

MANUFACTURING

Some manufacturing companies have endured during the slowdown, while other leaders are bracing themselves for an even slower year throughout 2010. Experts say finding skilled workers is essential to maintaining industry strength. Our group of manufacturing leaders also discussed helping Utah's homegrown manufacturing companies, promoting the industry in K-12 education, and international threats and opportunities.



We'd like to give a special thank you to Lew Cramer, president and CEO of World Trade Center Utah, for moderating the discussion, and to Holland & Hart for hosting the event.

PARTICIPANTS:

Standing: Pratap Khanwilkar, WorldHeart Inc.; Donald Blohm, Mity-Lite; Jeff Alexander, Alexander's Print Advantage; Nate Brown, XanGo; Miguel Rovira, Governor's Office of Economic Development; Steven Johnson, Wencor; Jon Bensen, ZAGG; Marlon Snow, Board of Regents; Diane Williams, Companion Systems; Charley Johnson, SnugZ USA; Bryan Welton, Namifiers; Richard Thomsen, Bank of American Fork; Josh Randall, Holand & Hart; Todd Brightwell, Economic Development Corporation of Utah; Ragula Bhaskar, Fatpipe; Wayne Stewart, Promontory Management Group; Frank Ruiz, International Armoring Corp. Sitting: Lew Cramer, World Trade Center Utah; Tom Dickson, BlendTec; KC Ericksen, Orbit Irrigation; Dave Sorensen, Manufacturing Extension Partnership

How has today's economic environment impacted Utah's manufacturing industry?

THOMSEN: 2009 was an interesting year, and we're glad it's done with. I'm starting to see financial statements from manufacturers that are customers of our bank and over the past 12 months there's been a general slide in their abilities, generally speaking. I believe the good news and the positive news that we're now hearing from our customers is that a lot of them are having very strong orders, so I think there's a lot of good news for the manufacturers from what we're seeing from our customers.

As most know, banks have not done a very good job in managing themselves. For a bank to be strong, it needs diversification in its assets. So if one sector of the economy



As Utah manufacturers seek out new opportunities, the international arena is probably the best place to look. – Nate Brown fails, a bank will not be in a funk because the other sectors are strong. So as a manufacturer, I think you should be seeing a lot of support from banks because they're needing more diversification.

BRIGHTWELL: We [EDCUtah] are busier than we've ever been regarding inquiries about business expansion and relocation to the state. We were expecting things to dip for us during fall of last year or at least to level off, but it hasn't-the pipeline is very full. The interesting thing about it is it's very full on the front end of the pipeline. We haven't been as successful as getting things across the finish line, but the interest is there. A lot of companies are doing their due diligence. They are spending the money to come here and we sense that they're getting in line for what is hopefully a little stronger economy in 2010 to start making decisions. We think we're poised very well here in Utah. I think that's our key lead punch and why companies are looking at Utah-because it's stable and it's solid, but also we have a low cost of doing business that is very helpful. But what is resonating more than anything is that we're a very well run state, and the ability for us to rebound out of this is looked at nationally as being very positive.

BHASKAR: From a tech perspective, many of the technology companies tend to invest forward in new projects. And what they did the last year and a half was cut back on some of the highly risky projects and also cut back on some of the marketing, making profitability go up in the tech sector. The top rank sales are not as high, but from a profitability perspective, it's done very well. And then from a financing perspective, most tech companies are equity financed, with not a whole lot of bank financing involved, therefore, they're being largely unaffected by the banking crisis. And if you look at some of the technology companies, they always have a lot of cash. So many of the technology companies have been able to acquire the weaker ones that have not been able to get equity funding from the venture capital.

KHANWILKAR: From our [Worldheart] perspective, we are selling as much as we can

make. We've doubled our manufacturing staff and clinical trials. Now we are manufacturing and it's a good position to be in. Medical device companies definitely need much more funding than even tech companies do and they take longer to get to profitability. So the good thing is even during clinical trials we're generating revenue now because our devices are being bought even during trials.

