Big Data - Let’s not mess it up!

The term Big Data is just a bit scary. In part, the name itself conjures up this immense mountain of bits and bytes that are now coming off the farm to be used in various manners to increase production. It also may invoke thoughts of Big Brother, with fears of who may get their hands on some of this data. Will it be an environmental agency that is watching and looking for any potential improper application of pesticides or which seeds are used where? Will information get out to the landlord or neighbor? Who has the right to see the data? Who owns the data?

There is a flurry of activity around data ownership and the privacy of the data. These are important issues and all will be worked out through the good work of Farm Bureau and many of the Commodity groups with the cooperation of seed and chemical companies, equipment manufacturers and others. AEM applauds this work and certainly supports the tenet that data coming off the farm belongs to the farmer and he should be in control of where the data goes and who gets to see it.

But should it really be called Big Data? Wouldn’t SMART DATA be a more appropriate term? The data, by design, is used for decision making. If used in a smart way the data can tell us what seeds to use, what application of fertilizer and crop protection are needed this year compared to last year. A survey of soybean farmers in 2012 showed a rapid payback using these technologies -- a 15% savings on seed, fertilizer, and chemicals. A study has been cited that through the use of precision technology, farmers increased their yield by 16% and cut down water use by 50%. WOW! That is tremendous. And we have only just begun to realize the potential.

SMART DATA will revolutionize our industry. Sixty years after biological innovation gave rise to the Green Revolution of the 1950’s, technological innovation has the potential to again sweep the developing world, helping to feed millions -- IF we don’t get in the way and mess it up. Panelists throughout October’s Borlaug Dialogues referred to the potential for SMART DATA to help increase yields of African smallholders enabling them to end the hunger and grow sufficient food for themselves. Quick and easy

—Continued on Page 6
Over the years, it’s been intriguing to find that many executives interviewed for this piece seem to be living their personal lives in alignment with their company philosophies. The same holds true for Timothy P. Hayes, President, Cambric Corp., a Tata Technologies Company.

Cambric’s corporate vision focuses on People, Planet, Profits, and Tim emphasized that while other factors play in, people are what will make or break you; treating people well is a #1 priority. As if in confirmation, Tim easily shared this philosophy, his business experiences and bits of home life in a thoughtful, friendly manner – even when our interview ran over our scheduled time.

Although born in Milwaukee and currently residing in Utah, Colorado will always be home for Tim. He claims loyalties to both the Broncos and the Packers, but his true passion is for nature and the outdoors – the mountains, fresh air and sunlight. He has ingrained this into his five kids (an adult son, a teenaged daughter and teenaged triplet boys), travelling, camping and hiking as a family. He has also instilled in them the importance of community service, something that Cambric and Tata Technologies also practice through support of various charitable organizations.

Tim says he really stumbled upon his career, and never would have guessed that he’d end up running a global engineering firm. He had a strong affinity for math and numbers even as a young child, and started out in public accounting at Arthur Andersen. He worked heavily in mergers and acquisitions, and eventually was hired by one of the M&A clients – a $300 million oil refinery business asset, purchased with no underlying business processes. Working with an investment group and acting as CFO, Tim was able to help build that business at the quick pace required. As he progressed along his career path, he realized that while processes and procedures may need to be somewhat tailored to the specific industry, the similarities from running one

---Continued on Page 13---

New ag committee chairs: Farm bill implementation, regulatory overkill

Dramatic Republican gains in the Senate have ushered in a new committee chairman for the 114th Congress, Kansas Senator Pat Roberts. Senator Roberts is taking hold of the gavel of the Senate Committee is unique in that he chaired the House Agriculture Committee during the 1996 Farm Bill.

It is worth noting that he voted against the 2014 Farm Bill. He took issue with the size of the cuts to nutrition programs, feeling they were too small. He also stated some of the target commodity prices were too high and would too easily trigger government payments for crop farmers. Additionally, he disagreed with tying crop insurance to compliance with federal conservation standards. However, upon his election to the chairmanship of the committee, he released a statement that he will not reopen the Farm Bill.

Roberts has stated one of his chief concerns in the coming year is “regulatory overkill.” It will be interesting to see how he tries to use the Agriculture Committee to tackle regulations farmers feel overburdened with, namely rules coming out of the EPA and Labor Department. The committee’s biggest responsibilities in the next two years will be reauthorization of the Commodity Futures Trading Commission and reauthorization of child nutrition plans, including school meals.

