



Innovations in Sustainable Enterprise

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Center for Sustainable Enterprise

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Kenan-Flagler Business School
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Featured Faculty Research

Rewriting the Rules:

Sustainable business models require a shift in conventional wisdom

By Albert Segars

Every industry is full of "conventional wisdom" – the beliefs that guide the production, distribution, and performance measures of products and services. The problem, however, is that conventional wisdom often has no basis in fact.

For example, in the mid-1980s the shipping industry began losing money. Conventional wisdom suggested that the problem was speed and, therefore, the solution was to build faster ships. Rather than getting better, however, the situation worsened. In fact, the problem was in the ports and not on the ocean: what was needed was to speed up the turnaround of ships when they loaded and unloaded. Getting the vessels to port faster only caused more ships to be waiting in the harbor, creating new problems in cost economics.

In the effort to achieve better environmental, social and financial performance (sustainability), conventional wisdom dominates. The belief that raw materials and environmental sinks are infinite and inexpensive, and that product recycling is more costly than sourcing raw materials are all well-documented problems in corporate thinking. The frustration among those who promote sustainable development is the slowness of business to change.

One reason is the role conventional wisdom plays in decision-making. Often, accepted business models are the ones that led to the initial success of the company. They may be closely linked to the reputation of senior management, who have a hard time "letting go" of business practices that made them successful. Another reason is the "leap of faith" needed for radical change as opposed to the "leap of certainty" associated with incremental change. Incremental change through continuous improvement represents a less risky business proposition than completely rethinking a product or business model.

While one would expect business models based on sustainability to be met with acclaim, the opposite is often the case. But these models represent product and service delivery that can create real value to consumers while maintaining social justice and environmental respect. Thus, the consumer does not have to sacrifice environmental or social value in order to obtain consumption value, and the true "total cost of ownership" is lower.

Let's look at some of these new models.

iPod, iTunes, satellite radio: simplicity over complexity

Concepts such as "direct to consumer" and "unbundling" characterize the model of Apple's iTunes and iPod. Rather than being burdened by media

(continued next page)



Director of the Center for Sustainable Enterprise, Dr. Albert Segars teaches classes on innovation strategy, technology management, and sustainable enterprise at UNC Kenan-Flagler Business School.

[bio online](#)

See Dr. Segars present "[Growth & Profitability through Innovation](#)" Sept. 14 in Charlotte, NC

"Rewriting the Rules" (continued from page 1)

such as CDs and the pre-packaging of songs by the recording industry, the consumer downloads only the songs desired and collects them all on one device. The result is environmentally friendly distribution of media (no CDs). Further, the consumer may now sample music not easily discovered through traditional marketing. Satellite radio will take this model further by allowing wireless downloading of music to small devices on demand. In essence, it will be "media on demand" without the requirement of storage.

Importantly, these models share one key characteristic: simplicity. It is easy to choose, store, and manipulate the media, which is increasingly digital rather than physical. In the future, these devices will also share another key characteristic: community. The sharing of media is already evident in the gaming sectors. It will soon become a central feature of media, the internet, and communication. Such thinking defies the traditional wisdom and revenue models of the entertainment and communication industries. These new models, however, will be of greater benefit to society and create more business opportunity.

Cirque du Soleil: shifting cost economics

The traditional circus is an institution. Marquee entertainers, animal acts, ringmasters and endless concessions are all a part of the "Greatest Show on Earth". Conventional wisdom would suggest that such a model is timeless, but nothing could be further from the truth. Concerns from animal rights activists, and higher costs of transportation and entertainers have placed the model in jeopardy.

Enter Canadian company Cirque Du Soleil. With no animal acts, no marquee entertainers, and a focus on employee development, the company has created a more profitable and sustainable model of circus entertainment. The real magic of the model is that it costs less to stage a Cirque du Soleil show than it does to mount a traditional one.

Aravind: mobile and distributed healthcare

Conventional wisdom bundles the assets of a hospital. For surgery or testing, the patient must travel from his/her home to the central facility for care. In developing countries, such as India, this model presents major problems. In these regions, the population is enormous and many are unable to reach central medical facilities, necessitating a serious rethinking of the structure of a hospital.

Aravind, an Indian eye specialist company, has pioneered the unbundling of hospital services through reinventing cataract surgery. By locating facilities throughout India and reinventing the medical procedure itself, Aravind can treat many more patients in diverse locations. Indeed, Aravind's success has led other companies, including Siemens and GE, to develop mobile platforms for medical assets that were once considered immobile.