BLOHM: We supply the hospitality industry and other industries that were hit pretty hard by the downturn. A while back we decided to create our own economic recovery with two initiatives. The first is to develop innovative products. The second is to focus on improving internal production and processes so that we can compete. In doing that, we've actually been successful in bringing a number of jobs back from offshore sourcing and found that the benefits we get from inventory management, from scheduling, from flexibility to customize our products to customers' needs, in addition to the fact we can compete on labor costs is quite encouraging. Oftentimes we think that the gap between foreign-sourced products and domestic-sourced products is big, but it really isn't that big. My idea is if we can match up offshore sourcing needs with Utah companies that can supply those needs and work to narrow that gap, it doesn't seem to be a challenge.

SORENSEN: Along that line, one issue is why is Utah perhaps more competitive in manufacturing? I say fortunately we're not dominated by a single industry. It's not just aerospace or just automotive. I think that diversity is very fundamental. The thing we need to be concerned about is making sure that we maintain a critical mass in manufacturing. We don't let it get so small that it can't sustain itself.

CRAMER: That's not only a Utah problem, that's an American problem because when you lose your core, you lose everything else around it—the accountants, finance, everything else is at risk.

SORENSEN: Over the last decade, the percent of employment as part of the Utah

economy that is in manufacturing has remained the same. But as a percent of the economy, we've gone from 12.4 percent down to 8.9 percent over a decade. That represents a loss. If we had just stayed at 12 percent of the economy, there would be over 50,000 more jobs in manufacturing and over 125,000 related jobs in the state. The concern is if manufacturing continues to be a smaller and smaller portion, it's not going to be sufficient as part of the economy to support new technologies, to hire all of our engineers and scientists, and to produce the kind of exports that we want as a percent of the economy. So the problem I see is this decline in the percent of employment in manufacturing as a percent of the total economy in the state. We lose here in the state 12 percent of our manufacturers every year. I have a listing from Workforce Services of every manufacturer in the beginning of every year for the last decade. And these aren't startup companies, these are companies that are paying withholding taxes, so they have employees and they're in business. Unfortunately, 12 percent of them don't show up in the next year—that's somewhere between 350 and 500 companies every year that vanish from the manufacturing scene. One of the challenges, of course, is that 99 percent of our manufacturers in Utah are small businesses, with their average size being only about 30 employees. Of the 4,000 manufacturers, only 34 of them are large, which is to have 500 or more employees. The challenge there is for those companies to have the resources to keep up with new methods and new technologies, and to be introduced into new markets.

WILLIAMS: As far as when the downturn was starting, we reviewed our own internal procedures and processes. We went ahead and created new lean practices within our organization, not only on the manufacturing floor, but in our front offices and back offices. We used the Manufacturing Extension Partnership to help us develop a lot of those programs in there. We also, in turn, saw the recession starting earlier than I think the general economy did, because our customers are the banks. So as they were starting to get in trouble before it was generally known to the public, we saw a downturn in our business. We went out international at that point and started developing relationships. In 2009, our international aspect became our number one and two customers, where prior to that it was virtually nonexistent. So we did not notice any downturn in 2009. We've stayed the same, grown a little, but it's definitely because of the international aspect.

Have any of you expanded into international markets?

BROWN: One of the things that we've seen in the consumer products arena is the fact that as the economy has gotten tight, we have gotten better from a supply chain standpoint and a manufacturing standpoint. Inventory has obviously come down. Commodity prices are getting more competitive. As sales flattened, that allowed the company to still be very competitive. One of the things that I said during last year's roundtable, and it's proven out this year, is the fact that there's many opportunities in the international arena. You know, the U.S. economy is stable but not really growing. We've made significant investments in the international arena and they have paid off. The economy in countries that we would consider emerging markets, like Russia and others, are very attractive right now. As Utah manufacturers seek out new opportunities, the international arena is probably the best place to look. With where the dollar is today and with the opportunities, we certainly hope we'll do more of that as our exports are reflecting.