While there wasn’t a shift in power in the House of Representatives, current Agriculture Committee Chairman Frank Lucas (OK) is term limited and will be stepping down at the end of the year. Taking his place will be Rep. Michael Conaway of the Texas 11th District located in the west central part of the state.

A native Texan and CPA by trade, Conaway has served on the Agriculture Committee since being elected to Congress in 2004. Most recently, he served as chairman of the Agriculture Committee’s Subcommittee on General Farm Commodities and Risk Management, a key position during the recent Farm Bill debate. He also served as a member of the Livestock, Rural Development and Credit subcommittee.

Since being selected to lead the Agriculture Committee, Conaway has said his priorities going into 2015 will be to secure normal authorizing oversight for the programs the committee oversees, move forward with implementation of the Farm Bill and launch reviews of the USDA nutrition program and the Commodity Futures Trading Commission.

AEM looks forward to working with both lawmakers in the coming year to advance issues critical to farmers and the equipment manufacturing industry.
AEM urges EPA to back off

Last month, AEM filed comments with the Environmental Protection Agency (EPA), urging the Administration to withdraw its proposed new definition of what constitutes a “water of the U.S.” (WOTUS) under the Clean Water Act (CWA).

AEM believes the proposed changes run counter to the clear legislative intent of Congress and legal precedent established by the Supreme Court. If enacted as proposed, the new definition would represent a gross expansion of EPA’s regulatory authority.

For example, under the proposed rule, waters and wetlands would fall under the CWA if they are “located within the riparian area or floodplain” of a traditional navigable water, interstate water, territorial sea, impoundment, or tributary, or if they have “a shallow subsurface hydrologic connection or confined surface hydrologic connection to such a jurisdictional water.” The proposed rule does not provide a limit for the extent of riparian areas or floodplains, but leaves it to the agencies’ “best professional judgment” to determine the appropriate area or flood interval. The proposal also fails to provide the limits of “shallow subsurface area, or any area that has a sub-surface hydrologic connection to navigable waters. A new catch-all “other waters” category would include isolated waters and wetlands that, when aggregated with all other wetlands and waters in the entire watershed, have a “more than speculative or insubstantial” effect on traditional navigable waters.

The overly broad and vague language of the proposed rule leaves the door wide open for EPA to deem virtually any body of water, or even ditches dry most of the year, as a WOTUS, thereby falling under their regulatory jurisdiction.

The potential costs and delays - to farmers, ranchers, and manufacturers - once they are subject to CWA permit requirements are staggering.

To help rectify this situation, AEM has banded together with groups representing the nation’s real estate, manufacturing, housing, construction, mining, agricultural and energy sectors by joining the Water Advocacy Coalition (WAC). In addition to individual filing comments, AEM also signed onto group comments submitted by WAC, the American Farm Bureau Federation, U.S. Chamber of Commerce, and the National Association of Manufacturers.

If EPA decides to move forward and finalize its flawed proposed rule, AEM will work with our coalition partners to continue the fight in Congress and the courts. In Congress, we will advocate for legislation to outright repeal EPA’s dangerous WOTUS definition and seek to enact language in appropriations bills to bar EPA from spending funds to enforce their new definition.

ISOBUS database gaining traction

The ISOBUS Compliance Database recently launched by the Agriculture Industry Electronics Foundation (AEF) has been awarded one of 18 Special Mentions of the SIMA Innovation Awards. SIMA is a major European agriculture trade show held every other year in Paris—February 22-26 in 2015.

The database lets users check compatibility between tractors, implements and consoles. In just a few clicks, the user can compare several alternatives, see whether the selected combination is compatible and what functionalities it has. Only certified equipment is included in the database. Problem identification by after-sales service is just as quick. And the user can directly contact the manufacturer for help. All issues encountered and their solutions are documented, creating a continuously growing and increasingly valuable resource to farmers, dealers and manufacturers.