Target: safety and worker dignity as value

Few businesses have received more attention than Wal-Mart, the world's biggest retailer. The company's philosophy of low prices and low costs has completely redefined shopping. Yet Wal-Mart's reputation has suffered over allegations of poor treatment of employees, along with lawsuits over store safety and the sale of firearms.

By contrast, Target, a retail competitor, has taken a very different approach. Unlike Wal-Mart, its stores are located in urban, mall-like locations and employees are treated as valued assets. Despite challenging the dominant market wisdom typified by the Wal-Mart strategy, Target has produced higher net margins. In other words, Target has approached the business of retail in a creative way – and succeeded.

Conclusions

Conventional wisdom dictates that success results from improving the prevailing business model. The unconventional approach, however, suggests defining value and then developing an appropriate business model. Importantly, this concept of value recognizes the true or total cost of products and services to the consumer. A product delivered at high cost to the environment and/or society is ultimately a cost passed on to the consumer; it is just not obvious in the initial transaction. Each of the businesses described above has lowered this total cost and in doing so created advanced forms of business and better definitions of value. Such companies will likely be the captains of business in the near future. ❖

This article was excerpted, with permission, from Financial Times, "Mastering Uncertainty," Friday, March 31, 2006.

**Navigating Uncertainty and
Achieving Sustainability:
Six Keys to Success**

- **Don't judge a new idea too quickly.**
This is especially true if the idea is at odds with conventional business models.
- **Don't run with the first idea.**
In many instances it's the one closest to the conventional norm.
- **Don't follow rules that do not exist.**
A new idea is often challenged with statements such as "our customers are not ready for that" or "we can't do that". When put to the test, however, many of these "rules" have no basis in fact.
- **Rely on teams rather than a "messiah" for good ideas.**
The best innovations are the result of knowledge gained through the insights, communication and experiences of a range of people in an organization rather than the brilliant ideas of a "lone genius".
- **Follow the right metrics of business performance.**
In many instances, companies follow the metrics of an industry blindly, unaware that more important metrics have emerged.
- **Identify the right problem.**
It's easy to frame every problem as a "nail" when all you have is a hammer. Business leaders must identify the correct cause of pressing problems before they can navigate uncertainty and achieve more sustainable business models.



CSE Achievements: 2005-06 Highlights

The Center for Sustainable Enterprise advanced its mission of education, research, and outreach with innovative new programs and curriculum enhancements in 2005-06. Highlights include:

- Contributing to UNC Kenan-Flagler's "[Beyond Grey Pinstripes](#)" success.
- Successfully completing the first year of the Center's innovative new [CSE Consulting](#) program.
- Bringing thought-leader [Hunter Lovins](#) of Natural Capitalism to campus.
- Supporting the development of a new student-run global MBA competition, the [Sustainable Venture Capital Investment Competition](#).
- Strengthening a broad range of activities focused on MBA student enrichment experience in sustainable enterprise: the CSE Mentoring Program, practicum program support, career development programs, Net Impact Club activities, and social events.
- Creating the CSE Faculty Grants program, in partnership with UNC CIBER, to support academic research on sustainable business.
- Hosting the conference "[Reinventing Today's Business for the Challenges of Tomorrow](#)," which brought together academic and business leaders discuss innovation and sustainable business practices.
- Developing Sustainable Enterprise curriculum enhancements, including new MBA electives like Innovation & Entrepreneurship for Developing Economies, and Sustainability for Business Advantage. Sustainable Enterprise was also offered as a BSBA program elective for the first time.
- Providing support through the CSE Enrichment Grant Program for 32 MBA students to attend the 2005 Net Impact Conference.
- Offering the new "CSE Seminars" series, featuring lectures on topics of business and sustainability.
- Co-sponsoring the Carolina Environmental Program's "[Discussion on Energy and Global Climate Change](#)" at the business school.



Alumni Spotlight

Maia Blankenship (MBA 2004)

Since graduating from Kenan-Flagler, Maia has been working with College Summit, a nationally acclaimed social entrepreneurship organization dedicated to increasing the college enrollment rate of low-income students. In her current role as Director of National Partnerships and Investments, she is responsible for building and maintaining relationships with both national foundations and private investors.



In Maia's words, to be successful, social ventures like College Summit must be "scalable, sustainable, and effective." She has a passion for serving her community and for education reform. While working before business school as a management consultant at Ernst & Young, she also served as V.P. of the Empowerment Resource Network, a community-based organization supporting entrepreneurship education in Atlanta.