RUIZ: I concur. I see opportunities in the international market. We did not expand as we wanted to back in 2009 because of the low in sales, but the markets are growing in the international arena, more at least for our product. We are looking at the Middle East and Africa as being one of our main markets for 2010, and some of the markets beginning to be born again in South America.

ROVIRA: I would like to complement the statements that have been made regarding international markets. In the past five years, Utah's exports into international markets have grown by 55 percent. And what's

truly amazing for Utah is that in 2008 we exported \$10.3 billion and that represented a 30 percent increase over the prior year. So after growing 30 percent in 2008 to exceeding that in 2009, it shows that our companies have looked at international markets and have been successful. It has been a long process to be able to go into those markets, analyze the market opportunities with the demographics as such, market to that particular population, and then build it so that we have continued growth. Interestingly enough, we exported about \$190 million in medical devices that were surgery related and about \$120 million on X-ray related products. Another area of manufacturers for Utah is integrated electronic circuits, and there was a huge growth between 2006 where we started at \$47 million to last year where we exported \$1 billion. So these markets continue to represent a lot of opportunity for Utah companies.

CRAMER: We push exports because exports mean Utah jobs. Anybody can import, but to export you've got to be a real trade warrior.

SORENSEN: If you look at the industry in general, 84 percent of [Utah's] exports are manufactured products. The other 16 percent are primarily software and Internet related. So if you want a balance of trade, you've got to have healthy manufacturing. That's also where our technology goes. Technology goes into products. We want to have scientists and engineers and technicians.

If you talk to a lot of people outside of manufacturing, they'll say, "Well, we can't compete. You got to let it go overseas." And you ask them, "Why?" And they say, "Labor costs. Labor costs less." One of the things I want to say about labor is if we think that we can't compete in manufacturing internationally, then we have a real dilemma in services because manufacturing has less labor in it than services. We need to learn how to compete in manufacturing or we're not going to be able to compete elsewhere.

What is your number one focus going into 2010?

BENSON: I would say our number one focus this year is costs. 2009 was our best year ever. A lot of that growth came from the shift in the consumers from price being the most important thing to quality being the most important thing. Our consumers are getting smarter than ever. They do their research. They look online. They read reviews. They want to know what's the best product and what's going to last. They're buying \$300 or \$400 cell phones, and they'll make a \$25 investment to protect their phones. But last year, even though we doubled our growth and we expect similar growth this year, we needed to be smarter on costs. And we need to be smarter on our supply chain. We can't do so much sourcing in China, which we haven't done too much of, but we've seen that get very expensive as you've got to build up huge inventory to manage that. There are a lot of costs in China that people don't think about. They just look at the hard dollar costs. It's all these hidden costs that get so

expensive. We're trying to get smarter and think about how we can bring a lot of this stuff into Utah, keep it home where we can be more flexible and more responsive to the rapid growth we have as we bring new retailers. And we can't just expect a slow, steady growth. We've got to be ready for massive growth.

ERICKSEN: My number one concern is just holding costs down in a market where our business is somewhat affected by the housing market. The professional side of irrigation is down 40 percent from 2007. So we're concerned that we need to hold the costs and continue to source and produce products in the most economical price. We have brought a lot of products back from China and from Mexico. We're now doing them in our plant here in North Salt Lake because we found that through automation and through a low cost of equipment today, which is a real benefit to us, there is a lot of equipment out there on the market that's very inexpensive and it allows us to produce here as cheaply as they produce there. The issue is assembly. There are items that we have to produce in China or somewhere else because the items are difficult to get casted or built in the United States. So we worry about how to hold costs.

DICKSON: BlendTec is really an engineering company. I'mamanufacturing engineer. I've always thought that if you have the best product and if you put money into it, then people will beat a path to your door to buy it. And instead what has happened is people steal your technology. Our main competitor has stolen 32 different technological advances that we've made in the industry.

There are five foreign competitors that have knocked off our domestic competitor, but our domestic competitor is smart enough to come after us to knock our technology off. As far as manufacturing

things offshore, we had a blade that has been made offshore, but now we're making it with a company right here in North Salt Lake. And we're making the blade for one-third the cost.