AEM is a founding member of AEF, and AEM members are encouraged to increase U.S. representation among the 170+ companies currently benefitting from AEF membership. Members participate in bi-annual Plugfests (U.S. in spring, Europe in fall) allowing companies to test their compatibility. More than 2,300 ISOBUS terminal-implement / client combinations were tested by 250 participants from 82 organizations at the October event. AEF members may complete the process for ISOBUS certification gaining entry into the Data-base. And members working on project teams may voice their position on global industry solutions for issues like high voltage on board networks, ISOBUS automation, communication and marketing and Farm Management Information Systems, to name a few. For information, contact U.S. AEF representative AEM’s Mark Benishek at mbenishek@aem.org.
Wisconsin IoH being implemented

A number of industry activities are underway as implementation of the Wisconsin Implements of Husbandry (IOH) law has begun and Wisconsin elected and Department of Transportation (DOT) officials gain a better understanding of the new law’s implications. In November, AEM and FEMA representatives met with officials from the WI DOT to discuss the impacts and nuances of the new IoH law. The constructive dialogue identified a number of gaps in the understanding of the inventory and condition of Wisconsin’s bridges and culverts as well as in clear technical understanding of size and weight issues. Follow up meetings are being scheduled to better inform the officials on the diversity of equipment used in agriculture. Draft legislation is being discussed to make some possible changes to the law in the next legislative session. One of those changes would be to codify the current interpretation of tracked vehicles on roadways. The Wisconsin lobbyist working for AEM/FEMA on this issue, James Buchen, has been invited to present the development and consequences of the WI IoH bill to a conference of state agriculture elected officials from more than 25 states in early January. For more information, contact AEM’s Nick Yaksich at nyaksich@aem.org.

Ontario government moves to restrict use of neonicotinoids

The government of Ontario recently announced that it is creating a pollinator health action plan. The first stage of this plan was the creation of a discussion paper on pollinator health, which will be open for consultation through January of 2015. The discussion paper is divided into two sections; the first provides background information on pollinator importance, health, and mortality. The second section provides background information on neonicotinoids, their use and regulation, and outlines a proposed regulatory approach for reducing neonicotinoid (NNI) use across the province by 80% by 2017.

The discussion paper proposes amending Ontario’s Pesticide Act to clarify that all seeds treated with NNIs are considered pesticides themselves, which would restrict the sale and use of NNI treated seeds. The proposed regulations would come into effect in July of 2015, in preparation for the 2016 season.

The province claims that this regulation would reduce use of NNI’s to situations where they are specifically needed, rather than as a pre-emptive measure. However, there is widespread concern that the proposed changes do not adequately reflect Ontario farmers’ interests.

In response to the province’s publication, AEM, along with Grain Farmers of Ontario, the Canadian Seed Trade Association, and the Ontario Fruit and Vegetable Growers’ Association submitted a letter to the Premier in November to express our shared concerns; namely that the province’s action plan is based on political imperative rather than on good science.

The claim that reducing the use of NNI treated seeds is beneficial to both pollinator health and the environment is simply not supported by scientific data, and there is no evidence to suggest that reducing NNI use would have a positive impact. In fact, reducing the use of NNI treated seeds is likely to have a negative environmental impact. Treated seeds have allowed farmers to adopt much more environmentally friendly practices, such as minimum tillage or no-till farming and the planting of cover crops between growing seasons. The only viable way for farmers to manage the pest-heavy conditions these eco-friendly practices generate is by planting treated seed, which protects the crop at its most vulnerable state and reduces the release of pesticides into the general environment.

The Ontario government’s action plan omits reference to these facts and runs contrary to the province’s stated commitment to fostering environmentally friendly and sustainable agricultural practices.

AEM and its value-chain partners will be actively involved in the public consultations for these proposed regulations, and will continue to work with the provincial government to adopt a more science-based action plan.

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**We’ve got it covered:** While AEM’s DC and Canadian staff provide manufacturer representation on the policy end of bee health activities potentially affecting our planter and sprayer manufacturers, our technical team is also taking action from the sprayer perspective, collaborating with other industry partners to identify the exact nature of the issue through scientific research and develop appropriate industry solutions.

**A new applications technical committee** has been formed to explore potential sprayer issues. Sprayer manufacturer members are working with groups including Ohio State, USDA-ARS and University of Nebraska on initiatives like boom stability, wake effect, drift reduction and agitation.

**A Sprayer Leadership Group** pulls together all of these aspects for a holistic approach to this important issue. A Planter Leadership Group is planned for the 2015.
AEM announced the 2015 Ag Sector Board at the November Annual Conference held in Napa, California. Areas of focus for the ag sector in 2015 include:

**Big Data:** AEM is working to represent the manufacturers’ perspective while facilitating technological cohesion and collaboration among groups like Ag Gateway and Open Ag Data Alliance.

**Tier V:** A cross sector Task Force will be established to develop an industry position. Activities in Europe will be monitored and the U.S. equipment manufacturers’ perspective will be represented as needed.

**Latin America Stats:** AEM staff will begin the process of establishing a Latin America statistical reporting program for ag equipment as proposed by the Latin America Regional Management Committee.

