



CONTEXT

Thinking in Context...

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Dear Friends and Colleagues,

We hear a great deal about going global in our industry. The work of feeding the world has never been more

important as we face a potential world population of 9 billion plus by 2050. Demand for food calories is on the rise. Increasing demand represents opportunities for increased productivity and improved quality. The opportunities at hand are accompanied by many risks, both in competitive markets and in economic and political issues.

In our industry, we're called upon to design and deliver improved productivity, enhanced products and services with greater quality, reliability and ease of use. The roles of technology and technology access will continue to grow in significance as these issues unfold.

At the same time, we are called upon to focus locally – whether that's on the overall running of our business, or in making specific decisions confined to a cell, a gene, a square foot of a field, or a seed selection.

Context's long history of working with companies tells us that there are several critical success factors that must come together to allow for successful and sustaining business. In this issue, we're "Thinking in Context" about these global and local issues that affect our ability to deliver what is necessary for success. We remain committed to supporting your business initiatives for today and toward a profitable, productive future.

Sincerely,

Tray Thomas
Founding Partner
The Context Network

Mitigate Risks, Optimize the Opportunities: Investment Ideas

We invest every day. In our businesses, we invest time, personnel, and physical and financial resources to achieve business results today and to reach specific goals for the future. Many of our clients are very well-aware of the strategic decision support and consulting work Context has provided the industry for the past 18 years. But one lesser-known area of expertise is Context's merger and acquisition consulting expertise and support.

Two key elements combine to allow Context to provide clients with the visionary perspective required for successful mergers and/or acquisitions: our broad network of executive experts located around the world, and our deeply established expertise in the ag & biotech business sectors. Our ability to provide actionable solutions in each M&A situation is derived from critical perspective gained through high-level consulting at every level of the channel throughout the years. In addition, our strong history of providing accurate industry projections lends credence and value to our clientele.

As an investment opportunity approaches your firm, Context encourages you to look at both sides of the coin:

- How your firm can best mitigate risk
- *...and...*
- How your firm can best optimize opportunity

Both elements must be clearly identified and articulated for successful, sustaining investment.

Context has worked with a variety of organizations in investment support. From managing the merger of two U.S. regional corn and soybean seed companies, to orchestrating multiple due

diligence exercises related to many of the significant transactions in the marketplace, our experience has proven effective and successful for parties involved.



Context Partner,
Blake Sieker

In the U.S. and internationally, Context works on behalf of biotech companies, as well as on behalf of Venture Capital firms. Context has been deeply engaged in defining and relating industry understanding as well as providing broad due diligence and opportunity assessments.

Investment opportunities can be grand, but opportunity is also captured by firms as they look to link more efficiently to others either upstream or downstream in their industry. Context has assisted in the creation of new divisions and new enterprises in biotechnology. We've provided support for both buyers and sellers in technology transfer transactions. In addition, we've assisted in the development of complex global transactions including contract development, legal liaison and concept introduction into the marketplace.

Investment opportunities surround good businesses each and every day. Context's business model of a broad network of industry professionals definitely places us in a unique position to offer services on a timely basis and with the ability to add areas of expertise even in the midst of a transaction review/due diligence process.

Our experience, our executives and our track-record speak volumes toward our acute understanding of the agriculture, biotech, food and fuel industries. Putting those factors in the correct context can mean the difference in the success of the transaction. We look forward to supporting you in your next investment investigation. Contact Blake Sieker: blake.sieker@contextnet.com

Thinking in Context. . .

The Metrics WILL Drive Performance

Metrics, Measurements and Scorecards: It's Important to Get them Right!

What you measure is what you get. The organization's measurement system strongly affects the behavior of managers and employees. The most fundamental reason to measure an activity is to improve it. Financial measures alone, like return-on-investment and earnings-per-share, can give misleading signals for continuous improvement and innovation - activities today's competitive environment demands. Getting the metrics right is one of those "easy NOT to do" things. It's not difficult, but does require some focused energy. The best news is that done well and embedded in the organization, it will pay major dividends.