Maia is one of the people changing the world every day. Her ultimate goal is to lead a nonprofit or socially responsible business that is impacting communities across the country.

... [more about Maia](#) ...

UNC MBA Careers in Sustainable Enterprise

The 2006 recruiting year yielded exciting summer internships and full-time positions for UNC MBA Sustainable Enterprise students, including...

Class of 2006 Full-time Positions

- Boise Cascade LLC – *Asia Development Manager*
- Cherokee Investment Partners – *Associate*
- Chevron Corporation – *Global Marketing Development Program*
- The Coca-Cola Company – *Associate Brand Manager*
- East West Partners – *Project Mgr.*
- Good Capital – *Portfolio & Operations Officer*
- Johnson & Johnson – *Asst. Product Director*
- Scott Madden Associates – *Associate*

Class of 2007 Internships

- Bristol-Myers Squibb – *Marketing Intern*
- Cherokee Investment Partners – *Summer Associate*
- Enterprise Community Investment Inc. – *Development Analyst*
- GE Energy – *ECLP Program Intern*
- Highwoods Properties – *Summer Associate*
- IBM Corporation – *Marketing Intern*
- Kenan Institute Asia – *Logistics Project Consultant*
- Kenan Institute Asia – *Consultant, Economic Devt/Tsunami Relief*
- Kenan Institute Washington Center – *Consultant, Cairo-Alexandria Stock Exchange*
- Liberty Property Trust – *Intern*
- National Park Service – *Business Consultant*
- NC Small Business & Tech. Devt. Center – *Carolina Entrepreneurial Fellow*
- Rare – *Summer Associate*
- Shorebank Corp. – *Summer Intern*
- SJF Ventures – *Associate*
- The Timberland Company – *Marketing Intern*
- UNC Ctr. for Sustainable Enterprise – *CSE Consulting Intern*

(representative list, 5/30/06)

Become a CSE Mentor!

If you are working in a sustainable business career and interested in being a mentor to UNC MBA students in 2006-07, please email cse@unc.edu. (UNC affiliation not required.)

Minimum time commitment,
maximum rewards.



Notes from the Field: UNC Faculty & Student Projects

CSE Faculty Director **Al Segars** recently spoke as a part of UNC Kenan-Flagler's "[Innovation Speaker Series](#)", addressing business managers about growth and profitability through innovation in Washington DC. He will speak again as a part of this series in Charlotte, NC on Sept. 14.

CSE Executive Director **Katie Kross** was quoted in Ethical Corporation's [special report on Corporate Responsibility and Education](#) in "Teaching ethics, post-Enron."

The **Kenan Institute of Private Enterprise** and **Kenan Institute Asia** have received recently [\\$200,000 from the Bush-Clinton Tsunami Relief Fund](#) to support a fishing boat repair center and pier project in southern Thailand.

The second annual **Carolina Challenge** [awarded prize money](#) to several social ventures, including *Campus Biodiesel* and *Zarkan*. The grand prize in social entrepreneurship went to a fair-trade retail business, *Zebra Crossings*, started by **Beth Richardson (MBA 2008)** and **Sarah Chasnovitz (UNC Law)**.

Kenan Institute Director **Jack Kasarda** and entrepreneurship professor **Jim Johnson's** report on Hispanic immigration is still attracting media notice, including in a *Boston Globe* article, "[A Glimmer of Hope on Immigration](#)." **Jim Johnson** was interviewed on NPR's "All Things Considered" for the segment, "[On Immigration, Americans Show Range of Views](#)" (Apr 14).

The UNC **Renewable Energy Special Projects Committee** has donated \$210,000 to help construct a [geothermal well system](#) as part of a "green" [Visitor Education Center](#) to be built at the NC Botanical Garden.

Co-founder and managing director of SJF Ventures, **David Kirkpatrick (MBA 1991)** was recently featured in the *Triangle Business Journal* in "[Eco-friendly' approach propels Durham's SJF toward \\$30M fundraiser](#)."



The William R. Kenan, Jr. Fund recently hired **Catherine Burnett (MBA 2005)** as their new program officer. Housed at Kenan-Flagler, the Kenan Fund supports the Kenan Institute of Private Enterprise.



Student Spotlight

Jim Hutton Johnson (MBA 2007)

Jim is a rising second-year MBA student and Net Impact chair of the Sustainable Venture Capital Investment Competition (SVCIC). Originally from Maryland, Jim graduated from Brown University in 2001 with a BA in economics and a record-breaking four-year career in college baseball. He is a Certified Financial Planner and worked for four years as a wealth manager for high-net-worth private clients in Boston prior to business school.



