesses. You don't go off and say the CEO told me to do that. You have to have a solid relationship with everyone. That doesn't come right away, but amazingly going and sitting down with them at breakfast, lunch or dinner—or simply saying you pick the time, I'll be there—that was very important."

On building the right team ...

"I recruited 1,000 of the best information technology and process people into General Motors, including at least 50 CIOs, one for every major business unit in GM. For the top 30 jobs, I personally interviewed 300 people, an hour and half each. I had to get great business and technology leaders or they would be rejected by GM management. Back in 1996 finding business/IT CIOs was not the easiest thing in the world

In addition to CIOs, I needed experts in business process areas. For instance, I needed product development talent that engineers would trust. I knew I better hire a great IT person who knew product development, so I hired the vice president of engineering at Navistar. I spent a lot of time recruiting—every day including Saturdays and Sundays, day and night, dinners, etc. My wife didn't move with me for six months to permit me to be totally involved—this was intense. If you don't have the right people you can forget the rest. We used five recruiting firms—all the big ones—and we had them compete against each other—which was unheard of. They accepted this because of the volume of positions to be filled. We had to move quickly.

We also recruited the best 1,000 auto experts from within GM who understood the business. These individuals were invaluable to jump-start the IT change at GM. Putting outside IT experts together with GM auto business experts was invaluable for quick assimilation.”

On driving commonality in a distributed culture ...



“My Information Systems & Services people were new to GM. We had to get wins quickly—to gain trust. To be able to say, okay, we’re giving you money back as we drive commonality. The business units weren’t engaged with each other from a process perspective. There wasn’t a corporate head of engineering or manufacturing that led change across the corporation in 1996. We were not going to be able to sit with a committee of business leaders in a room and drive systems commonality. It was just not going to happen. This was before there were corporate business process owners. A lot of it would have to be shouldered by IS&S leaders who had global visibility. We had to drive common systems where it could be done and cut costs quickly.

I kept telling senior management that we had to wire this place together to be more efficient. They would have to get involved or the IS&S personnel would be doing the best they could to accomplish the wiring alone. I knew it was up to my team to take the lead in driving involvement because they had insight into the way the company was functioning using systems. So we did and, over time, business management got very involved and then started to drive the processes and do the wiring themselves.”

On constructive friction and matrix structures ...

“Trust was one of the hardest things to cultivate. We had hired business process and IT people from outside of GM, which again was a first. Very few senior executives ever came into GM from the outside. The question was, why would we trust you? What do you know about an auto company? The relationship with EDS was not perfect. So there was an opening to improve and be accepted. We had to build trust between the auto people and the top IT people. These IT people were CIOs from Fortune 100 companies. They were heads of consulting groups. They thought they were pretty smart; for the first six months they all thought the company they came from was the best. My answer was okay, you guys all get six months, and after that you tell me how GM is going to be the best.

There was friction. In IT, we created Process Information Officers who drove commonality across GM businesses, and CIOs who represented today’s needs of their respective business units. They needed to work with each other in a matrix structure. So we created terms of engagement. How do you interact with the businesses users? One of them would talk to a business customer and not let the other person know that they were doing it. This caused conflict. We had to define what we called “Big Rules” of engagement. These defined who had what responsibilities. Why did I create tension like that? GM is so big and we were moving so quickly, I didn’t have time to know daily what exactly was occurring in Brazil or Poland or wherever. If I always had two people giving me two different views, one the ‘strategic longer-term transform-the-company’ view (the Process IT Officer), the other the ‘this is my need today in the business’ view (the CIO), we could make the right decisions pretty quickly. If I hadn’t had that, we probably would have made the wrong decisions.

The process information officers at GM have the job of innovation—the strategic transformation of the company. The CIOs work on tactical issues and driving the business. The typical CIO has a hard time thinking about innovation because they are trying to just keep up with their business operations. Some of them had the challenge of helping to drive GM’s growth in countries like China. The process officer drove commonality and transformation in areas such as product development and manufacturing. They had to innovate.

I think the biggest benefit of this matrix structure was that the business also picked up on it. In 1999, the company added process officers across the company. I think we [IS&S] helped to some degree to influence this business direction and transform the business. Today IT is a pretty mature matrix organization in this company. IT is usually not one of the most mature in transformation.”

On ingrained culture ...

“GM was created by its founder, Billy Durant, by buying a bunch of independent automotive companies. It’s amazing that years later a lot of that culture still existed. Business presidents had strong autonomous control of all aspects of the business, from design through distribution. They were highly educated MBAs and some of the best business people in the world, and they were here to create their own businesses and run them with their own resources.

Later, [then President and CEO] Alfred Sloan created an overlay business model to drive efficient product branding and financial management. Financial management was done uniformly and product brands did not overlap. But as time went on, large corporate staffs evolved to administer this overlay. There was a real fear of these staffs running the company given they were remote to the customer needs and local operational requirements. So if you say you are going to try to do things commonly, even with top management direction, it didn’t always happen.

A culture doesn’t change in a year or five years. It takes a lot longer. When I came, the product cycle time was about five years. You didn’t have a forcing factor to change—the cycle time was so long that people started on a product and didn’t end up finishing it. To challenge people to accelerate change and drive a ‘one team’ mentality, [Chairman and CEO] Rick Wagoner created the concept of ‘One Company,’ and ‘Go Fast.’”

On global competition and process reengineering ...