Multiple Metrics are Needed to provide a Balanced Scorecard (BSC)

No single measure can provide a clear performance target or focus attention on the critical areas of the business. A balanced presentation of both financial and operational measures is needed. Made famous by Kaplan and Norton, and further improved by Schiemann & Lingle, The Balanced Scorecard links performance measures:

1. **Customers/Markets:** Are we meeting customer or marketplace expectations?
2. **Financial:** How do we look to shareholders?
3. **People:** Are we deploying our human resources effectively, including employees, partners and suppliers?
4. **Operations:** How efficiently are we running the enterprise?
5. **Adaptability:** Are we responsive and innovative in our approach to changing requirements both internally and externally?
6. **Environment:** Are we dealing with community, environmental and regulatory forces that define our playing field?

Context has the capability, working with management, to determine appropriate leading measures in the 6 key strategic areas, and to embed the balanced scorecard metrics into the organization and organization processes. Bringing metrics for these areas together in a single management report is crucial. It guards against sub-optimization. By forcing senior managers to consider all the important operational measures together, the balanced scorecard lets them see whether improvement in one area may have been achieved at the expense of another.

Measure Hard Results and the Soft Stuff Will Follow

What are key elements for implementation of a good Balanced Scorecard? Communication of strategic goals that are linked to individual objectives is critical. It allows organizations to link strategic goals with business unit targets, individual performance objectives and rewards and recognition. In addition, it allows companies to develop proper targets that verify and support your strategy. Secondly, BSC metrics must be integrated

into the strategic planning and budgeting process. This step allows organizations to harmonize short-term financial performance with long-term strategic goals and growth opportunities. Finally, a solid set of BSC metrics must include a mechanism for continuous feedback - for strategic learning and for the occasion to adjust as new threats and opportunities arise.

The number of metrics is less important than the process used to arrive at them. Forget quantity and focus instead on linking measures to strategic capabilities, customer expectations and financial indicators. And remember to involve those closest to the action in defining the measures and setting the targets.

Leading vs. Lagging Indicators

One clear advantage of BSC metrics is they allow us to effectively see the whole picture. We are all used to "lagging" indicators - i.e. the results we can measure after they've occurred - profit, market share, etc. They have a place, but are not useful for proactively making adjustments in season. "Leading" indicators, on the other hand, are ones you can measure in real time and are directly related to achieving the key business objectives. They require some thoughtful processing to identify as there is not a handy list that are "known to be right" for your business.

Know What to Expect - Focus on Implementation

Companies adopting and implementing a BSC model must determine what to measure in the 6 key strategic areas of customer markets, financial, people, operations, adaptability and environment. Then, they must embed the BSC metrics into the organization and its processes; link strategic measures to compensation, tie strategic measures to the performance management system, and track and manage strategic performance measures.

Although this sounds easy, it is not. Simplicity is often deceptive. This involves some hard questions, but a Balanced Scorecard of metrics is more than a measurement system; it is a cornerstone of strategic management. For the rest of the story on how to implement new management processes that work to align short-term action to long-term strategy, visit <http://www.contextnet.com/contextresources/Business/metrics>

The old adage, "Measure twice, cut once" reminds us how critical it is to measure effectively to both avoid making costly mistakes, and make the most out of our goals. Context is ready to help your company deploy metrics that will best assure positive performance. For more information, contact mike.borel@contextnet.com.

References: William A. Schiemann & John H. Lingle; Robert S. Kaplan & David P. Norton; William L. Simon; Tony Hope & Jeremy Hope; Peter F. Drucker



Context Partner,
Mike Borel





“Without a doubt, China presents the agribusiness industry with both unique opportunities and interesting challenges. As active participants in global consulting initiatives, Context has produced dedicated research assessing the Chinese market. Our research and experience combined provide firms with unique perspectives derived from deep analysis of Chinese market data and surveys of growers across China.”



