

Technology Association of Iowa

Suggested
"Talking Points"

By

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Opening remarks

- Thanks ... Martha (Willits) ... for that kind introduction.
- Several years ago ... I shared the book ... "Who Moved My Cheese?" ... by Dr. Spencer Johnson ... with the leadership of Rockwell Collins.
- At the time ... it was just hitting the bookstores. Since then ... it has become an established and appreciated best-seller.
- As a refresher ... the book is a parable about four characters ... two mice... and two small fictional human figures.
- As the story goes ... the mice and the humans all shared a maze. Within the maze ... they found a pile of cheese that became the focus of their lives.
- The cheese was plentiful ... and life was good.
- But one day ... the pile of cheese was suddenly gone ... and the characters needed to decide what to do next.
- The mice did what animals instinctively do ... they immediately set out to search for more food.
- The humans ... on the other hand ... did what humans are inclined to do. They waited in the same spot ... day after day ... for the cheese to come back.
- So ... in this context ... the cheese in the story represented the catalyst for change.
- The mice recognized that the disappearance of cheese meant that they needed to quickly change in order to survive.
- The humans resisted change. They instead hoped that their situation would simply improve if they waited.
- You know ... many people in business behave this way too. They open up shop ... serve their customers well ... and realize success.
- But then something happens. The marketplace changes. The competition catches up. Costs rise faster than revenues. Business dynamics change.
- Every organization ... at one time or another ... faces these kinds of challenges.
- That's certainly been the case at Rockwell Collins. In fact ... you could say that "our cheese has moved" at a regular ... and unrelenting ... pace.

- I could literally spend the entire day detailing all of the initiatives within our company in reaction to momentous and far-reaching events ... ranging from 9/11 ... to wars in Afghanistan and Iraq ... to changes in customer requirements and expectations.
- But ... to summarize ... there are two things we can say about the many changes we've experienced ... and driven ... at Rockwell Collins.
 1. First ... it hasn't been easy. It's required our people to think differently about what they do ... and how they do it.
 2. The second thing we can say about all the change we've driven ... is that it has worked. Rockwell Collins is a successful company now ... largely because we recognized that we needed to change to adapt to the market environment in which we operate every day. Because we saw that necessity on numerous occasions ... and because we took on the hard work of making those changes ... we're enjoying a great deal of success.
- So ... ultimately ... change has been good for our company.

The cheese is moving again

- Now ... the great temptation for successful companies like ours ... is to now sit back ... and relax ... and nibble on that big pile of cheese.
- But guess what? Our cheese is moving again ... and my fear is that as it disappears this time ... it will literally change our world.
- Today ... I want to focus on two issues ... that have the potential to limit the growth and success of Iowa ... and the growth and success of the companies represented here today.
- These issues deal directly with our ability to be competitive in a global market place.
- The two issues I'm referring to are American technology leadership and the diversity of our workforce.

American competitiveness

- First ... American technology leadership.
- As we enter a century that we know will be dominated by technology ... our nation is at a crossroads.
- Science ... engineering ... and technology are converging to become the driving force in the global marketplace ... probably best captured by Tom Friedman in his recent book "The World is Flat" and this convergence is about to "move our cheese" like nothing we've ever seen before.
- Friedman describes the dramatic rise of previously under-developed nations using education and technology as an economic accelerator.
- His proof-points include examples all across Asia - where intense focus on math and science literacy combined with the global information revolution has begun to create virtual economic bonanzas at unprecedented rates.
- And the critical building block is a combination of education and technology not dissimilar to that in the U.S. over the past 100 years that created the world's greatest economic power.
- But what of the future.....
- By 2010 ... a mere four years from now ... if current trends continue ... more than 90 percent of all scientists and engineers in the world will be living in Asia.
- South Korea ... with one-sixth of our population ... graduates as many engineers as the United States ... and more than 50 percent of all engineering doctoral degrees awarded by U.S. engineering colleges are to foreign nationals.
- Although U.S. fourth graders score well against international competition ... they fall near the bottom or dead last by the 12th grade in mathematics and science.
- And in a recent survey of 1,000 11 to 13 year olds, 84% said they would rather clean their rooms, eat their vegetables, go to the dentist or take out the garbage than learn math and science.
- **Now ... some of you may be sitting there thinking this is a global issue that will be resolved somewhere else ... but consider this:**
- For several years ... reports filled with the kinds of alarming statistics I just mentioned ... have been stacking up in offices throughout Washington, D.C.