WELTON: Namifiers just passed 100,000 clients last year worldwide, and everybody is saying, "How's the economy affected you? Obviously you guys are down because of this or that." We still grew about 50 percent last year. Part of that was dissolution of competition and our effective processes that we've put into place. But one of the challenges that we faced is how to teach our people inhouse that we still are growing—that the



Somewhere along the line, the public educators have to figure out that not all kids want to go to college, but they can get a great education in our technical colleges.

- Jeff Alexander

economy is good. So in our sector, what we've noticed is that a lot of a company's dollar spent on promotional gear and other items dropped from a \$10 per item to about \$5 per item. That opened up a new market for us because we manufacture different types of promotional products, whether a key ring or a lanyard or some sort of name badge. So for us that's what helped us grow, because most people can't get these items overseas unless they plan on buying in bulk. So the competitive advantage we've capitalized on is the fact that labor may be a little less expensive overseas, but we have the speed, and that's something that people just don't want to deal with.

But more importantly, we focus on quality. We claim that we're one of the only companies out there that can produce 90 to 100,000 custom products per day. We're now taking our Utah processes and using them in the worldwide market. We never thought we'd be sending 5,000 or 10,000 name badges to some random company in Germany, but that's just what happens. And when the Greece airport calls and says "We need 3,000 badges" or "we need you to do ID cards," I'm thinking, "Wouldn't it be easier in a sense to sell the machinery or have you guys do it?" But we can do it faster, we can do it better and our quality is there.

STEWART: My company is called Promontory Management Group. We named it Promontory Management Group after the great event that happened out in 1869 at Promontory Point. It turns out that the lessons learned at Promontory Point are incredible as they pertain to industry. On May 10, 1869, railroads passed each other when they were supposed to connect because of a flawed reward system. Central Pacific and Union Pacific passed each other because they were being paid by the mile, they were being given land grants by the mile and there was no incentive to connect. Somebody had to intervene and say, "Let's connect these things."

Most of our manufacturing operations across the country are the same way. They have flawed reward systems and flawed measurement systems. My company goes in and helps them fix that. One of the things that we worry about is there are a lot of really good techniques out there that can be applied to manufacturing in Utah that we're not taking advantage of.

Are many of you exporting your products?

JOHNSON: I am constantly told to export, export, export. In the aerospace industry, our biggest market right now is China. The biggest problem is there are all sorts of export restrictions on what we send over to China. And so we spend a lot of time just trying to convince the Commerce Department and others that they need to help us. They're the ones encouraging us to export, but what are they doing to make it a little easier for us to do that exportation? Exporting is still a problem for us for our largest potential market.

Last year we had a record year in our international markets, particularly in the China market. Our domestic market was up 10 to 12 percent. That's what we were off here in our domestic market. But our international markets are growing substantially, particularly the Asian market, and that's the area that I have focus on. So I see a lot of external challenges that we still have to face, particularly with the products that we're dealing with.

RUIZ: Export licenses have become a number one problem for us because we have to export to places where there's conflict. After 9/11 we now are required to specifically have the export license for the individual that's going to use our vehicles, and that puts us against a competition in other countries that do not have the same requirement. And so some of our clients have their privacy very well-guarded. So rather than get me the information that the government requires for me to make the sale, they go to another competitor and in another country. So that has become a big conflict for us for the future.

Do you believe Utah has a strong pool of skilled workers the manufacturing industry needs for sustained growth? SNOW: I will say education-wise, we have never seen bigger growths in education in my assignment on the Board of Regents for higher education. We've never seen the growth in education that we're seeing today. UVU had a bigger increase this last semester than two of our smaller colleges combined, than CEU or Snow College combined, just in one semester's increase. Even in down funding, we've got a huge responsibility to try and educate these people that want to be trained so that they can work. We've got to make certain, even in down times, that these people have been given a good education so they can find a place in the workforce and be able to help with any needs of new businesses coming in and businesses that are here.