China's Agricultural Prospects

China represents roughly 20% of the world population, but only 8%-10% of the world's farmland. China has indicated that continued food self-sufficiency is a priority for its government and is taking steps to modernize the country's agricultural infrastructure. The Chinese government acknowledges that modernization will take time. Context believes the agribusiness industry will be a valuable partner in China's effort to meet the needs of a population with growing incomes and an appetite for larger quantities of food and agribusiness products. In 2007, USDA released a study supporting the notion that the quantity of most food items consumed by Chinese households is highly responsive to income growth, especially among lower income households.

Expectations for Growth

Context's *Emerging Markets Outlook: China* study suggests that China will need to produce 630 million tons of rice to feed 1.6 billion people by 2020, up from 528 million tons recently. The International Food Policy Research Institute (IFPRI) expects the world's appetite for meat will increase by more than 55% from 1997 to 2020 and that China will account for 40% of that growth. Context's research compiled in conjunction with our *Outlook Reports* suggests China's seed and trait market is likely to represent greater than 15% of global seed market growth from 2010 to 2020.

The promising expectation of future Chinese demand for agribusiness products is balanced by significant challenges. Consider one of the key challenges facing agribusiness companies operating in China: the large size of China's agricultural labor force and the small size of Chinese farms. To be certain, a large pool of labor presents a comparative advantage in labor intensive crops. However, companies seeking to operate on a Western scale in China face the daunting challenge of partnering with thousands of small farmers. China has approximately 240 million farm households each of which has access to roughly 1.2 acres of land, according to the Chinese MOA. Depending on the province, farmland per capita in China ranges from ¼ acre to over ½ acre. By contrast, the 2007 Census of Agriculture counted 2.2 million farms in the US, farming an average of 418 acres per farm, with 125,000 farms producing 75% of the value of US agricultural production. If, over time, half of the current rural population of China migrated to urban areas, average farm household production scale would only increase to roughly 2.5 acres.

According to the Chinese Ministry of Agriculture, in 2006, 42.6% of China's total working population was involved in agriculture although it accounted for only 11.8% of GDP. Increasing Chinese agricultural productivity via farmer education, mechanization and biotechnology is an imperative if China is to maintain agricultural self-sufficiency.

For more of Context's thoughts on the opportunities and challenges of the agriculture market in China we suggest you reserve a copy of our report "2010 Emerging Markets Outlook: Grower Survey China", or contact mark.nelson@contextnet.com.

SeedMatrix™ Brings Efficiency to Hybrid and Variety Data Management



This SeedMatrix screen shot shows the exceptional level of detail provided in this easy-to-use format.

With an easy-to-use set of menu options, SeedMatrix's many applications are readily processed and easy to access. Data are stored if desired for future reference. Access to data and customizable reporting options are meeting with great favor by users. They cite benefits including:

- No need to collect University trials: we collect the public data and make it available to our customers.
- The app can have a look and feel of your company. All reports can be customized with your logo, color scheme and preferences
- State of the art data entry system means data can literally be loaded from the field and instantly available on SeedMatrix.

Advancing the Ability to Analyze Field Data Effectively

Context's new offering, SeedMatrix™ has met with enthusiastic favor and rapid adoption by seed companies across the country. SeedMatrix is a web-based application for seed companies. The software simplifies hybrid and variety data management by allowing users to analyze a host of seed test plot data in a simple format. Context Partner Mark Holland said, "SeedMatrix helps glean full insight from extensive test plot investments – advancing your ability to make those critical commercialization decisions count."

"The seed industry is at a point where large volumes of new products are coming to market. SeedMatrix allows users to keep on top of what genetic and technology combinations work best in a given geography, allowing them the ability to place the best possible products in a given agronomic environment", he added.

What SeedMatrix Does

The application allows for customized, comprehensive analysis of variety and hybrid data on six crops: corn, soy, cotton, wheat, rice and sorghum. It is uniquely designed to:

- Create customized, head-to-head seed variety or hybrid comparisons
- Find the most consistently high-yielding varieties by geography and analyze those seed products for strengths and weaknesses within a specific geography
- Evaluate multiple points of data gathered from the public forum and compare that against internally generated data in a secure system.