- Those reports all carried the same basic message: The U.S. is losing its competitive edge because of a lack of investment in math and science education and research.
- And most recently, a National Academy of Sciences study cautions that without strong steps to improve federal support for science and technology ... the very quality of life in the U.S. is threatened.
- Last October ... Norm Augustine ... the retired chairman of Lockheed Martin Corp. ... and 19 other scientists, academic leaders, and business executives ... presented a 150-page document to the House Science Committee. Their testimony ... and their report, "Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future" ... provided an ominous warning.
- It was the unanimous view of the committee that America faces a serious and intensifying challenge relative to our future competitiveness and standard of living ... and we appear to be on a losing path.
- The committee warned that if the U.S. does not respond quickly:
 - We will lose quality jobs to other nations ... and without such jobs ... our citizens will not have the purchasing power to support the standard of living which they seek.
 - Tax revenues will not be generated to provide for strong national security and healthcare.
 - And the lack of a vibrant domestic consumer market will provide a disincentive for either U.S. ... or foreign ... companies to invest in jobs in America.
- These facts from the report help to further underscore the issue:
 - For the cost of one engineer in the United States ... a company can hire 11 engineers in India ... and five in China. Last year, China graduated 500,000 engineers; India, 200,000; and North America, 70,000.
 - Chemical companies closed 70 facilities in the U.S. in 2004, and have tagged 40 more for shutdown. Of 120 *new* chemical plants being built around the world with

price tags of \$1 billion or more, one is in the U.S. and 50 are in China.

- The United States today is a net importer of high-technology products.
- So, in light of this discouraging prognosis, what are we to do?
- As a start, I was encouraged to hear President Bush ... in his State of the Union address ... focus the nation's attention on this issue.
- He emphasized the need to "lead the world in human talent and creativity" ... and announced the American Competitiveness Initiative ... or ACI ... to encourage innovation throughout our economy ... and to give our nation's children a firm grounding in math and science.
- As part of ACI ... he proposed to double the federal commitment to the most critical basic research programs in the physical sciences over the next 10 years.
- He also proposed to make the research and development tax credit permanent ... to encourage bolder private-sector initiatives in technology.
- And he emphasized the need for our children to take more math and science ... and to make sure those courses are rigorous enough to compete with other nations. He proposed to train 70,000 high school teachers to lead advanced placement courses in math and science ... bring 30,000 math and science professionals to teach in classrooms ... and give early help to students who struggle with math.
- ACI can be an excellent starting point for a national bipartisan effort to renew the U.S. commitment to our future through a sustained investment in science and technology research and career development.

Math and science education

- But to be successful, we will need similar dramatic efforts at the state and local level with the government and private sector working together on common goals.

- Each of us gathered here today has an obligation to motivate and encourage a whole new generation of young people ... to the incredible opportunities in science ... engineering ... technology ... and math.
- It's our job to inspire and to provide those students with the resources they need to succeed.
- At Rockwell Collins ... we have long realized how important it is for teachers ... parents ... and our company to work together to help motivate children to pursue math and science studies.
- That's why we support Engineers Week ... the Future City competition ... MATHCOUNTS ... LEGO League ... and Robotics programs in various Rockwell Collins communities.
- And that's why we sponsor our own K-12 programs in an effort to recruit students into math, science and engineering careers.
- And I urge you to consider participating in ... expanding ... or creating these kinds of programs in your community.

Diversity

- Now ... while American investments in science ... math ... engineering ... and technology have lapsed dramatically in a remarkably short period of time ... we face another parallel ... and equally alarming issue.
- If we continue on our current course ... I fear that Iowa companies will not be able to attract the people we need to grow our businesses ... not just in science and engineering ... but in every field ... from Finance ... to Information Technology ... to Human Resources.
- Every day ... the health of each of our businesses is dependent on our ability to attract ... retain ... and develop talented and motivated people.
- Understanding that ... we must adapt to inevitable changes ahead ... relative to the composition of our future workforce.
- Last year ... I commissioned a team of people to develop ideas ... seek outside assistance where necessary ... and benchmark what other leading companies are doing in the area of diversity.

- Why? Because attracting the people we need to grow our business ... is becoming more challenging ... and the “war for talent” is escalating.
- During the period from 2005 through 2010 ... we’ve projected growth at Rockwell Collins that will require us to hire approximately 7,000 people.
- This will occur over a time when we expect 70 percent of those entering the workforce to be females and minorities.
- Over that same period of time ... the Department of Labor estimates a shortage of 10 million workers.
- And ... as I mentioned a few moments ago ... China and India combined outpace the U.S. in engineering graduates by a ratio of 10 to 1.
- **So what’s the impact of all this? The source of people critical for the success of our companies four or five years from now ... will be very different than what we saw just five years ago.**
- So if you add up all of those elements ... it means the status quo will simply not work in the future.
- You know ... the definition of insanity ... is doing everything the same way ... and expecting a different result.
- If we expect to be able to tap into the trends I’ve just described ... we must change the way we think ... and look ... in order to win the war for talent.

What is diversity?

- Now ... I mentioned a moment ago that I commissioned a team to explore ideas relative to diversity ... and they began by defining what "diversity" really is ... because it is so often thought of as a compliance issue ... or something that deals with only race or gender.
- But in fact ... the team recognized that diversity is the definition of all the differences that make us what we are. Some are socialization differences ... things you've been learning all your life ... such as “girls play with dolls; boys play with trucks.”
- Much of the definition is legally protected to make sure we don't discriminate in some cases, such as:
 - Race/ethnicity

- Age/Generation
- Physical Abilities or Qualities
- Sexual Orientation
- Gender
- Religious Beliefs
- But there are many other things that make us different. Are you married or single? Do you have kids? Have you been in the military? What is your education? Where did you go to school? Those things make us different and they help define who we are.