BRIGHTWELL: We have over 300 projects on our books and about 158 of those are active. Over 52 percent of them are manufacturing based. It's been pretty much what we've seen over the last three or four years that's remained pretty constant between 50 and 60 percent. So I definitely agree that manufacturing is the lifeblood of the economy here. The comments we hear from site selectors interested in Utah is the known quality of our workforce. Yet, we still hear about the particular skills that our workforce needs. I think that's our constant challenge—to look at those opportunities to educate our workers. I think technical colleges do a fantastic job, but we need to continue to put our foot on the gas to map the right skills and the right people to these type of projects.

THOMSEN: During the economy last year, we had some manufacturing customers who just knocked their sales up and had incredible margins. And as you look at each of them, they primarily came out of universities. BYU, for example, is a real incubator for Utah County for great technology and new ideas that really propel innovation. No one is there competing with them. And they have a niche that no one can touch. So I feel strongly that for Utah to be productive and competitive as we face the China threat, we need to offset the China threat by having very strong education and universities through the state of Utah that are more competitive and do a better job.

BENSON: I agree with what's been said about education. Although educated people are more expensive because they require more compensation, they're far more productive which makes your overall cost actually lower. At ZAGG we've seen that when we hire people with college educations, they are usually smarter, more driven and they tend to pay for themselves in the increased production they bring, plus the ideas and the innovation they bring to the table.

ALEXANDER: One of the things that's hard for the legislature to focus

on when you talk about education is a segment of higher education that gets lost—technical training. Technical training isn't seen as being sexy or cool. People almost see it as a second-class type education, which I think is really wrong. We need to start in the K-12 age groups. We need to do something so our kids have a clear path to technical training. Somewhere along the line, the public educators have to figure out that not all kids want to go to college, but they can get a great education in our technical colleges. I think we're doing an outstanding job in higher education, but we need to help this other segment of our workforce that just gets lost.

BHASKAR: From a wide perspective, what we're doing is we are unifying all the industry sectors that are needing technically trained people, not college educated, but technically trained. And now we're working more closely with the technical colleges to get them matched out, so that if you need X number of people, we can figure out a way to have the technical colleges produce X number of trained technicians. We have recognized the problem the last year and we're trying to work through the system. Hopefully within another year, you will see some progress coming out of that.

Utah's universities have a record of innovation and entrepreneurialism. What are some of the challenges startups have in taking an innovation to market?

SORENSEN: One of the things that we need to find ways to capitalize on more are the resources we're talking about from higher education, particularly the research and the development that occurs. We should pride ourselves in the fact that University of Utah is number one in new high-tech startups this year—better than MIT. So we have some very good resources here.

The challenge is that even though we may start up 20 or 30 new high-tech companies, they have 1,600 unlicensed technologies in reserve up there just at the University of Utah. The challenge is that they don't have the resources to reach out to the 4,000 potential manufacturers here in the state. Again, this is an issue of some way to help the bulk of these medium- to smallsized companies that have access to external resources that can keep them competitive and moving. So we need to think a little more about not just developing the technologies, but how do we help deploy them? That goes back to resources. We think about the economy as two sectors, goods and services, but we often forget the driving sector-the consumers. If we haven't learned anything in this recession we should have learned that the economy is not driven by goods or services, it's driven by consumers. Now, as we come out of the economy that we're currently in and consumers get a little more loose with their money, what do consumers want to buy? They want to buy goods. They don't necessarily want to buy services. What do you put under the Christmas tree? What do we spend most on? I say people spend on five things: food, clothing, shelter, tools and toys, which are goods. So we should be very optimistic coming out of this that there will be a more rapid demand for our output in manufacturing than necessarily in services.

