GLOBAL AUTO PLANT START UPS:
Building a Workforce to Drive Success

By The MPI Group

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Global Auto Plant Start Ups: Building a Workforce to Drive Success
EXECUTIVE SUMMARY

Automotive manufacturing is changing dramatically around the globe, especially as new auto consumers emerge in countries such as China and India. In traditional automotive markets, meanwhile, the appetite for new vehicles continues, even amid uncertain economic conditions. Along with increased worldwide consumption comes increased production, and that means new or expanded and renovated plants. In many new plant start ups, the names and locations are merely changing, with new countries and cities emerging, as once-great auto centers such as Detroit subside.

As the locations and manufacturers change, many executives and workforce development teams are facing the challenges of plant start ups for the first time. Yet the challenges of plant start ups are predictable and consistent across companies and countries, as are the human resource components of plant launches. Global Auto Plant Start Ups: Building a Workforce to Drive Success offers a guide to establishing the HR processes to successfully launch new plants in the auto and auto component sectors, highlighting best practices and strategies as well as the challenges facing Start Up® executives:

> **DNA:** It’s imperative that automakers establish the cultural identity of a new plant—its DNA—well in advance of hiring the first employee. This is a one-time opportunity to embed a corporate stamp firmly on the location and to remove or revise traditional mindsets, systems, and practices.

> **Leadership:** New plant leadership is a critical component to an on-time launch that hits performance criteria (quality, cost, safety, etc.). These individuals typically arrive on site years before production begins. Leadership must also embody and champion the personal attributes and values necessary to build the intended culture or DNA of the new plant. With the right leadership in place, with a clear vision of the culture, all other HR facets can proceed in a systematic and efficient manner.

> **Potential hire/recruiting:** The criteria for potential employees varies by position type (e.g., leadership, technical, production associate), but successful start ups focus on hiring a workforce with the right personal attributes and work motivations, especially in locations where automotive experience is not readily available.

> **Selection:** New plants face the challenge of quickly sifting thousands of recruits through a selection and hiring process filter while adhering to launch timelines and regulatory restrictions. Proven support services and analytical tools are a must.
Training: Inexperienced workers must be trained quickly via a program integrated with selection and staffing efforts. Yet pre-hire training can only go so far; successful start ups rely on leaders/supervisors capable of training "just in time" as new developmental needs emerge.

Transition: The leadership and technical staff necessary to launch a plant are often not the same staff required to lead a mature plant. Automakers must develop the systems and practices to transfer knowledge from start up experts to local employees who will guide the plant to long-term success.

An automaker’s ability to quickly select, staff, train, lead, and sustain a team-based workforce (frequently focused on lean principles) is the key to start up success. As with any investment this large, there are significant risks, but a well-planned HR Start Up® model can help meet the plant launch schedule, and achieve both production and market-share objectives.

HR START UP® MODEL

While each automaker and its Start Up® plant practices are unique, the following is a typical human resources Start Up® approach.

DNA
Identify unique company DNA (culture, production philosophies, commitment to workers, etc.) that must permeate new plant.
Use DNA as a guide when determining leadership selection and staffing criteria.
Consider accommodations to plant DNA, if any, based on region and mission of operation.

LEADERSHIP
Assemble leadership team (including HR) as much as three years prior to launch.
Focus on strong start up expertise, but also include leaders at developmental stages to grow start up expertise.
Provide a significant support structure (spousal, housing, etc.)
Leadership sets rigid schedule for recruiting, interviewing, and hiring.
Put in place mentoring programs to transfer knowledge from Start Up experts to local leaders.

RECRUITING
Establish potential-hire criteria (physical, intellectual, teamwork objectives) consistent with corporate DNA.
Ensure process is compliant with legal/regulatory environment.
Recruit skilled labor/technical positions as much as two years prior to launch.
Recruit initial production staff as much as one year prior to launch.
Apply competency testing and analytical tools to quickly narrow potential-hire pool and minimize the identify-to-hire cycle (and prevent candidate losses).
Substantial outsourcing of recruiting and selection function for screening high volumes, but final selection approval by plant leaders/managers.
Give appropriate weight to personal attributes.

SELECTION
New hires receive from one week to three months training; may include visits to existing facilities.
Initial training focused on safety, ergonomics, learning, lean manufacturing, problem-solving, etc.
Ongoing training as required and often specific to new jobs/operations and roles (e.g., job instructions, equipment setup).

TRAINING
As plant and local leadership matures, transition start up experts to other facilities.
Start up experts stay as little as one year or as long as five years (some longer if looking for permanency).
Length of stay for experts also varies by position.

TRANSITION
INTRODUCTION

More than 70 million vehicles were produced around the globe in 2007.\(^1\) With products designed and manufactured not only in traditional automotive countries such as the United States, Canada, and Germany, but also in new locations around the globe. Especially notable is the rapid emergence of automotive markets in China, India, and Eastern Europe as consumers there join the global automotive sector:

- Auto sales in China were 8.88 million automobiles in 2007, which was 22% higher than 2006,\(^2\) and in the first quarter of 2008 topped 2.58 million, indicating that China may top the U.S. as the largest car market by 2020.\(^3\)
- Poland is rapidly becoming an auto center for all of Europe, with approximately 80% of its automotive products exported to other EU countries.\(^4\)
- India auto sales topped 1.5 million in 2007, with many projecting growth surpassing that of China.\(^5\)

India currently accounts for only about 1% of the global auto components sourcing market, but is expected to account for 4% by 2015.\(^6\)

As markets shift, production follows—meaning that new automotive plants are rising at an incredible rate around the globe to keep up with consumer demand. "It's pretty simple," says John Burton, executive director, manufacturing engineering, General Motors (GM), "We need to build plants in the markets we want to sell to. Russia's growing. India's growing. And it's critical for us to be down in Mexico because it gives us some advantages for North America." Burton is currently responsible for launching greenfield plants in each of these countries, and says it allows GM to do things that just aren't possible in traditional, established facilities. "You have a bigger chance in the beginning to create the correct culture that will self-perpetuate over the years."

Sky Foster, manager of recruiting, payroll and compensation, BMW Manufacturing Co., Spartanburg, South Carolina (USA), helped to launch the plant. BMW was looking for three things when it located its first and only U.S. plant in South Carolina: Local technical talent, availability to ports, "and the third major reason was the U.S. was the largest market at the time and we still are." BMW, which has increased production at the South Carolina plant three times, recently announced it will add 70,000 square feet at a cost estimated at $27 million, bringing the German automaker's total investment there to $4.83 billion since it opened in 1994.\(^7\)

Yet all this new fluidity in the global automotive market comes at a price, at least for those firms moving West to East or East to West. New countries and new cultures present significant strategic and operational challenges. Constructing a new automotive plant in a home country is an enormous endeavor; doing it overseas adds multiple layers of complexity. Because even though these plants are built of concrete, steel, equipment, and information technology systems, the human
capital within their walls ultimately drives success (or failure). World-class recruiting, hiring, training, and development processes—established long before any groundbreaking ceremony—can generate millions of dollars in cost savings and new profits as plants reach production volumes on time and on budget, whether at home or abroad.

A new automotive plant can cost upward of $1 billion to launch. Leveraging that investment requires a leadership corps and a workforce up to the task. Just how do automotive original equipment makers (OEMs) and their major component and parts suppliers get the human resource factor right?

TRUE TO YOURSELF—HR STRATEGY STARTS WITH CORPORATE DNA

Long before the first brick is laid or the first production line designed, OEMs begin assembling the real bricks and mortar that hold a start up together—the leadership team charged with imprinting the identity or DNA of the plant. This group taps the varied skills of others to get a new plant swiftly producing new vehicles and new profits, and it faces an enormous task—to get it right the first time. It’s difficult to overcome a poorly staffed and badly managed Start Up environment and culture. At the same time, new plants offer unique opportunities for manufacturers to improve, correct, and change their traditional operating methods, standards, and mindsets, especially legacy systems and practices that no longer optimize value.