SeedMatrix accesses the data, organizes and imports it into a user-friendly form. Through online security measures, SeedMatrix data are never shared. The information generated is storable and accessible anywhere or any time, even from a mobile phone device.

With SeedMatrix, analysis and results become more meaningful and applicable to your company and ultimately, to your customers.

SeedMatrix allows users to slice and dice data in a variety of ways to achieve multiple views and assessments. Users may choose from:

- ✓ Single Trial Data
- ✓ Top Performing Products
- ✓ Head to Head Comparison
- ✓ One to Many Comparison
- ✓ Yield Book

Rapid Adoption by Seed Companies

Holland said, "Our customers are utilizing SeedMatrix this fall to help make recommendations to their customers on what hybrids/varieties to purchase and plant next spring. One customer told me that he felt they had significantly upgraded their ability to provide value to their customers through the use of performance data via SeedMatrix. SeedMatrix customers will be utilizing the system in the next 90 days to help drive seed production and trait mix decisions as well."

Many seed companies are finding unique value in the timeliness and flexibility offered through SeedMatrix. Holland said, "We have added several customers this year since the acquisition by Context. We look forward to reaching additional seed industry professionals through participation at ASTA and IPSA meetings this winter." For more information, contact dale.ioqan@contextnet.com.



seedmatrix™

Context Sustainability Study On-Track for Spring Release



“The firms that understand how the sustainability movement will affect the global economy, their industry and their individual companies are the ones which will prosper as demand for food that meets consumers’ expectations for health, nutrition, convenience, environmental sustainability and social equity drives market prices up and opens up new opportunities.”

*Context Sr. Associate,
Jim Murphy*

Context’s Multi-Client report **“The Sustainability Transition: Impacts to Agriculture”** is on track for release this spring. Context Senior Associate, Jim Murphy leads the study. “This is a major undertaking and the report will be the only one of its kind to examine how sustainability is being incorporated into corporate strategy and influencing the changes firms within the food value chain are making to their operations.” What makes this study truly different is our focus on what’s broadly happening on farms, in companies and in the marketplace. In addition, the study provides a clear view of the range of impacts and just how different agriculture is likely to look by commodity and region of the world.



*Context Senior Associate,
Jim Murphy*

While in the research phase of the study, Murphy noted, “We are finding many and varied differences in how companies are approaching sustainability depending upon where they are in the value chain.”

He added, “In addition, we’re noting some exceptional differences in which dimensions of sustainability (economic, environmental or social) are being emphasized.” Murphy offered several examples. “As you might imagine, it’s the EU that embraced sustainability first. Those firms tend to place heavy emphasis on the environmental aspects of sustainability as opposed to economic or social emphasis. Brazilian firms tend to approach sustainability with a more evenly weighted emphasis on economic and social aspects. Also, we’re uncovering some very interesting facts based on how companies are making sustainable sourcing decisions. Crops receiving the lion’s share of the sustainability focus are those grown in tropical regions where expanding acres of production is resulting in loss of rainforest.”

Another interesting trend is the shift in thinking within large companies about sustainability. He said, “A growing percentage are coming to see sustainability as business opportunity, to improve both top and bottom line performance, as opposed to a compliance issue. Water and energy conservation are two areas getting a lot of attention across the food value chain and throughout the world.”

The study will focus on five major drivers propelling the agricultural sustainability movement, and how their effects will vary by geography and agricultural sector. They include Health & Food Safety Concerns, New Environmental Regulations, Food Retailer Sustainability Initiatives, Resource Constraints and Worldwide Food Demand. Additionally, it will review what is most important for firms operating at different points within the food value chain and highlight the most significant sustainability issues. The study will describe the drivers, opportunities and risks that can help organizations adapt to changes related to sustainability issues.