KHANWILKAR: I sit on the commercialization advisory board and the issue I see is that we have great success starting up companies, but how do they grow? How do they become manufacturers? How do they sell products? There's great technology that looks good on the lab bench and it looks good in prototype, but it has to make the transition to a real product before it generates revenue and creates more jobs. The Industrial Assistance Fund has to do more to grow instate companies. I believe legislation should be changed to allow the Industrial Assistance Fund to go into unprofitable companies. Maybe set aside 20 percent of funds to those companies and encourage them to grow up and become manufacturers.

BHASKAR: Part of the problem is an idea is really only 5 percent of the business—the other 95 percent is where the gravel meets the road. You can license the technology but a lot of pain is involved in taking it to market and making a company profitable. Most people don't want to take that step because it's a lot of work. And, therefore, they'd rather go for something easier. Most of the stuff that's coming from the universities is highly complicated. It's an idea that's been patented, so it's tough to engineer and launch successfully.

How has immigration affected the state's manufacturers?

RUIZ: I think immigration affects most manufacturers. I think we all want to help solve the issue, but we are the ones being penalized. It seems like the spirit of the legislature is to penalize [the employers]. I think that's the wrong way to go. We know there's a problem, but it's a federal problem. We can't solve it because of the nature of it being a federal problem. For small companies like ours, if we lose two or three key employees whose status may be in question, it might affect our ability to produce.

What other employment issues are you experiencing?

BLOHM: It seems to me that the best opportunity for short-term job growth is with the existing small manufacturers. It just seems that's where most of the jobs are going to get created in the short term. There ought to be some way to help the smaller manufacturers out. With better management and implementation of modern techniques, these companies can be very successful, and they can quickly add jobs and they can quickly bring jobs back in. If I were to go to make a plea to the legislature, it would be to find a way to help not only the startups, but the existing guys that are out there struggling with how to make their companies better. And they can be better, but some of them are so small they just can't find enough resources to implement the improvements.

THOMSEN: At our bank, I'm aware of about four manufacturers who produce offshore. As I've talked to a couple of them, I'm astounded by what happens in China. I mean, the workers are three times more productive, the environmental costs are low and rent is low. But really more interesting is that they don't pay taxes. There's no income taxes on my corporations that are doing business there. There's no property taxes. I think the Chinese are smart enough to figure out that for every manufacturing job, you produce three other jobs. I think that's the multiplier effect. I suggest that we need to move taxes from manufacturing to consumers through sales tax. We need to give a huge relief to manufacturers so they can compete with China, and we've got to be as smart as the Chinese who understand what causes job creation. It will be very important for the State of Utah to look at the manufacturing companies and do everything to bring taxes to zero.

ROVIRA: Looking historically, Mexico was where China is right now several decades ago. And at the end of the day, we as a country, not just Utah, are in a global supply chain situation. So we always will have to try to remain competitive by looking at the way supply chains are constructed. What we're seeing is there are emerging economies that are going to start competing with China, that the

governments are going to start putting into the manufacturing plants. We see it with Mexico. Companies that were outsources in China are now going to Mexico because they're finding that their production requirements are so small that even when they ask for the entire year's inventory, which isn't really manageable from a cash-flow perspective, they're now trying to find the metal fabricator in Mexico that will grow with their company. So that's how we're seeing some of the shift in manufacturing-in outsourcing into the emerging markets that will still keep us competitive. I think that China in the next 20 years will move out of that manufacturing mode that they're in and start working toward the knowledge-based worker. I think every single country in the world wants to evolve that way. I think where we play is a key hand, how do we leverage those opportunities in manufacturing in those emerging markets?

BROWN: I was going to comment on this tax issue. I actually believe that as companies get efficient and more competitive, those are the costs, the tax and governmental costs, that you can't control. And they're the one thing that you look to your government for help and oftentimes that investment into manufacturing is so critical. And if they don't realize that that's where economic fuel comes from, we'll be in trouble. One of the things that we've done in our supply chain is looked at all of the other costs as fixed and looked at those foreign costs as variable and then determined whether we should change and whether we should bring manufacturing back.

ALEXANDER: We talk a lot about the fact that we would like to make changes or we need to make changes, but we don't get involved. And as a former legislator, I encourage everyone to be involved. **UB**