**Key Policy Issues:** Renewable Fuel Standard, Section 179, EPA Waters of the U.S., Rural Broadband expansion, Precision Agriculture advancement

**Technical Priorities:** Ag roadways initiative, support of standards activities, ag sprayer initiative, strengthen relationships with regulatory authorities
Section 179 is back… sort of

The U.S. House approved legislation December 3 that would extend a series of tax breaks for the 2014 calendar year that would help promote investment in equipment. The package includes several measures of importance to equipment manufacturers, including section 179 expensing, bonus depreciation and research & development tax credits. The legislation would apply for the 2014 calendar year, meaning that the status of the provisions will remain uncertain for the 2015 tax year.

The legislation is expected to win passage in the Senate, and President Obama suggested he would sign the so-called “tax extenders” into law.

“As a general rule, we are open to short-term extensions of many of those provisions to make sure that all of you are able to engage in basic tax planning at least for the next couple of years, and are not having to scramble during tax time, figuring out what exactly the rules are,” Obama told members of the Business Roundtable (BRT) at a meeting in Washington.

AEM had repeatedly urged lawmakers to ensure that the tax provisions important to the industry wouldn’t lapse for 2014. AEM leaders conveyed this in meetings with lawmakers and letters to Capitol Hill, along with numerous coalition efforts.

House and Senate negotiators had initially crafted a broader package that would have extended most of the tax breaks for two years, while making several key deductions – including section 179 expensing – permanent at an expanded level. The deal fell apart after the Obama administration threatened to veto the emerging deal because it didn’t include similar expansions in provisions like the Earned Income Tax Credit (EITC).

The one-year legislation could spur renewed focus next year on broader corporate tax reform.

“There is definitely a deal to be done,” Obama told BRT about the prospects for corporate tax reform during the remaining two years of his administration.

As this Advisor went to print, the U.S. Senate had not considered the tax extenders bill, but all indications are that the Senate will pass, and the President will sign, the House version of the bill soon.

Big data - let’s not mess it up!

communications via cell phone (common throughout Africa) could direct farmers on best practices for their current field conditions, potentially saving a crop from pest or disease.

Let’s look at that big picture, the potential beyond our borders. Let’s help our farmers provide food to far world reaches through increased yields resulting from SMART DATA. But we can do better than that. We can also help feed starving people in those regions where food can’t reach them due to infrastructure or politics by sharing best practices. We can all help to feed hungry people in developing countries and meet those 2050 demands by helping them to farm better using SMART DATA.

So let’s build the electronic bridges between the data clouds and build the right security measures so that farmers are comfortable releasing their data for select uses. And let’s build the right standards around the data formats so all the appropriate people can see and interpret the data using a common language and format so we don’t spend billions of dollars in having to decipher and translate code for each application for which the SMART DATA will be used. In other words, let’s work together in this new, exciting world of SMART DATA.

AEM will do its part in trying to help influence the market and represent our members in development of standard data formats and tools for connectivity in the most beneficial way possible for the industry as a whole. We’re facilitating communications with organizations like Ag Gateway and OADA and are realizing that we really all do share one common goal. If we are successful, we WILL meet the food demands of the world.

We have found a solution just as we always do in this industry. Let’s not get scared or build big walls around the SMART DATA for what could be perceived as commercial benefit. This would be detrimental to reaping the full benefit of what SMART DATA has to offer. And for goodness sakes, can we call it SMART DATA instead of Big Data?!!

Charlie O’Brien,
Senior Vice President
and AEM Ag Sector Lead – 414-298-4157
cobrien@aem.org

Check out Commodity Classic 2015!
February 26-28, 2015 ~ Phoenix, AZ

Get on the exhibitor waitlist
Preview in preparation for the 2016 CC/AEM event launch
7300+ attendees
2500+ average farmer acreage
$310,000+ average annual equipment purchases

Contact Show Manager Kristi Burmeister at 636-922-5551|
tradeshow@commodityclassic.com or go to www.commodityclassic.com
AEM is deeply committed to the agriculture sector and has assembled a dedicated team with a passion for agriculture and backgrounds firmly rooted in the industry. Over the next issues of the Ag Executive Advisor, we will introduce our ag specialists devoted to serving you, our agriculture sector members.

This edition’s profile:

Director, Government Affairs, Nick Tindall

Nick Tindall grew up on a corn and soybean farm in Iowa. He graduated from the University of Northern Iowa, and earned a Master’s Degree in Political Management from George Washington University.