GM’s Burton says that a leadership team should be in place at least two years prior to a plant start up. “That gives them a chance to think, plan, strategize, get familiar with the local circumstances, to effectively get this thing moving.” This group is often assembled from what GM calls its experienced ISPs (international service people), who go “in there with the right knowledge, background, and ability that can then help build the teams from the local regions.”

A start up leadership group has one major goal—populate the plant and get it ready—but strategically it’s also attempting to import the firm’s unique corporate identity into a new culture and work environment. “Hopefully,” notes Burton, “you do a good selection on those people to make sure they’ve got the right background, the DNA of continuous improvement.” And in many instances the start up team is faced with contradictory goals: both building a leadership group and workforce to get the plant off the ground and building an HR infrastructure for ongoing production, workforce development, and administration. Leadership brings in the DNA, but it must quickly be assimilated by local leadership.

Toyota is well known for its efforts to maintain a consistent corporate culture and operating system throughout the world. Nate Furuta, chairman and CEO of Toyota Boshoku America (a business unit manufacturing automotive interior systems and currently building new facilities in Erlanger, Ky., and Princeton, Indiana (USA)) says Toyota’s culture is encompassed by the “Toyota way,” or in this case the “Toyota Boshoku way, which is composed of how to deal with humans, how to deal with society, being a good corporate citizen, and also we like to dig into problem solving. We always want to have the standards we want to stick to, regardless of production or quality or human resources.
Wherever we go, we like to have some standard. Then if we don’t have a standard, let’s create a standard, then measure where we are now. And then if we find a gap, then the gap has to be analyzed for what we have to do to create the consistent culture throughout the company."

Following “the Toyota way,” though, doesn’t always mean forcing it upon employees right from the start, notes Furuta. He considers his previous experience at NUMMI (New United Motor Manufacturing Inc., a joint venture of Toyota and GM restarting an old GM plant), where leadership consisted of 30 Toyota and 16 GM managers: “I have to understand what we are trying to do. In other words, what kind of standard do we want introduced and why do we want to do it, and [combine] it with the culture, what they’re thinking in their minds. I have to understand what it is that the Americans are thinking or how they think, why they achieve like that. Then I have to tell them why I like to introduce our thinking.”

At Toyota’s plant in Walbrycz, Poland, Dariusz Banach, general manager human resources, served on the Start Up leadership team as “Employee No. 1,” reporting to the president. “I was responsible for the company setup for recruitment, for setting HR systems, for setting administration systems, including public affairs issues, and so on.,” says Banach. Toyota’s plant in this coal-mining region provides access to Eastern Europe, as well as France and the U.K. But for Toyota, the plant could just as well be in Toyota City.

“In Toyota, you meet basically the same people everywhere regardless if it is the U.S., if it is the U.K., or Poland,” says Banach. “They are the same open, flexible, and hard-working professionals, basically. So we try to keep the same principals and same Toyota DNA.” Banach recalls one visit by top executives from Toyota Motor Corp., after which an executive left noting that he sensed values he’d been familiar with in Toyota since the 1960s.

“We intentionally didn’t want to interfere [with our DNA] for such excuses as cultural difference because we already realized that Toyota was successful in Japan, other Asian countries, the U.S., and also in Europe. So why should it be different in Poland?,” asks Banach.

Yet even though most automakers have fairly rigid corporate DNAs and operating systems, because of the need to standardize processes and procedures, some flexibility may be required in new locations. BMW’s Foster says that combining Americans and Germans in South Carolina—as well as a president from Japan-based Honda—required new methods for appropriately translating BMW’s DNA. “One thing we realized early on is we had to design workshop seminars, coaching around respect for the individual, and understanding the different cultures. Not that different meant deficient, but different was just different—and you needed to respect that."
“We had somewhat of a struggle in the beginning of just defining the
culture, because in that same mix with the nationality part, was also
automotive versus non-automotive, because there were many people in
the local area [hired as production associates who had never built cars],”
she recalls. Indeed, this turns out to be a best practice in many auto
start ups: finding people who match the corporate DNA regardless of
auto industry experience.

Foster offers anecdotes likely played out among global automakers on a
daily basis. “For example, in Germany, it was more of ‘Here is a set
standard. Here is how we do it. It is the best way. We’ve tried it.
We’ve tested it. It’s true. And we will move forward with this,’” she says
of BMW’s hierarchical management approach—a stark contrast with the
Japanese philosophy of “respect the team.” Another example regards
time: “Germans, of course, they’re really sticklers for time. If you say
8 o’clock, it’s not as the Americans would be 8:02, 8:03, 8:04, 8:05.
That was a huge barrier in the beginning, just respecting the time.”

Foster adds that the Germans were often perceived as hard and referred
to as “coconuts”—hard external but soft interior. Americans, on the other
hand, were known as “peaches,” saying things like “Have a nice day” or
“Come over and see us,” which the Germans might take literally, when in
fact the Americans were merely tossing off a greeting. She says that
although these instances may seem trivial, they illustrated issues that
ultimately required German senior leadership to be more accommodating
to change and helped make the plant more competitive because they
improved team interactions and product. “Striving for the top and
comparing yourself to those at the top has forced some change in many
areas . . . I would say competition has been the greatest driver of
change,” says Foster.

At the Global Engine Manufacturing Alliance (GEMA) in Dundee,
Michigan (USA), Bruce Coventry, president and CEO, faced a similar
challenge in mixing cultures while trying to remain true to a corporate
DNA. GEMA is a joint venture equally held by its parent companies:
Chrysler, Hyundai, and Mitsubishi. “That drives a unique structure
around this particular start up because we do have the Asian influence
of our two partners, Hyundai and Mitsubishi, and the Korean influence
is very different than the Japanese influence,” says Coventry. “So there
are, in fact, at least three distinct cultures that are recognizable within
the plant, and we have more than that in terms of languages being
spoken in the plant. We have Spanish, Portuguese, Korean, Japanese,
and German. It is a multicultural, multilingual organization but, of course,
all of our business is conducted in English.”

Coventry said the triple ownership structure—and combining three
DNAs—require his staff to be representative of all three companies and
highly flexible in being able to deal with issues and communications
problems at the Michigan plant, which is unionized by the UAW. The
partners wanted it to have “a very different work structure within the
organization than we had within any of the existing North American
facilities, whether it be Mitsubishi in Normal, Illinois., or any of the
Chrysler facilities. Hyundai does not have any unionized North American plants, although all of the Korean facilities are unionized. We wanted to have a very different and very competitive structure. So one of the things that we did, from the very beginning, was establish a flexibility requirement that would be far greater than anything we had ever done before.

Coventry says they use a concept in the plant called “4A,” which means anyone, anywhere, can do anything, anytime—and that is applicable to salaried employees as well as hourly employees. “We routinely will have hourly people doing salary things like visiting customers and talking to suppliers and dealing with quality issues. And, likewise, we frequently will have salary people that will jump in on the assembly line and help out when necessary. We spend a lot of time cross-training individuals.”

To achieve that flexibility, it was imperative that GEMA set a high standard for employees coming into the facility. On the salary side, all technical support must be degreed engineering candidates; on the manufacturing side, all team members must have at least a two-year technical degree or a journeyman’s card, a skilled trade journeyman’s card, or at least five years of CNC (computerized numerical control) machining experience. DDI assisted GEMA in its selection process to identify and evaluate candidates, who were tested across a number of broad dimensions indicative of how they might perform within GEMA’s unique team environment.