“Today’s corporate focus is much more on common processes and globalization—the ability to develop, manufacture, sell and distribute products any place in the world and at the lowest price. The world is becoming very small. If you are expanding into China, either you start with existing efficient global processes or you create new ones with the associated increased cost and unknowns. You have to leverage common processes to keep your costs down and drive efficiency. The lowest cost structure wins. In a mature industry like General Motors’, raising prices is probably not in the cards. You have to leverage common processes so that you can move quickly into any region of the world. So you’re totally cannibalizing existing process and re-automating, ripping up good processes to make them even better. And they are going to have to be re-automated. When you re-automate you have to do it quickly. Everything is real-time, everything is digital or close to digital. There is no room for business interruption.”

On the “IT Broker” model ...

“The IT model that we put into place is one where IT is a business. What does that mean? GM uses a significant outsourcing model, a legacy of the days when GM owned EDS. Insourcing all IT functions back into GM was not feasible. The arms and legs of running IT would continue to be outsourced. I don’t have people that do programming. I have people that manage programming. We had to create the best buyers of information technology, the best architects, the best accountable project managers that had tremendous business knowledge—IT business brokers.

We are brokers. I measure everybody that works for me on business transformation, not IT transformation. They’re measured on cycle time improvement, on quality, efficiency and all that. It’s assumed to be a slam dunk that they are going to get the IT right. If we don’t, we are a major drag to the corporation. They can never blame an outsourcer because they are part of picking that outsourcer as a broker.

I want our people to transform the business and I want them to do it as fast as possible, with whatever technology there is out there. You better know technology. You’re spending billions of IT dollars, and at the same time you better know how to help the business innovate. We do yearly competitive analyses of business processes and the application of information technology. We have numbers back from 1996 to today. Our Business Process Leaders and our Process IT Officers have process reviews with the CEO every year. Every process officer and information officer has to present a competitive assessment—where they are in their business processes versus competition.

We've become unbelievably good in being brokers of technology—we're running close to the lowest IT cost as a percent-of-sales in the auto industry. In an outsource model, this is not easy. We use the concept of 'Precision IT.' You don't invest one dollar unless it improves the business. It's a different mentality. Most CIOs tend to protect their resources. This model does not let that happen. If we had the 30,000 outsourced IT people within GM, it would be difficult to transform; we would still be changing the culture. We would never have gotten to the business issues. The business IT broker's only job is to transform the business—to get business results. In the future, IT will be rewarded on those results, not on the elegance of information technology. Nobody cares about that. The world is moving so fast—everything is digitized already. All business leaders want are results and they don't want to spend a lot of money on IT to get them. Nobody is going to spend money for technology's sake."

On the future of IT ...

"GM's IT model is where, I believe, most companies will be in 20 years. Most of them will be much more sourced to outside IT and business process companies. Most companies will not want to have thousands of internal IT people unless their business is IT. But they will want IT brokers who can architect systems, manage projects, and drive business process change. It's a new world.

The value IT can bring is this successful brokering. IT is still complicated. Business leaders will never have the level of IT knowledge to be self sufficient. A CEO might know how to use a Blackberry and a PC, but only you [the CIO] have the knowledge of IT. The same way a CFO has financial knowledge or the head of manufacturing has manufacturing knowledge. But they all don't just do manufacturing, they don't just do finance ... they are business leaders.

Most CIOs are still technologists and sometimes don't understand why they're not appreciated by the business. The whole world is going against them—there is offshoring, outsourcing, purchased software. The business is asking, 'what have you transformed?' The CEO is asking every year, 'what are your business wins?' Surely you can't be just a technologist. You have to be a business transformer. At GM if you build a two-million-line program for a business area, and it is on time and in budget, but it doesn't transform the business, you failed."



On what's next for GM ...

"We have a serious legacy cost problem that a number of our competitors do not, including healthcare and pensions. Sometimes, it feels like having one arm tied behind your back. Our processes tend to be as good as any automotive company in the world. Our cycle times are pretty good. Our quality has significantly improved. But we're still not as profitable as we need to be.

Our challenge is in how we address this issue. We have to run our operations and processes better than everybody else to offset these legacy costs. We have to be more innovative on vehicle technology, such as OnStar. The vehicle is essentially an electronic node in the digital world. We have to develop the most efficient engines to run our vehicles.

GM's product cycle is significantly shorter from where we started in 1996, and IT plays a big role in that. In fact this was one of the first areas of the business where IT realized they could really improve the business. We design and build more vehicles than anybody else in the world. We know that winning products are GM's bread and butter."

On IT's role in shaping GM's future ...

"Right now we're working on key company-wide transformational activities. Our information process officers are very involved in an effort to drive efficiency; improve the supply chain; help enable growth. We've gone from no business in China a decade ago, to it being our second largest market. IT is critical to global growth. We have designed a vehicle in our Korean operation. We build it in about eight plants, some of those in different parts of the world under four brand

names and variations, and we distribute it to 124 countries in the world. If we can do this faster and more efficiently than anyone, then we will succeed.

I believe we will win. Even with GM's legacy problems our people believe in GM. We are all trying to improve this icon. The last chapter hasn't been written and if you are an information technologist, where else does the business appreciate your capability more than General Motors? What a great place to be. I have to give a lot of credit to [CEO] Rick Wagoner for being a supporter since day one in 1996. Without his vision for the company and making IT an integral element, we could not have been where we are today." ■

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