Before joining AEM six years ago, Tindall gained experience in Washington at the U.S. Grains Council, the American Farm Bureau Federation and the National Marine Manufacturers Association. Tindall engages representatives of national agriculture groups in Washington, coordinating on critical issues such as bee pollination and fugitive dust emitted from planters.

Next edition: Rich Jefferson, Senior Director, Public Relations

For details on this and other pending EU RoHS2 compliance deadlines, check out AEM’s new Regulated Substances Brief, a newsletter dedicated to helping members comply with all the major regulations affecting chemicals and substances contained in your products. Regulated Substances Brief is an extension of the EU REACH Executive Brief which provides OEMs and their supply chains with information on the complex and ever-evolving EU REACH legislation.

In response to member need, AEM expanded the newsletter to include information and perspective on Conflict Minerals and EU RoHS (European Union Restriction of Hazardous Substances) regulations. In addition, it will cover emerging developments which could potentially impact members, such as China RoHS and Korea REACH.

Says John Wagner, AEM director, materials management, “Members can now get all the latest news on regulated substances from a single source, customized specifically for the off-road equipment manufacturing industry.”

Regulated Substances Brief will inform you on what has changed and is scheduled to change, upcoming deadlines and analysis from industry experts, and case studies and feature articles from peer companies.

The first issue features insight and perspective from three experts as well as important updates and deadline reminders:

**EU REACH Roadmap Review of First Substance Proposals: Trisodium Nitrilotriacetate, 4-tert-butylenzoic acid** – for companies who track the growing number of substances evaluated by the EU under REACH, this piece covers the recent release of information about the EU’s SVHC (Substances of Very High Concern) Roadmap.

**The Conflict-Free Sourcing Initiative: Helping Companies Make Informed Decisions About Conflict Minerals in Their Supply Chain:** With the June 2015 expanded Conflict Minerals reporting deadline just around the corner, this item identifies – and links to – a portfolio of very useful resources to help equipment manufacturers comply with this far-reaching U.S. law.

**Seeing the Forest As Well as the Trees:** As evidence of this steep increase in reporting requirements, an entire service sector has emerged to help companies gather and report greenhouse gas, energy, water, waste and, most relevant to this Brief, substance data. As a result, we are becoming lost in all the compliance-reporting “trees.” If we are not careful, the cost of all this compliance may put many small-to-medium sized firms at substantial financial risk.

For more information or to subscribe to the newsletter, contact AEM’s REACH Program Coordinator Lydia Riesch at lriesch@aem.org. To download a free copy of this issue: aem.org/SRT/ComplianceTraining/REACH/BriefDownload/
The manufacturers of tractors and agricultural machines are less satisfied with their current business situation than in the past four years. The Agrievolution Alliance, a global network of leading agricultural machinery associations representing more than 6000 equipment manufacturers worldwide, presented the 10th edition of the Barometer among manufacturers and importers of machines. According to the report, only 18% of companies surveyed described their business situation to be “good” or “very good”. This share was still around 50% in April this year. The Agritech Business Climate index dropped considerably, by 33 points, and has reached a value of -7 on a scale from +100 to -100. “Mainly the industry in Europe and Japan has driven the global index into the negative range,” said Gerd Wiesendorfer, Chair of the Agrievolution Economic Committee. “One out of two agricultural machinery manufacturers from those regions are dissatisfied with the current business situation.”

Nevertheless, the readiness to invest in new agricultural technology is still very pronounced in many markets. Both order intake and turnover have recently revived again in China, where the need to increase the mechanization levels on the farmland remains very high. The local industry reported a higher order level than in the past year. A similarly positive trend and expectation can be seen in Turkey, although this market had shown high volatilities in the course of this year. The ag market in the USA has cooled down slightly according to the perception of the machinery industry. Though the decline seems to be limited to the arable sector, while dairy and livestock farmers benefit from lower cost due to the commodity price decrease. US agricultural machinery manufacturers are less optimistic than six months ago, but around 40 % of them expect their order intake and sales to increase over the next months.