Adding to the complexity of the GEMA DNA and culture is a rotating, three-crew, two-shift, 120-hour work pattern. “By rotating, that says that nobody is stuck on any one shift,” says Coventry. “And it gives us good visibility with our top management structure, because every three weeks we get to see every single employee in the plant. It also minimizes movement from department to department and shift to shift because everybody’s view of the world is fundamentally the same.”

Despite the range of languages, nationalities, and global cultures within GEMA facilities, the DNA remains the same. “What is absolutely consistent between the plants is the product and the process,” stresses Coventry. “We must share any product or process changes. So we very aggressively manage, and we have very strict rules about, what kind of changes can be made by an individual facility or an individual company with respect to product. We have a great deal of discipline. In fact, there are what we call ‘speed bumps’ in the process that slow us down and make sure that we actually consult with and gain approval from all of the partners in the process so that we don’t run off and start making this engine, or the plants, unique in their own way… Where there’s a lot of creativity is in how you go about doing things.”
At Ford’s new Dearborn Truck Plant (USA), it wasn’t so much a need to maintain a culture or combine DNAs as it was to develop a culture and DNA. The truck plant transferred in workers from a nearby Ford facility that was closing (Dearborn Assembly Plant) and other Ford plants around the country that were downsizing; leaders wanted to develop a new culture different from that in older Ford plants. Steve Barney, human resources manager, Ford Dearborn Truck Plant, explains, “There had been a very, very strong—and there is throughout all of Ford’s assembly plants—a very strong assembly culture. There’s rules, there’s regulations, the way you operate, and that type of stuff is very well known to people that are familiar with the assembly plant. Now where this plant was different, it really was going to build on some lean behaviors and moreover it was going to build on a teamwork concept for the plant.”

The new Ford work teams would consist of eight to 12 members building a vehicle, learning all jobs necessary to get that done and rotating through positions. Not surprisingly, the clash of old Ford DNA and new Ford DNA produced unique situations as the plant was launched. “It was very much a culture change for a lot of people coming into the plant to work,” says Barney, but the launch was successful—despite a new product, the fact that 50% of employees had no assembly experience, and the plant’s emphasis on new production methods (changing from a moving assembly line to a “skillets” technique that bring units to employees) and “green” manufacturing principles.

Barney says the resulting DNA, regardless of workforce mix and new conditions, was forged in order to connect to standards from which Ford refuses to budge: Lean, safety and quality principles that emerge from executive decisions at headquarters, divisional offices, and the human resources department. “There would be very little deviation that you could do locally, regionally, even internationally on a lot of those situations,” he says. “If you deviated, you had to prove it to corporate on what you needed to do in that regard.”

**Consistent corporate systems**

Jonathan Lu, Delphi China, has been engaged in various start ups, and believes it's critical for a greenfield project team to have liberal access to the resources and systems of the parent company. For example, Delphi doesn't reinvent its production systems when starting new plants around the world; similarly, if a start up needs HR infrastructure, it should pull an HR system from within Delphi. He says not all companies entering China take that approach, instead trying to apply unique systems within and for China, “which makes things quite difficult.”
CRITICAL CHARACTERISTICS—LEADERSHIP TEAM IS KEY

“Leadership is the critical piece here,” says GM's Burton. The start up team typically includes the plant manager, assistant plant manager, HR director, HR manager, and other critical staff throughout the organization. This group forms the “critical mass required to get the thing kicked off correctly in the first place.”

GM deploys its version of lean manufacturing called the “Global Manufacturing System” (GMS), and Burton says that despite hundreds of books on lean and lean management, it really comes down to having people in place who have done lean, GMS or similar (Toyota Production System); have Start Up experience; and can work in a team framework among a multicultural society. “You've got to get the right leadership in place to get this done. If you get the right leadership in place, you get the right framework—GMS—and you get people applying it in a consistent manner. Then the thing takes off.”

While the GMS portion of that criteria is critical, Burton says the Start Up component taps into a different set of characteristics among personnel. Start Up leadership, particularly in a foreign country, isn’t for everyone and involves significant challenges and stress. “There are people that will thrive in the environment of a Start Up, often in a difficult country and outside of their comfort zone; they extend their comfort zone,” Burton notes. “[These are] people that are used to dealing with some ambiguity in the early days, and their job is to carve order from chaos.”

Burton rattles off a punchlist of decisions that face Start Up leaders: Construction, on-site safety issues, plant financing, equipment specification and purchase, staffing and training people from all over the globe. “You've got a lot going on, and you've got to be able to cope with the stress of all that. Staying cool when it's all going, and compartmentalize it, prioritize it, make sure it's dealt with in the proper manner.” He believes there are different kinds of people adept at those things, and that sometimes people who can run and improve an established plant aren’t necessarily the right people to start a plant. But for those that can do a start up, it’s rewarding: “Start ups are dynamic. They're exciting. You're creating something new from nothing.”

The GM ISPs, though, must feel safe, secure, and established (e.g., schooling, shopping, spousal support) in their new surroundings in order to be effective. “If you don’t do that, then guess what? You're going to be struggling constantly. Our ISPs are critical, and we have to recognize they're not living in their comfort zone. Russia is not Michigan. And it's a different world out there. And you know, you've got to ensure you get them settled down. I believe building the plants is easy.

“I believe building the plants is easy. Everybody can put steel up. Everybody can put equipment in. . . . The critical piece is getting the appropriate amount of focus on your people right from the beginning.”

— John Burton, General Motors
Everybody can put steel up. Everybody can put equipment in. . . . The critical piece is getting the appropriate amount of focus on your people right from the beginning.”

Roxie Asbury, manager, administrative services, AM General LLC, South Bend, Indiana (USA), agrees that the leadership committee has to be the first on site. “We looked to our plant manager, assistant plant manager, and area managers first, because they really had to make the decisions about who their employees were going to be. They had to develop their team and set the training up.”

GEMA recognizes that while building a Start Up leadership team they’re also looking to develop leaders, individuals who may fill leadership positions in the next start up. GEMA’s Coventry reports that a great deal of senior staff has turned over in the past 12 to 18 months, transitioning out of Dundee and moving on to other assignments within Chrysler, Hyundai, or Mitsubishi. “While the day-to-day running of the plant creates a different set of challenges than launching the plant, we’re finding that, as we transition our leaders, what we’re doing is we’re teaching them to grow into that new role. And we’re also making our experienced leaders available for other new programs that exist within the parent companies. What we’re doing is providing a group of relatively young leaders to go back into Hyundai, Mitsubishi, as well as Chrysler, and be able to immediately participate at much broader and higher levels of responsibility than they had on this program.”

Toyota has traditionally been highly selective in placing top leadership at its plants, with many Start Up executives rising throughout Toyota’s corporate hierarchy. For example, a leader at the NUMMI start up was Akio Toyoda, currently executive vice president of Toyota Motor Corp. (TMC) and widely considered in line to be its next president. Key leadership qualities include the ability to teach and manage others as well as someone who is outgoing, says Toyota’s Furuta, so “he can get accustomed to the culture or differences easily and maybe even mingle in with the people without difficulty.” He says he was identified for the Georgetown start up because “I [was] the only young guy who [understood] American human resources”; Furuta had just finished negotiations at NUMMI, a union plant. Today, because of Toyota’s decades-long presence in the U.S., more Americans are likely to be moved from plant to plant and take positions in Start Up leadership. “We develop our own local people.”

**POTENTIAL HIRES—UNDERSTANDING WHO YOU WANT AND WHY**

Successful start ups put tremendous effort into determining the qualities they’ll need in new employees—including not just experience, but intangibles, as well. But adding complexity to the selection mix is that no one role or position (e.g., leadership, technical, production associate) typically requires the same degree of experience, knowledge, and personal attributes or potential (see Plant Start Up® HR Criteria). And just as it takes the right kind of leader for plant start up, there is
an increasing focus on selecting the workforce with the right innate personal attributes and work motivation, especially in global locations where automotive experience is not readily available.