A more diverse team outperforms a less diverse team

- Another thing that the team discussed is the fact that ... in general ... a more diverse team will outperform a less diverse team. That may be arguable ... but let me explain the thought process that yields that conclusion.
- I first explored that concept more than a year ago when a group of CEOs in the Business Council were talking about diversity ... and I heard Steve Reinemund, the chairman of PepsiCo, talk about a significant business issue they had ... which was solved when he understood the power of diversity.
- The business issue was the fact that Pepsi was underperforming Coca-Cola in selling their product in urban areas ... and they couldn't understand why ... until they began looking at their product development teams and their marketing teams.
- What they found was they were made up mostly of white men. And then they started defining who their customers were in urban areas ... and the fact that they didn't match ... or understand urban demographics.
- And only when they began to reshape their product development and marketing teams ... did they understand the customers they were selling to ... and see a significant improvement in market share.
- What a great example of the power of diversity.
- We've seen that same kind of power at Rockwell Collins. Through our work in Lean Electronics ... we came to realize that if we brought in suppliers ... customers ... or others from

outside the processes we were trying to improve ... that they had a different perspective.

- We found that they had significant knowledge ... that was beneficial to the team.

Diversity Strategic Plan

To begin addressing this issue at Rockwell Collins, our team structured a strategic plan in three specific areas:

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- The first area was focused on People Diversity
- This addresses our need to go out and recruit ... attract ... and retain the best cross section of workforce that we can get

- We also recognized that we need to create a work environment that encourages and accepts a free exchange of ideas and perspectives ... and that's what our second strategy ... Workplace Diversity ... is about.
- It sets the environment in the workplace that will enable us to productively use diversity ... and enable us to better work together with each other.

- Finally ... once we have People Diversity and Workplace Diversity ... we need to leverage them for our third strategy: Marketplace Diversity.
- This is the ultimately about ... developing solutions that help us better serve our customers and other stakeholders.

Working together

- As a company with over half its employees in Iowa.....almost 10,000 to be exact.....we also discovered that we couldn't do this alone.
- If you look at ethnic growth in Eastern Iowa ... specifically the Cedar Rapids - Iowa City corridor community from 1990 to 2000 ... the minority population grew from 4.6 percent ... to 6.6 percent.
- That compares to an increase in minority population in Iowa from 4.5 percent to 6.1 percent.

- At the same time ... the minority population in the U.S. grew from 19.7 percent to 24.9 percent.
- So ... we're far behind the country in terms of where we need to be.
- In the Cedar Rapids – Iowa City corridor ... we're starting to address this issue through the development of a new resource devoted to enhancing diversity. It's called *Diversity Focus*.
- A board of directors ... with representatives from several charter sponsor organizations ... as well as other community leaders ... is overseeing the establishment and operation of this exciting new addition to our community development..
- I believe *Diversity Focus* ... over time ... will become a benchmark for “working together” at the community level ... to leverage and enhance diversity.
- But while Cedar Rapids and Iowa City corridor businesses have identified this issue and are becoming engaged ... this issue will affect companies across the state.
- Every individual ... and every company ... large or small ... can help.
- Working together ... we can provide a different view of our state five years from now ... a view that diversity is valued... and that we are an inclusive and welcoming people.
- Working together ... we can help diverse individuals become active in our communities ... by serving on boards and councils ... which will help influence and shape the future of our state.
- Working together ... our schools can begin to reflect our diversity through our teachers ... and administrators ... and programs of study.
- Working together ... we can drive those kinds of changes ... and provide a positive ... long-term ... and unprecedented impact on the quality of life for Iowans.
- Because you see ... the great benefit of diversity goes back to the fact that I mentioned earlier: a diverse team will out-perform a less diverse team. They will be more innovative. They will bring more ideas to the table. They will challenge the status quo. And ... by doing so ... they will strengthen everything we do.

Summary

- So ... in closing ... whether you represent a technology company like Rockwell Collins with 17,000 employees ... or an emerging technology company ... we all face the same challenge: **the “cheese” that represents prosperity ... success ... and the quality of life we’ve come to enjoy ... is moving....little -by-little.....every day**
- Like the fictional characters in the maze ... it’s human nature to wait ... and hope that our situation will improve.
- However, ...hope is not a strategy...and nothing is harder than change when we have a big pile of cheese sitting in front of us ... and life is good.
- But the risk of waiting for that cheese to disappear is greater. There are many examples of companies that failed because they didn’t anticipate change... before it was too late.
- So today... we have a choice. We can wait like “Hem” and “Haw” in the book..... as our cheese slowly disappears as we yearn for those good old days.
- Or we can take action..... to improve our ability to compete in a world that will not care if we fail to act.
- It will require strong leadership ... but with your help ... we can begin today to improve our probabilities of success ... as business leaders ... as state and community leaders ... and as citizens of this great country.
- In this ... we have a shared destiny ... and we need to begin the journey now.
- Thank you ... and thank you to the Technology Association of Iowa for arranging this summit today. I look forward to the panel discussion that’s next on the agenda.