Globally, the best market performance in the next half year is foreseen for the Asian continent and Oceania, while sales in Europe and South America are expected to further decline. In 2013, the worldwide agricultural machinery industry reached a record production volume of ca. EUR 96 billion (USD 130 billion). For 2014, Agrievolution expects a production decline of ca. 5 %, followed by another slight decrease in the coming year. Despite this downward trend, the industry output clearly remains above the long-term average. Based on the positive basic market conditions and due to the important role of mechanization for the productivity increase of farming, the next economic upswing is expected within a short period.
Turkey continues its upward growth

Denmark, Guatemala and Turkey were among the countries that experienced growth in exports in the last 4 quarters ending in Q3 of 2014. Turkey was also a top country last quarter. The other countries that experienced highest growth were spread out worldwide. Interestingly, there were no major markets experiencing growth. The smallest decline in the major market section came from Mexico.

Largest declines: Iraq, Finland and Sweden

Iraq, Finland and Sweden were among the strongest decliners for the last 4 rolling quarters. This is the second and third consecutive quarter that Finland and Sweden ranked among the strongest decliners, respectively. Interestingly, there were several major trading partners that also lost market. Canada, China, Germany, Belgium all experienced less imports from the U.S.

THE BELOW CHARTS ILLUSTRATE A ROLLING 4 QUARTERS VS. PREVIOUS 4 QUARTERS FOR COUNTRIES WITH > $25 MIL./YR IN EXPORTS
AEM Ag Flash sales trends and analysis

Large Tractors still underperforming

Large tractors (>100 HP & 4WD) are down 36.1% from the same period last year, with 1,799 units being sold in the USA.

This downward trend has been going on for three months. While large farm tractors have trended below 2013 numbers, they were still high in line with 2012 numbers until this last quarter.

2WD Farm Tractors continue to grow

Unlike large tractors, 2WD tractors under 100HP have been trending better in 2014, compared to previous years. While November did show a significant drop, this is still in line with the seasonal trends.

The November numbers came in 4.6% higher compared to a year ago.
Downturn Continues: Demand for farm equipment went south the 1st half of 2014, reversing an upward trend that began 5 years ago. In Q3, the q/q comparison of unit demand continued to decrease drastically. The net rising index decreased to -0.35 down from -17.64 indicating that more and more respondents see the market declining. The index for the planning scenario, on the other hand, remains unchanged and in positive territory although it has lost some steam over the past 2 years. Naturally, while the ag machinery market is undergoing a downturn that will most likely continue into 2015, there are still pockets of growth in dairy and other equipment such as livestock and tractors under 40 hp.

Inventory Levels: One of the main issues in the ag machinery downturn is high inventories at the dealership level. The full lots not only constrain the dealer’s ability to finance new machinery, it also limits the farmer’s ability to trade in his ‘older’ piece of equipment to buy a new one. From the survey we learn that, with peaks and valleys, manufacturer and dealer inventories have both been rising since the second part of 2009. In 2012, the net rising index for inventories at the dealership became positive, indicating more respondents felt the inventories were growing versus decreasing and in Q3 2014 the index jumped from 0 to 0.15. Inventories at the manufacturing level decreased in Q3 2014, but have been in positive territory for several consecutive months.

Profit Margins and Price Levels: Among the many areas of business covered by AEM’s quarterly industry conditions survey are profit margins, prices paid for materials, and prices charged for equipment. Respondents are asked if each item has risen, fallen, or stayed the same over the last 12 months. In Q3 2014, more respondents indicated that prices charged for ag equipment were growing vs. declining as the net rising index rose to 0.1 from 0.06. The market consensus surrounding prices paid for material has stabilized in the last couple of quarters. The net rising index came in at 0.2, up from 0.17 in Q2. The net rising index for profit margins declined from 0.06 to 0.05. All of these remain in positive territory, which means that more respondents indicated growth vs. decline, disregarding those that indicated the levels to be stable.

These data and much more are available to AEM members participating in the Industry Conditions Survey. To participate, please contact bduycik@aem.org.
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From AEM's Global Monitor

The data on this page was compiled from the data provided by Business Monitor International. More detailed data is for sale to members on a customized report by report basis. For more information, please email AEM Market Analyst Benjamin Duyck at bduyck@aem.org
People, planet, profits... Executive Insights

Continued from Page 2

The Latin American economy is expected to continue its path of slowed economic growth and high inflation, with regional averages of 2.2% and 11.3%, respectively. Major players are on opposite ends of the spectrum, with Peru expecting growth of 4.9% and Argentina contracting by 1.5%.

Currency depreciation continues to reign supreme across the board, with the Argentine Peso (ARS) and Brazilian Real (BRL) experiencing the worst effects.