Toyota, for example, expects all employees to show potential for leadership, allowing them to eventually lead in some capacity. Similarly, expectations regarding other key Toyota criteria—teamwork, the flexibility to move from job to job, a focus on safety and built-in quality—don’t differ much between staffing levels, be it the initial leadership team for a start up or the last production worker hired.

Toyota also insists on finding and developing employees with a structured approach to thinking, problem-solving, and improvement. “Not only using manual skills, but also using mental skills to improve his or her own work area, work post, and to think all the time about improvement,” says Toyota’s Banach. “Also to participate in, or willingness to participate in, official improvement activities. What is most important when we talk about improvement is drawing satisfaction and motivation from improving his or her own workplace.”
GEMA, too, looks for problem-solvers, but it also wants technically capable and flexible individuals that comprise a diversified workforce. “What we’ve attempted to do is to find people that, first of all, possess a higher level of fundamental skills: math skills, engineering-based skills, technical skills,” says GEMA’s Coventry. “They tend to understand blueprints, they understand metrology and measurement, they can easily swing between an English or a metric system, they understand how equipment works and what kind of results they can generate. We do that primarily through our technical assessments and then through our background checks. What we have gone after is not the typical UAW automotive worker. In fact, we have very few of those that have made it through our process.”

Coventry says that because of the decline of the Michigan economy, many small tool and die shops and smaller manufacturing operations closed. Hires from those firms, he says, tend to be more flexible in their approach to work because they’ve held down a variety of roles, from opening up in the morning to doing the books at the end of the shift. “Those people tend to be highly independent and can manage flexibility and ambiguity in a much different way than somebody who is very rigidly structured and only worked on an assembly line in one operation or was a skilled tradesman and only did one specific trade. So, we’ve looked for that flexibility.”

“The other thing we’ve looked for is people that had previous experience with lean manufacturing operations,” adds Coventry. “He says that within Michigan they’ve found Japanese employers that have relocated or downsized, leaving behind people trained in Japanese management techniques. “They understood lean manufacturing. They understood basic problem-solving methodologies.”

Last but not least, GEMA looks for a diversified workforce. The Dundee plant is situated in Monroe County southwest of Detroit, and the minority population is about 2%, “dramatically below our requirement from a diversity level, so we were looking for a workforce that had at least 25% to 35% diversity. We’re currently sitting at 32% diversity.” That mix was achieved through cooperation with Focus: Hope, a Detroit agency that trains highly qualified, technical minority candidates, matching many of the skills GEMA required.

Ten years ago in Gliwice, Poland, GM was looking for personnel without automotive manufacturing experience. Grzegorz Smolka, personal development manager, General Motors Manufacturing Poland, says at that time GM wanted to invest in at least four different world locations: Thailand, China, Argentina, and in Central or Eastern Europe. “The idea was to establish four new plants, and not only four brand-new plants, but plants with the idea of lean manufacturing fully implemented from scratch, from the beginning. It was the concept of four brand-new greenfield facilities whereby the people should follow the principles of lean manufacturing from day one.” For that reason, GM wasn’t necessarily looking for a car manufacturing tradition or workers with automotive industry experience.

Working with DDI, GM Poland sought employees with certain competencies and attributes rather than specific automotive industry skills. “And apparently it worked,” points out Smolka. “I’m saying so because now this plant, after 10 years, is placed within, to put it conservatively, the 10 best automotive industry plants in the world.”
There are so many opportunities, and so they’re always looking for higher pay in other plants. It makes it quite complicated to control the attrition in China.”

— Jonathan Lu, Delphi China

In China, the dramatic rise in new manufacturing businesses of all kinds puts most recruiting, selection, and hiring programs to the test. When unemployment is low, leverage sits with the recruit, and hiring—or simply retaining—employees can be difficult. Jonathan Lu, human resources director, Delphi China, Shanghai, China, says he became aware that his plant’s attrition rates were higher than some Delphi plants in Mexico and Europe. “The reason, I think, is that China now is becoming a manufacturing center of the world. And we hire a lot of people.”

Lu adds that it’s become difficult to hire local people within China cities to work in plants. Like many manufacturers, Delphi brought in rural laborers and farmers who were looking for different, modern work. “We call them immigrants from the countryside,” Lu says. The wages the “immigrant” workers earn will be considerably better than what’s available in the countryside, but once in the city they see a world of manufacturing options. “There are so many opportunities, and so they’re always looking for higher pay in other plants. It makes it quite complicated to control the attrition in China.”

Lu says one way to address attrition is with higher pay, but being a good employer can also go a long way toward keeping employees. “People also see you are a safe company. You are a good company, a good employer to work for. This is the kind of thing we are doing.” Lu points out that many direct labor employees join the company without any kind of skill. If they can see there’s an opportunity for them to pick up new skills, and also upgrade their level within the company and receive commensurate pay, it helps to keep them from looking elsewhere. To further that feeling of trust and loyalty, Eduardo Ruiz, manufacturing manager at the Delphi China Shanghai plant, says the company also provides productivity bonuses and “best teams” awards.

GETTING EMPLOYEES ON BOARD—RECRUITING, SELECTION, AND HIRING PROCESSES

For companies such as Ford, GM, Toyota, and others, the vision of their ideal workforce, from leadership on down, is often quite clear and specific. Yet because getting even a handful of potential hires to jibe with specific criteria can be challenging, getting thousands to hit the mark can be a daunting prospect. A successful strategy includes:

> Understanding the market from which potential hires will come (often a strategic decision that contributed to the plant-site selection in the first place);

> Recruiting for positions in the plant, from management through the plant floor;

> Working within and ensuring conformity to regulatory, compliance, and legal vagaries in countries of operation (recruiting through day-to-day administration); and
Global Auto Plant Start Ups: Building a Workforce to Drive Success

> Efficiently managing the applicant pool through the selection, interview, and hiring processes (and being certain that those conducting interviews have the skills necessary to make accurate decisions and make positive impressions with sought-after candidates).

Many OEMs and suppliers, not surprisingly, rely on outside human resource firms to oversee portions of this overwhelming process—especially compliance—helping Start Up plants sort tens of thousands of potential hires into the right number of employees with the right characteristics at the right time.

“There’s a standard process that we use now where we are pouring them into the funnel,” says GM’s Burton. “In Poland, we put 52,000 in the funnel to get 2,200 out. We’re seeing fallout rates of about 10—for every one that comes through, there’s seven to 10 being cast aside.

But, you know, if you’re in Russia with 0% unemployment, it’s different than being in Poland at the time with 15% unemployment.

“I think that what we’re currently doing very well is the way we select the people,” adds Burton. “We’re using DDI to support us. In all the projects I’ve been in, if you use that process and let the process work, pay attention to it, you’ll get good people at the other end. And good people build good plants.”

Burton’s colleague in Argentina, Maria Fernanda Mora-Vinueza, industrial relations director, General Motors Argentina, Rosario, Argentina, says leadership and skilled trades/support were on board “the first semester of project initiation,” with operators and associates in place a year ahead of production start up. GM Argentina gets assistance with staffing from two service providers, one for its hourly population and one for salaried.

“They follow GM’s standard procedure for interviewing and assessing personnel (competencies-based interviewing, hands-on, assessments),” Fernanda says. She notes that GM employees (internal clients to the selection process) participate as observers and qualifiers of several of these activities; final interviews are performed internally based on the established competencies.

Toyota’s Furuta says that when staffing for production associates, Toyota has often relied on DDI to develop the process. DDI takes Toyota’s criteria for employees—good at teamwork and problem solving; good dexterity, speed, and pace; able to come up with ideas—things that are not often easy to measure, and develops a screening system. “They give me a more [defensible] way in the United States to select the most capable guy who could understand a number, who could read well, who could communicate well, and who could learn [under] pressure in a faster pace.” He adds that this attention to legal issues around staffing is more of a concern in the U.S. than Europe or Asia.