Context Partner, Mike Borel said, “The time is right for a sustainability study specific to agriculture interests that goes beyond broad discussions of policy to the specific issues facing the entire food value. Our ongoing reconnaissance on this topic leads us to believe that some of the changes coming will significantly reshape agriculture worldwide”. **The Sustainability Transition: Impacts to Agriculture** will offer companies the essential information needed to understand the interplay of the various sustainability issues, how that will affect their businesses and strategies for adapting and prospering from the sustainability transition.

Murphy added, “The four-part study will provide readers with a thorough and holistic analysis of the drivers behind the sustainability movement, whether they will be felt primarily as market, environmental or regulatory forces, and project how it will affect agribusiness over the next 20 years.”

For more information, contact jim.murphy@contextnet.com.



Looking for Context Information Relevant to Your Business?

Context Multi-Client reports have become icons in the industry. On our website, (www.contextnet.com) companies may subscribe to upcoming reports, purchase existing reports or recommend topics for new reports. Currently, Context offers extensive and thorough information on the following topics. Visit our site today to learn more.



Benchmarking Study for Crop Protection Manufacturers

Crop Protection



Plant Biotech Traits Commercialized & Emerging Markets Outlooks

Plant Biotech



Global Seed Market Database

Global Seed



Global Seed Sector Outlook 2020 – Major Field Crops

Global Field Crops



Global Seed Sector Outlook – Vegetable Crops

Global Vegetables



Future of the North American Biofuels Industry

Biofuels



The Sustainability Transition: Impacts to Agriculture

Sustainability

Context Addresses Unique Challenges in N.A. Agricultural Retail Sector

One of the most dynamic market sectors in agriculture is the Ag Retail sector. Agricultural Retailers face big challenges. Major consolidation across the retail and wholesale industry is continuing. Trends in solutions management for the grower will continue to provide enormous complexity throughout the entire agricultural market. Through these ongoing changes, the ag retailer will continue to be the touch point for the grower.

Challenges, opportunities, risks and potential abound, but until now, there's not been a single resource providing a current and comprehensive look at the Ag Retail industry. Context is pleased to introduce **The North American Ag Retailer**

Competitive Study - a unique evaluation of this important market sector along with the kind of analysis companies have come to expect from The Context Network.

What the Market Looks Like:

Context Partner Tray Thomas says, "Trends in consolidation will only intensify in the coming years. As an example, Agrium has outlined their expansion plans in several presentations. These included both organic and inorganic growth strategies, both of which will lead to further retail consolidation. These plans, plus the continued consolidation of the industry as a whole, will radically change the face of retail."

Thomas notes that complexity in product offerings will also accelerate with the development of new traits and chemistries. The next decade will bring the first biotech products targeted specifically at drought, along with continuous improvements of some of the yield traits already in the market. In addition to traits, new herbicides will be targeted for glyphosate resistance management, new fungicides for plant health improvements, and new insecticides for enhanced control of secondary pests in Bt crops, etc.

"All of these trends will have a profound impact on how the channel is structured, how manufacturers communicate to growers, and ultimately how growers receive and interpret information. The retailer remains at the center of this evolution and growers will likely turn to their local retailer as their key source to navigate through these trends."

Context Senior Associate, James Mann adds, "The response and subsequent actions taken by retailers and wholesalers to address these trends will have a major influence on how the final message is delivered to the grower. The winners will be those that can adapt to the changing market by assimilating information for the end user."

Thomas concluded, "We do know that firms that take more proactive management of these changes through better understanding of both current trends and future scenarios will best position themselves toward successfully advancing their business objectives. **The North American Ag Retailer Competitive Study** will allow more proactive management of these changes through better understanding of both current trends and future scenarios. We look forward to working with companies as the study is released." For more information, contact tray.thomas@contextnet.com or james.mann@contextnet.com.

The Context Network provides business management and strategy consulting services to the world's leading agriculture, biotechnology and food companies, government agencies and institutions. Major areas of expertise include strategy, strategic decision support, merger and acquisition support, valuation of new technologies, formation of alliances, and market research. The Des Moines-based firm is composed of a core of professional consultants that is complemented by a network of hundreds of industry and subject-area experts.

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