Similarly, corruption continues to play a major role in Latin America. 72% of the 29 countries score below 50/100 on the corruption scale, indicating the high presence of corruption, with Venezuela and Haiti leading the way, scoring a 19/100 each. In contrast, the U.S. scored 73/100, landing at #17 on the list of 175 countries. See the full Transparency International report at www.transparency.org/cpi2014/results.

Water shortages have become an even larger issue. Climate change has caused droughts in Brazil and Paraguay, as well as the ongoing deforestation of the Amazon rainforest. Over the past 20 years, the Amazon has lost 763,000 sq. km. (188,541,407 acres) as a result of logging, clearance, and fires.

This massive reduction in size has decreased forest transpiration, and resulted in a longer dry season, which has contributed to mass water shortages throughout São Paulo state. Water rationing and shutoffs have been slowly becoming more significant in poorer towns, some of which are left with potable water alone.

As reservoirs continue to dwindle, social unrest may force the government’s hand into reducing deforestation or providing alternate solutions. This water shortage will also affect multiple agricultural crops, including coffee and sugar. This will in turn increase prices for both commodities, aggravating local economies as many citizens can’t afford increasing food prices. Any benefits farmers may reap from the increased prices, whether they are exporting or selling locally, will likely be offset by decreased yields due to the drought and by the populations’ rather low purchasing power in the region.

For a more in-depth analysis and details on individual countries, see the December Latin America Agriculture Advisor – available now! Subscribe at www.aem.org/Email! exclusive to AEM members. Contact Vanessa Radlinger at vradlinger@aem.org | 414-298-4103.

Drought, inflation, corruption

The rebranding reflects that broader footprint.

What do you feel are the greatest challenges ahead, for both the industry and for Cambric/Tata Technologies?

I think it’s evident that we are facing a much more rapid technological development cycle. There is a demand for much quicker response and faster advancement of technology embedded in the equipment. The challenge for all of us lies in meeting that demand, continuing to research and invest, while operating in a less robust market. Our role is to help customers navigate this situation. We need to figure out how to improve customers’ ability to be responsive in spite of the market constraints. The market itself, managing the business cycle, is what I feel to be the greatest long-term challenge in business overall. Managers earn their keep on the down cycles, not the up cycles.

Upon joining AEM, you immediately became engaged in the Associates Executive Committee, the Annual Conference and last year you accepted a seat on the Ag Sector Board. Comments?

It’s not worth doing something unless you’re going to be engaged, passionate and a part of it. Do it to make a difference. It’s how we run the company, and how I live my life. It’s important to give back to the industry, and to know what is going on in the industry around the globe. The data gained by active engagement with AEM is invaluable. We set our strategic plan based in part on where these companies are going, what they are dealing with. And we learn that by being actively engaged.

People, planet, profits. One has to reconsider: Is it the executive in alignment with company priorities, or the other way around?
Standards adoptions, revisions

The American Society of Agricultural and Biological Engineers (ASABE) has completed projects to nationally adopt


and the recently amended International standard ISO 730:2009, Agricultural wheeled tractors. Rear-mounted three-point Linkage. Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4. Amendment 1 to ISO 730:2009, which was approved in July of this year, includes link coupler illustrations and hitch data for larger tractors equipped with 45 mm PTO shafts.

These adoptions further harmonize national and international standardization, a goal that facilitates manufacturing, safety advances-ments and product marketing worldwide.

ASABE has initiated four standards projects for rotary disk, drum, and flail mowers. Three of the projects will pursue the adoption, with deviations, of current ISO standards:

- ISO 4254-12:2012, Agricultural machinery — Safety — Part 12: Rotary disc and drum mowers and flail mowers

The remaining project, X639, Safety Standard for Large Row-Crop Flail Mowers, comprises the development of a new standard. Currently there are no ASABE standards for all types of these mowers.

ASABE has announced the completion of three standards projects related to power take-off drive shafts and related equipment. The new standards are:

- Revision ANSI/ASABE S604.1, Safety for Power Take-off (PTO), PTO Drive Shafts, and Power Input Connection (PIC) for Agricultural Field Equipment

The adoption of ISO 5673-1 and 5673-2 increases the visibility and use of standards and benefits international trade.

ASABE has completed a new standard for terminology related to forestry. ANSI/ASABE S516, Terminology for Forest Operation and Equipment, standardizes terminology to describe forest operations and equipment in technical papers, documents, standards, and general use. It will be used by equipment manufacturers and distributors, public and private timber managers, consultants, university faculty, and students, as well as the forest operations research community.