John Mitchell, business team leader for human resources, International Diesel of Alabama LLC (USA), says his plant started recruiting efforts 10 to 12 months before the first production run. First on the list of recruits and hires were engineers, managers, skilled trades workers, and maintenance technicians; operators/assemblers were last. Mitchell says his biggest challenge was getting people hired quickly enough, because candidates had to cross several hurdles before getting a job offer; if he had to do it over again, he says he would have started the hiring process earlier. He also noted that the 90 to 120 days required for each candidate to move through the hiring process meant that in some cases International Diesel was in danger of losing qualified employees to
a competitor. Once in-house, new hires enter into an International Diesel of Alabama new-employee orientation and job-specific training program.

BMW’s rigorous process for hiring production associates has evolved since plant start up. It initially required each applicant to spend 33 hours of his own time in classes and in testing situations. After successful completion, applicants entered a hiring pool from which BMW staff selected for line jobs. “In the earlier days, those 33 hours included computer training, team skills training, training on quality orientation, and interpersonal skills training,” says Foster.

“We process-changed, through efficiencies, from 33 hours to 4 hours over time,” she adds. “Now there is an applicant pool. These are people that are interested in the job. They come through a paper/pencil testing process that determines willingness to work, it determines comprehension, it determines some problem-solving skills. From there to a drug test and from there to . . . an experiential simulation where we actually saw work happening and we were testing for quality orientation. Can you follow a process without changing anything or trying to make improvements along the way? Are you safe in that process? Do you exercise cleanliness in your environment and surroundings through that process? Do you do quality checks within that process? It replicated repetitive work that we would then see on the line. And it also measured stamina—how much energy do you have to push through problems or push through tiredness?

BMW follows the simulation with a pre-placement physical, which consists of a functional capacity test to determine upper body strength as well as tests to determine if an applicant is physically fit enough for repetitive work, along with checking for previous body trauma that could result in reinjury. “We would make sure that the physicals were very thorough, and then those applicants would enter an interview process where the departments would perform panel interviews. If they liked those applicants, then, of course, we would hire them and they would start immediately. If we had reached our capacity for the moment, then that applicant would go into what we call an applicant pool. And whenever we’re ready to bring in the next group, they would be the ones chosen for those particular jobs.”

BMW also sought people who had manufacturing experience—proof that they can sustain manufacturing work—and who lived within a 50-mile radius of the plant, to prevent long drives after working long hours and overtime.

On the professional side, BMW solicited and screened résumés, weighed skill sets, and conducted panel interviews. During the Spartanburg start up, this was a manual process; today it’s electronic, including résumé submission. Prior to panel interviews, says Foster, a pre-meeting with the hiring manager was held to prioritize necessary skill sets.

Would you be willing to do that, or do you just say, ‘I’m tired and I sit down and I give up.’”

“In the interview we spoke a lot to how would you handle yourself in this specific situation. We might have four or five managers interview one person, and they all were looking for different things, different environments, responses, as well as experiences. We also had the DDI inventory that all of our salaried candidates took.”

—Roxie Asbury, AM General
Robert Schable, safety engineer, and Roxie Asbury, manager, administrative services, AM General LLC, South Bend, Indiana (USA), say that outsourcing is a necessary tool when working through volumes of potential hires, using various firms for preliminary testing and prescreening of candidates, followed by AM General interviews and selections.

"In the interview we spoke a lot to how would you handle yourself in [a] specific situation," says Asbury. "We might have four or five managers interview one person, and they all were looking for different things, different environments, responses, as well as experiences. We also had the DDI inventory that all of our salaried candidates took." Candidates had to pass one of two inventories, one each for supervisory or non-supervisory roles.

"Within that inventory, there were very specific questions," adds Asbury. "One of them had almost 200 questions and another one had maybe 50 [questions that sought out] longer responses from them or more complicated responses. That inventory spoke specifically to team-based environment situations, getting along with workers. How would you handle it if someone came to you and said they saw someone’s paycheck and they were making more than you? That kind of thing. DDI helped us a little bit in narrowing that down."

Ford’s Grigorian faced unique challenges when recruiting for the Dearborn Truck Plant, most notably a pre-determined hiring pool (displaced Ford workers) and severe restrictions on selection criteria (physical inability to perform the job was essentially the only way to disqualify a candidate). "In terms of the hourly, we wanted to make sure that the people that we brought in were physically able to work in the plant. When I say that, I mean we were going into this facility with an understanding that all employees were going to rotate on the teams. So that if you had one team that had seven operations, there would be job rotation. We’d never done that before; it was mandatory job rotation. So we had to have people in the plant that had the ability to do that. So the only way we could disqualify someone coming in the plant was for medical reasons, and even that was a challenge."

"I remember at one point I brought in some people from one of the east side plants that was closing down, and I probably disqualified 14 people," recalls Grigorian. "Let me tell you what, I mean, that caused such a ruckus in the Ford system, it ended up hitting the newspapers. But you don’t have much leeway in anything that you can do. The only thing that we could address was from a medical point of view, to make sure that people coming in could do the jobs. And if they couldn’t do the jobs, we sent them back." Grigorian says that if they could perform physically, they were hired. Ford, though, was able to position new hires as appropriate, putting top performers into team leadership roles.

Ford’s Barney explains that on the hourly side of the business, while the truck plant could not hire from the outside, in other start ups at Ford the company does pursue more traditional recruiting and hiring approaches. The firm often uses government employment agencies, such as the Michigan Employment Security Commission, to identify candidates and establish affirmative action scopes for candidates, as well as outside parties for selection, testing, and validation of candidates.

Job-related testing looks at a variety of criteria, Barney notes, including motor skills, problem-solving ability, and manufacturing awareness. Outside companies administer the testing and provide scores for each
person (e.g., low, medium, and high). “Of course, we would look at the high people first, and then maybe look at some mediums.” From there, everyone goes through a series of interviews, conducted primarily by first-line supervisors and some mid-level managers. Using Ford’s behavioral-based interview process, staff then learn more about candidates and their experiences and backgrounds. After that step, Ford makes formal offers, completes the hires, and enrolls employees through a 90-day evaluation period. Upon completion of this period they obtain seniority, becoming a union-protected employee.

Establish a Plan
At Toyota’s plant in Walbrzych, Poland, the projected employee base kept rising, says Dariusz Banach, going from 500 to 1,000 and finally to 2,000. Difficult as this was, Toyota was rigorous in establishing an HR ramp-up schedule. For example, knowing the date that workers must be on board, leaders worked backward to establish a timeline for when recruiting notices must appear, when interviews must take place, etc. “And we actually set the interview date, even if there were no candidates at all, even if there were no advertisements, and then we planned all of the other activities. This was the only thing that helped us to survive in the timing, in the punctuality of staffing. Punctuality of our staffing was 99%; 99% of the positions were filled according to the plan.”

Banach says that a recruiting agency helped pull in candidates, DDI worked on testing (paper-based instruments to determine attitude, ability to work, technical skills, etc., as well as establishment of an assessment center—a “mini company”—for behavioral and teamwork testing), and Toyota completed final interviews.

Report-outs During Ramp-up
Like most plant start ups, AM General wanted a clear view of the talent pipeline it sought. AM General’s Roxie Asbury says few things were monitored as closely during the selection and hiring phase as having the staff in place according to the timeline, “ready to meet our production requirements, non-failable requirements, whatever stage we were in. It was continuous: Report-out weekly on how many candidates, how many qualified résumés did we look at, how many candidates did we set up for testing, how many candidates passed, how many interviews we had ... Those were our metrics. Where do we stand? These are our requirements. Where are we? Are we staffed? Can we run this department?”
BRIDGING THE GAPS—INITIAL TRAINING AND ONGOING TRAINING

Even the most adept recruiting, selection, and hiring program requires support via training. No employee arrives on day one as perfect; more to the point, most Start Up auto or auto supplier plants want employees steeped in lean manufacturing concepts, in addition to lean’s supporting attributes of problem-solving and teaming abilities.

Ford’s Grigorian says that even with people coming from other Ford plants, substantial training was required. “We understood that there would be various degrees of understanding and knowledge, so we incorporated that into the new-hire training program.” That program lasted one to two weeks and consisted of core classes covering the Ford Production System, safety and ergonomic training, and continuous-improvement workgroup training. “We tried to really drive the work group process ... in terms of their interaction among each other and working together as a team and problem-solving.”

Ford’s Barney adds that the teamwork training was especially important for employees coming to the plant with lengthy Ford résumés. “They definitely weren’t involved with as much teamwork that was going on [at their previous plants] as was at this plant.” He also notes that on-the-job training was extensive because of the unique assembly methods that Ford was deploying in the new truck plant. Most training was conducted in-house, although equipment-specific training for skilled trades might have been administered as part of a supplier’s contract. Some skilled trades also took part in the installation of equipment with vendors, months in advance of the plant’s start up.

“When a new employee is hired, there is a five-day, hands-on training session conducted offline and a subsequent five-day on-the-job training conducted online,” says GM Argentina’s Fernanda. “During the on-boarding process an exhaustive review of GM’s GMS [Global Manufacturing System and GM’s version of lean] and work philosophy takes place, covering history of the company, core values, cultural priorities, core policies of the company, major processes, products manufactured at the location, among others. All on-boarding activities are performed with internal resources. Depending on the level of the position, the person may receive additional training such as leadership training, candid feedback, performance management, etc. Additionally, some functions have also created a functional on-boarding process (specific training and processes for each function), which follows the general company overview.”

At AM General, “One of the first training opportunities that we offered our new employees was the GM GMS concept,” says Asbury. Her colleague Schable says, “There’s a big learning and training curve for the management folks probably initially to get used to that, because most everybody did not come from that lean background. So there’s a lot of training that had to take place to get folks up to speed, and to understand the lean manufacturing concept and the team-based concept.”

In addition to lean training, during pre-screening prospective hourly workers were put through a simulated work environment that taught the team-based concepts of lean manufacturing. “[I think] the biggest challenge we’ve seen in adapting a traditional environment to a team-based environment is historically the way people handle situations,” says Asbury. “For instance, if you have someone [in management who
has 20 years of traditional experience of telling employees what to do, even though they understand the concept of the team environment and they are trained in the team environment, if they’re not on their toes all the time or if they’re in a stressful situation—which is really pretty common in manufacturing—then they have a tendency to revert back to the old behavior.” Because of non-lean recidivism and the big change from traditional to lean, Asbury says it’s vital to have frequent training sessions and workshops to remind people that they are in a new environment, a new culture.

Ruiz of Delphi China says that salaried employees in Shanghai were hired about six months in advance of production and received detailed training covering every conceivable aspect of operations as well as orientation. “Within six months, we will teach them all details,” says Ruiz. “And in addition, they will be part of that project team. They will learn hands-on ‘How-to-do.’”

Technical and direct employees in Shanghai, such as technicians, inspectors, and material movers, were hired three to four months out from launch. “They need to learn procedures and work instructions and some specific items to technically do the job,” says Ruiz. Basic training for direct employees, which lasts for two weeks, also covers orientation and skills development for how to build a product, as well as the basics of the manufacturing system. After two weeks of training and evaluation, employees are moved to the operation site. “And normally it would take from three to four weeks learning curve to achieve 100% efficiency. In that real time, we assign the ‘brother’—you know, buddies to support the new people to learn methods and the job-related standard work in the line.”

It’s a given that lean manufacturing varies from automaker to automaker and supplier to supplier. Toyota’s Furuta says that

“You want to have people trained in what they’re going to be doing as close to that time period as possible. . . . You want to train them on those specific things as close to the event of when they were going to take on that responsibility as possible.”

—Steve Barney, Ford Motor Co.
when he gets an employee with no automotive background, it typically takes three months to teach him the basics of the Toyota Production System (from which lean manufacturing was designed). But if Toyota is working with an employee who has traditional automotive experience, as was the case at NUMMI, it can take three years to get them trained and fully committed to the system. He says, “Because if they don’t know, they accept it, whatever we teach them. So, if they were running a tractor, farming, or flipping a hamburger, they accept it, whatever we are teaching, and they believe this is right. On the other hand, UAW folks, I have to tell them why. Otherwise, they say, ‘Oh, we used to do this, we used to do that, I don’t like that way, I can find a different way.’”

Toyota’s Banach says that within a 70-kilometer radius of the Walbrycz, Poland, plant there were as many as 50,000 job offers in the market, requiring the plant to adopt a training approach that quickly moved its hires from 80% readiness to 100%. In such an environment, Toyota’s practice of hiring for “suitable behavioral competencies” was critical. Adds Banach: “And then we sent them for [several months to one year] to Japan to [Toyota Motor Corp.] to learn technical processes at our mother plant.” The length varied given their previous technical experience, and most of the training “was acquiring Toyota culture or corporate culture. One of the companies that visited us much later asked, ‘How did you set kaizen system?’ or ‘How did you set kaizen attitude or improvement culture among your members?’ We said, ‘We didn’t have to. It was gained with the full package of Toyota culture, of corporate culture, because they went to Japan, they were working in a kaizen-friendly environment.”

**TRANSITION TACTICS—FROM NEW TO MATURE AND IMPROVING (AND OUT WITH EXPATS)**

When staffing up a new plant, especially senior leadership roles, it’s often necessary to find executives with proven leadership and technical experiences to get the plant launched. As noted, GM yields a force of iSPs to put GM’s cultural and systems stamp on a new plant; other auto firms also deploy start up teams that move around the world. Many work alongside local managers, who are mentored for their own moves up the corporate ladder and into plant leadership positions. Yet once a plant is established, it usually requires a rapid leadership transition to executives who will then manage and improve operations within a maturing facility. The pace at which outside advisers and expatriates move on varies by automaker, plant location, specific skills requirements, and the need to get experts/expatriates on to their next start up.

BMW’s Foster says that there are approximately 200 expats among the exempt staff at the Spartanburg plant, recruited from BMW’s German operations based on specific needs, whether for the plant or an individual’s growth/development path. These Spartanburg expats deploy or redeploy based on project complexity (i.e., pressing deadlines to get the product out the door); at times there were nearly 400 expats among BMW’s 4,700 employees, with an even greater concentration among vice presidents. “We really relied heavily on the experts from Germany in probably the first five years of our existence,” says Foster.
BMW paired German expats with local American managers. “As the German managers imparted all the skill sets to the American managers in a three- to five-year period, then they would return home. The Americans then should be able to run it,” explains Foster. “And sometimes, they would have another German national come over and run that particular department. But in the ebb and flow back and forth, it was decided that they should leave the skill set of knowledge with that individual through a training situation. They’re learning on the job, actually, and that’s what we do still today. It is a partnership and trade-off of knowledge and intelligence because that was a huge problem with people. The guys would come over, and then they would go back and there would be a huge void. We had to think of a way to make sure we captured that knowledge in a planned fashion.”

At Toyota’s Walbryczch, Poland, plant, there are still about 15 expatriates out of 2,000, says Banach, who mentor locals. “In this respect, our start up might have been different from start ups maybe in other companies because we have a system of comanagement in some positions, depending on the maturity of the position holder. In some positions, in some managerial positions, we have positions doubled by two co-managers . . . The purpose of such comanagement is for a kind of on-the-job training, not only for the comanager but also for subordinates. We can directly get experience from TMC expatriates.” He says the expats stay for limited periods, with their prime task being “to teach.” He recalls that he, too, had a comanager because of expanded responsibilities that included Asia finance and administration.