ASABE has initiated revisions to --

ANSI/ASAE S343.3, Terminology for Combines and Grain Harvesting. The standard, which contains terminology pertinent to grain combine design and performance, improves communication among engineers and researchers and provides a basis for comparative listing of machine specifications. Last updated in 1990, the standard is being revised to align terminology with currently used practices.

Standard ASAE S207.12, Operating Requirements for Tractors and Power Take-off Driven Implements. The revision will include adding Type 4 PTO specifications and updating the reference documents and standard format.

For standards information, contact Scott Cedarquist at cedarg@asabe.org. A listing of ASABE standards projects may be found at http://www.asabe.org/projects.
EPA pulls back on ethanol rule

The Environmental Protection Agency has pulled back on issuing a failed 2014 blend levels for ethanol and will begin work on a new rule to combine 2014, 2015, and 2016. This decision is an important, though imperfect, short-term victory for the biofuels industry. Most observers were expecting EPA to release a final 2014 rule with increased blend levels, but also including a new methodology for determining future years’ blend levels that would have effectively killed the advanced biofuels sector.

With this victory, the battle to defend the RFS will shift to the Hill in the near term while EPA starts from scratch. Opponents of the RFS have already begun to point toward EPA’s withdrawal of the proposed rule as proof that the law is hopelessly broken and can only be fixed with legislation.

AEM will continue to work to prevent an RFS reform bill from materializing in Congress and encourage EPA to calculate blend levels according to the language Congress originally enacted rather than invent harmful methodologies that place the future of advanced biofuels in the hands of its opponents.

Disruptive Technologies: One AEM member’s top five takeaways

David A. Sauter, CEO of AEM member company Envano, shared his takeaways from this year’s Annual Conference with excerpts below:

From driverless cars to 3D printing, our time in Napa brought together a tremendous spectrum of perspectives. Here are the top five strategic takeaways for leaders of the next generation of manufacturing:

The Difference Between Iteration and Innovation. Innovation does not have to be costly, constant or take courage – after all, bigger is not always better. When most business leaders think “innovation,” they think it needs to require a major upheaval to the traditional way of doing things. Yet, by taking small steps, staying smart, and taking a cyclical or iterative approach, smaller innovations can account for greater success overtime. Iterative innovation is not disruptive in the negative sense of the word but can work wonders for positive change.

Disruptive Ideas Can Spark Anywhere. Good ideas can come from anywhere – the executive level, managers, interns, or customers. Wherever they come from, be prepared that the first step of invention or innovation is ridicule, the second step is opposition, and the final step occurs when the idea becomes self-evident. Disruptive companies and people aren’t slowed by initial criticism. In fact, they have a commonality in that they are driven by a passion to change. Take Jack Andraka for example, the teen who pioneered the early stage marker for pancreatic cancer. Or GE, a 150-year-old company that has learned to reinvent itself yet again but this time through outside influencers – another disruptor.

Technology Is Driving Change. The birth of new models, the Internet of Things, sensors, data, and analytics bring great opportunity, but not without a level of complexity. Technology is going to be embedded in everything. Can equipment adjust configuration and performance based on soil conditions? Absolutely. Think agriculture equipment that quickly assesses its surroundings and adjusts according. These are just a few of many very real probabilities in the near future.

It’s Time To Uproot Process. Taking a current, traditional process and completely inverting it is one easy way to gain a different perspective and influence disruption. A paradigm shift to bringing products to market comes when you look at your approach backwards or upside down. For example, don’t be so focused on protecting your IP when you could already be on to a bigger and better next thing. Take a “Gut, Data, Gut” approach to leveraging technology, collaboration and great ideas to bring new products to market faster with less cost.

Last But Not Least, Wine! For three days, we had the pleasure of visiting historic local wineries throughout Napa and enjoying the age-old tradition of wine. Akin to our other takeaways on disruption, the same positive change speaks to the wine industry. For decades, wine has followed a traditional, tedious process. Yet with the simple tweak of one step in that process – like using an electric sorter for viable grapes – technology and the openness to change shifts the end result for greater agility, more time savings, and a surprisingly unique end product.

AEM Chairmans Rick Patek and CEO & Co-Founder of Local Motors, Jay Rogers, make an entrance in a car manufactured by a 3D printer.
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And for our renewing members--
Fully electronic 2015 renewal process!

OCRs and Renewal Contacts can quickly and easily renew 2015 AEM memberships (due December 31) at https://adu.aem.org

Questions: Paul Malek at pmalek@aem.org | 414/298-4153.