At GM’s Rosario, Argentina, plant, a majority of the executive team still consists of expatriates. “And,” says Maria Fernanda Mora-Vinueza, industrial relations director, General Motors Argentina, Rosario, Argentina, “as of today, we still have a number of expatriates in critical technical jobs in addition to the management team. We have defined specific career paths for a number of local, high-potential people in order to take over those positions in a medium term (three to five years). As we are in an expansion phase, most of these roles are still filled by expatriates that have the required knowledge and expertise needed for the development stage. At the time of full project implementation, we plan to have a reduction on the number of expatriates (30%). For being part of a global company, we will have expatriates as a natural component of becoming common and building expertise throughout the globe.”

GM keeps volumes of data on its internal staffers, trying to understand not only performance but also what colleagues and managers think of them, their characters, and their abilities to adapt to foreign assignments. Burton says, “[W]e see how they get on. Can they do this? We can then make decisions on people based on fact as well as the more subjective things their local management might input into the decision-making process.”

“We really relied heavily on the experts from Germany in probably the first five years of our existence.”

— Sky Foster, BMW
GM’s ISPs generally have operations experience, and decisions about deploying this group are carefully considered. “Starting up, sending ISPs in, is expensive by the time you get them in, the family in, deal with their taxes, deal with all the housing and all those things, and just looking after them,” he adds. “We would carefully monitor that situation to understand strategically where we would put them, and that would be done also based on the availability of good local talent. In Poland, when we started that up, we had about 10 core ISPs that were in the heart of the business. If you look at Russia today, I think I’ve put 11 up there. In India we’ve had less, but we were able to pull people from our existing operations. In Mexico, it’s even less because we can pull people from the current Silao, Ramos, type of operations, and they can go in and do a job.” Burton adds that an expat position doesn’t necessarily come with a promotion: “Some people will go in it just to get the experience, a sideways move. You know, it’s a very challenging thing. We’re [currently] moving a young lady out of Canada to Russia. She will get a pay increase, but she won’t get a level increase. She wants to go because she’s keen to do something so unique as a start up. Not many people get those opportunities in life.” Barney says that Ford typically places local nationals in positions such as plant manager or area manager, but requires them to apprentice with Ford staff for six months or more. “And our goal always was to turn as much of the leadership for the plant [as possible] over to local nationals when they’re ready to do it.” Occasionally Ford will earmark a position in a plant or country for expats, because we want people at our higher levels of management that have international experience. We may keep a certain select number of positions that we would reserve for developmental purposes. But … the operating committees at the plants and the mid-level of the plants, those we would try to staff up with local nationals as soon as possible. When you get down to the supervisor level, you still may see some expats there, but more often you try to start up with local nationals. And certainly, at the operator level, those would all be local nationals.” Ford’s Grigorian says some members of Ford’s launch leadership will remain at the plant. “As we brought in and selected the members of the operating committee that were going to run the plant, we were looking for key attributes in the people—knowledge of lean manufacturing, their leadership skills, not just the technical side of it,” says Grigorian. “We brought them in earlier on so that they would be a part of the launch team, and we had them together, working together as much as possible through meetings to understand everything that was going on. So they were a part of it when we launched, and then the launch team goes away. [But] some members of the launch team that were extremely technical were able to move into other key positions within the workforce.’” “What Ford does is that we over-staff to a degree,” adds Barney. “This was the case with this plant, as it is in any new model or major new model launch.” He says Ford brought in a cross-functional group of about 125 employees from the corporation’s product design engineering, manufacturing, and engineering groups—“drop-in expertise that’s there to help with the ramp-up and the [new model] launch.” Ford weans itself away from over-staffing after Job 1 (the first run of production), and when the plant’s jobs-per-hour goal is reached (in this case 54), more experts are taken away.
As a safeguard, though, Ford retains “resident managers” from the design community to help resolve issues and work through changes. These staffers have a “dotted line” to the plant manager but also report to design engineering, helping with model year iterations, warranty concerns, quality issues, and general problem-solving. “So that eases that transition,” Barney adds, “but the day-to-day operations are really run by the operating guys on the OCM [operating committee member]. And those guys, by how they’re selected and by their development and their grooming, have real good people skills, management skills, and, hopefully, especially where it’s critical, very technical knowledge.”

GEMA’s Coventry says, “At the senior staff level within the facility, we’ve turned over a great deal of our folks in the last 12 to 18 months as they’ve moved on to other assignments within the Chrysler group or within the parent companies Hyundai or Mitsubishi. We’ve seen a lot of people go in and come out of the organization, but we’ve not fundamentally changed the requirement of what we’re looking for. We’re still looking for people that have strong technical capability, but we’re also looking for people that also have very strong organizational and people skills. So, while the day-to-day running of the plant creates a different set of challenges than launching the plant, we’re finding that, as we transition our leaders, we’re teaching them to grow into that new role. And we’re also making our experienced leaders available for other new programs that exist within the parent companies.

We’re providing a group of relatively young leaders to go back into Hyundai, Mitsubishi, as well as Chrysler, and be able to immediately participate at much broader and higher levels of responsibility than they had on this program. But they now have a background that is enabling them to do much, much more.”

HR START UP CHALLENGES—MANY AND VARIED

Innumerable strategic issues face executives bringing a new auto plant online, and many of these translate directly into cultural and HR challenges (see “Start Up Challenges,” on page 24), ranging from finding the right leaders and employees in a new manufacturing region to the detailed work of instilling knowledge of the manufacturing systems and philosophies from the start—all under intense pressure to make the most of a rare opportunity.

GM’s Burton believes the biggest challenge is ensuring the right balance between the ISP start up group and local teams. “You get the right balance of interaction between them, then it’s seamless,” he says. “They’re respectful of each other, and they are demonstrating that they work well together.”

Toyota’s Furuta says the greatest challenge is in achieving mutual trust with the local workforce. “How can they realize mutual trust in our policy?” What is the way we can foster mutual trust between company and employee? And also,
### Start Up Challenges

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<td>Ensuring production associates have the right attitudes and attributes (selection process focus on problem-solving, teamwork, etc.)</td>
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<td>Applying efficient, post-hire development programs that incorporate proprietary training (e.g., lean manufacturing principles)</td>
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human resources should understand they are an employee advocate, and at the same time they are management. He says it’s necessary to balance this conflict, and not be too one-sided either way.

Asbury of AM General says one of the biggest challenges the South Bend, Indiana (USA) plant faced was in hiring employees with automotive experience. “We kept a kind of a matrix of the employees and what companies they were from and how many years of experience this represented in terms of giving some credibility to our workforce. But then, in addition to that, being in the location that we are here in South Bend, there’s not too many automotive industries that are very close. We had to relocate almost all of our salaried personnel. We had very few people that were local that had the skill sets that we needed. So relocation was huge and so was the expense associated with that.”

She also says that the sheer volume of hiring was challenging, with staff completing much of the selection process after hours because most AM candidates were actively employed elsewhere: “You couldn’t reach them during the day, you couldn’t interview them during the day. It was kind of hard on the home life to be able to have the staff in the evening or to do weekend interviews. There was a lot of bringing candidates in, and we would make sure we would take them out to dinner or show them the city, talk to them about the culture of this area, the things that this area had to offer.”

Like many migrating automakers, BMW was looking at a perfect storm of newness: new plant, new associates, and new suppliers. “That’s a bad combination,” says Foster. “We had to get everybody up-skilled in a very fast way to meet the volume, the quality, and the deliverables because our customers wanted what they paid for. We didn’t want it to fall apart. And in order to do that, we many times had to solicit assistance from Germany because that’s where the skill and expertise was. Any time there was a lull in how we did what we did, we had our German counterparts come in and work with us until we were not taking baby steps any longer.”

Another challenge in Spartanburg was BMW’s unique system of rotating presidents every three to five years. Foster likens it to hiring a new football coach, who then brings in new staff and, subsequently, causes some instability. “That was a concept we had to grow accustomed to, as well. And that still continues today.” She says the plant has had to learn to be flexible with regard to the rotation system. “We could not survive if we weren’t amenable to that. The challenges have taught us this: If you’re rigid in your standard and your way, then you would probably die here or sink very, very low. There’s always a challenge in front of us, whether it’s brought on by the volume, by model change, or by a management change.”

“You didn’t have time to think. The pressure was unbelievable. I was with Ford for almost 29 years, and I don’t think I’ve ever experienced anything quite like that. I mean, it was a great experience, but it was just unbelievable.”

— Vera Grigorian, Ford Motor Co.
Ford's human resources staff launched the Dearborn, Michigan (USA) truck plant as it closed another facility and transitioned workers between plants, a unique challenge even among start ups. "There were plant closures going on around us as well," says Grigorian. "So we had to look at the locations that we were reducing and had to take people from those locations. But we knew that we were trying to bring over people who had the strong communication skills—and not the old-school way of performing—and that were more advanced in the FPS system and that had proven themselves as leaders."

Yet that wasn't entirely possible, and she instead needed to work within the existing Ford system. Those constraints led to what Grigorian says was "probably the craziest time of my life. You didn't have time to think. The pressure was unbelievable. I was with Ford for almost 29 years, and I don't think I've ever experienced anything quite like that. I mean, it was a great experience, but it was just unbelievable." Despite the constraints, she says they were reasonably successful in negotiating "working agreements" to support where the plant was trying to go, especially with team leaders. "It was a battle with the union, because what they had over at the assembly plant was an OK process, but it was an election process. We were trying to get away from the election process and get it to be a selection process. Eventually they came to a 'good, intermediate solution' that allowed Ford to get the best leaders they could in place while still providing some flexibility to the union to have elections.

BOTTOM LINE—SUCCESSFUL START UPS CAN BE MEASURED

For any new plant, the bottom line often is determined by the ability to hit a key production launch date or production volumes with quality product. But gauging success by those measures alone overlooks critical evidence that differentiates a well-done start up (able to continuously improve) from a rocky launch (likely to need ongoing remediation). Many automakers have found a variety of lead and lag measures helpful in gauging HR start up effectiveness.

Toyota's Banach says, "Our biggest successes in recruitment were, first of all, quality of the people, which resulted in the quality of the work. Definitely all our KPIs confirm that: Because of the quality of the people, we are able to meet business challenges. This is the best test of our activity." He says Toyota's quality of workforce influences all manufacturing key performance indicators (e.g., quality, machine availability, delivery accuracy, production accuracy) as well as HR indicators such as absenteeism and health and safety statistics. "I believe that in the initial three or four years, we didn't have any work-related accidents," says Banach. "Actually all of the KPIs confirm that we basically did a good job in recruitment."

"Clearly, you could look at after-the-act issues," says Burton. "I currently am watching what's going on in our current facilities in terms of the attrition rate. If you get a lot of attrition early on in the process when you should be in your honeymoon period, that's a bit alarming. So you have to question yourself, 'Is the management attitude right? Are we paying them correctly? Are they getting the right remuneration?' All those are issues."
Those measures have clear effects on productivity and output. “Often the metric is at the end of the project. ‘Did we start on time? Have we got the right quality levels? Have we got the right employee engagement because we can see that they’re coming forward with ideas?’” adds Burton. “We’ve got an open forum and open relationship in the plant. You can sense it when you walk around, the way the plant management is engaged with the people and, of course, those are things that we really need to be continuously monitoring, even after start up. … I’ve run three car plants in three different countries in the world, and the people systems were common. And they were indicators of how well we were motivating our people to do their job.”

BMW’s Foster says the firm monitors standard plant and individual targets such as volume, quality, and adherence to standards, but also reviews issues such as process training (number of classes an employee should attend). “Were you training them or were you not? That was a measure as well, and we used the traffic light approach, whether it’s red, yellow, or green. And when auditors came through, they needed to see that everyone in the plant that touched the car was basically trained in the same thing specific to that particular area.”

“In assembly plants—matter of fact, in almost any type of plant that we have in Ford Motor Co.—there are specific measurements that the operating committees look at on a daily basis,” says Ford’s Barney, pointing to success factors of quality, costs per unit, jobs per hour, safety, etc. “Once you ramp up and you’re hitting your jobs-per-hour [rate], then you also need to think about how you [wean] out that extra [start up] workforce and you get more productive. So you’re meeting your hours-per-unit-to-produce or cost-per-unit-to-produce [rates], how are you meeting your quality measurables, how are you meeting your cost measurables, your cost budgets? And then, certainly from a person standpoint, we’re always looking at the safety statistics.” Ford also uses measures such as manpower balance (i.e., enough people to do the job), absenteeism (and causes), and employee/job satisfaction.

International Diesel’s Mitchell looks at both lead and lag measures, relying on five primary metrics to measure progress in the plant. These metrics inform how feedback and goals are delivered to individual employees:

- Absenteeism (measured monthly),
- Safety (accidents/lost-time accidents),
- First time through (quality metric),
- On-time customer delivery, and
- Parts per million: “To ensure we produce flawless parts and products.”

“If we have a quality issue on the line, our engineers will go back down the line and resolve it by giving feedback to the individual team member,” notes Mitchell. “They work together to come up with an innovative solution to the problem. … There’s lots of error-proofing on the line. We get heads together to come up with a way to not make that mistake again.”

“Our biggest successes in recruitment were, first of all, quality of the people, which resulted in the quality of the work. Definitely all our KPIs confirm that: Because of the quality of the people, we are able to meet business challenges. This is the best test of our activity.”

— Dariusz Banach, Toyota Motor Co.
SUMMARY

Many of the executives mentioned in this paper—as well as those reading it—will find themselves walking the floors of a new plant on a new continent within the next year or two. If they’ve been prepared properly, they’ll walk in with the HR knowledge and have access to HR systems and philosophies to begin the complex process of selecting staff and ramping up a new facility:

- Pulling in experienced Start Up leadership with the right attributes and populating the plant with carefully selected hires,
- Instilling corporate identity/DNA within the culture and work environment,
- Applying the right type and amounts of training to new and transferred hires,
- Building the HR infrastructure for ongoing workforce development and administration, and
- Transitioning the plant—and its workforce and leadership—as it matures.

Yet even battle-tested Start Up veterans may find the HR challenges daunting if not impossible without the assistance of professional services to manage the overwhelming volume of hires and activities. Savvy executives will look for help as they need it—because they know they’ll only get one chance to start a new automotive plant the right way.

Benchmark Other Plants

GEMA’s Bruce Coventry reports that the company shares and compares key performance indicators among its plants. “And when we see one plant breaking away from the pack in an area like quality or warranty reduction or cost improvement or safety, then we jump on an airplane and we go visit that plant very quickly so that we can identify what is being done differently than what we’re doing in our own facility, and try to make those changes. The other thing that we do on an annual basis is we take anywhere from 15 to 20 of our employees, a diagonal slice across the organization, to visit our sister plants in both Japan and Korea. We’re slowly rotating all of our employees through this process now. ... So about 15% of our workforce has had a chance to hands-on visit our sister plants and, in that process, we’ve gained some deeper understanding of how things are being done and what kind of opportunities exist within the structure of the overall joint venture.”
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Automotive executives:
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ENDNOTES

iii Tian Ying, “GM May Boost China Auto Sales 50% Over Three Years (Update),” Bloomberg, April 19, 2008.
ABOUT MPI
MPI is a Cleveland, Ohio (USA)-based research organization specializing in research development, analysis, and communications. MPI services include:

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