Jim is a highly driven and committed champion of sustainability. In his words, "The vast majority of people want to live in a cleaner and more-just world, yet we all know how perspectives can sometimes change when people act from behind the walls of a corporation. For me, incorporating social and environmental impacts into business practices is simply allowing our businesses to act in the same way a collective group of individuals would."

Jim is working as a sustainability consultant this summer with the CSE Consulting program.

... [more about Jim](#) ...

Sustainability in NC: Events

For more news, announcements & events related to sustainability and sustainable business in NC, visit:
[NC Sustainability Network](#)

Jun. 14-16

NC Economic Developers
Association Annual Conference
Asheville, NC
[more info](#)

Jun. 15

Book Discussion:
"The Weather Makers"
Quail Ridge Books, Raleigh, NC
[more info](#)

Jun. 17

Green Building Design &
Construction for Homes Workshop
Central Carolina Community
College, Pittsboro, NC
[more info](#)

Jun. 20

Emerging Green Builders
Green Drinks Happy Hour
Chapel Hill, NC
[more info](#)

Jun. 28

Triangle Net Impact
Sustainability Discussion Group
Durham, NC
[more info](#)

Aug. 17

Net Impact
Network-Wide Happy Hour
Chapel Hill, NC
[more info](#)

Sept. 7

GreenNC Tradeshow: Building for
a Sustainable Future
McKimmon Center, Raleigh, NC
[more info](#)

Sept. 14

"Growth and Profitability through
Innovation"
Al Segars, Director,
Center for Sustainable Enterprise
Charlotte, NC
[more info](#)

Sept. 15

Deadline for NC Sustainability
Awards Applications
[more info](#)



Intel announced it will invest more than \$1 billion in its new [World Ahead Program](#) to improve technology access for people in the world's developing communities.

GE Energy, PowerLight Corp., and Catavento Lda broke ground on the world's largest [solar photovoltaic power project](#) (11 megawatts) in Portugal.

Bank of America will offer a [new hybrid vehicle credit](#) of \$3,000 to employees based in Charlotte, Boston, and L.A.

Italian firm **Italcementi** has developed a revolutionary ["smog-eating" cement](#) product that promises to reduce urban pollution by over 40%.

Syngenta and the Smith Institute will collaborate on a [new initiative for African development](#), marking the launch with a publication called "Going for Growth: Science, Technology and Innovation in Africa."

Bank of China has launched China's first ever [socially responsible investment fund](#), the new Sustainable Growth Equity Fund.

Preliminary results of a McGraw-Hill/NAHB survey show a [20% growth rate in the green building industry](#) for 2005, predict 30% growth for 2006.

International Paper plans to partner with The Conservation Fund and The Nature Conservancy to protect 218,000 acres of forestlands in one of the [largest private land conservation sales](#) in the history of the U.S.

The winner of the **GE / Dow Jones EConomics Environmental Business Plan Challenge Award** was **WaterVap LLC**, whose technology turns [salt water to fresh water](#) with efficiency approaching 100%.

Technology companies like **HP, AMD, Cisco, Dell, and Motorola** topped the 2006 list of *Business Ethics* magazine's [100 Best Corporate Citizens](#).

Ford announced an industry-first [customer carbon offset program, "Greener Miles,"](#) to enable Ford owners to calculate and offset the climate impacts of their driving. And in Canada, **UNIGLOBE Travel** announced its ["Green Flight" program](#) to allow travelers to purchase carbon offsets for air travel.

The U.S. Dept. of Transportation introduced [new fuel economy standards](#) for light trucks, including the first-ever standards for the largest SUVs. Meanwhile, France now requires cars to post an ["eco-label" disclosing CO₂ emissions](#) per kilometer.

The Economist took a look at hybrid airplane technologies in ["Flight of Fancy?"](#) in March.

Holmen AB, Stora Enso, Nippon Paper and 56 other members of the International Council of Forest and Paper Associations have inked a major [new leadership agreement](#) on sustainability.

Officials approved a plan by **Superior Renewable Energy LLC** to build the [biggest offshore wind farm in the U.S.](#) (500 megawatts) in Texas.

Google, with Earth Day Network, has launched an interactive [guide to ecotourism facilities and activities](#) in popular U.S. vacation destinations.

BP announced plans to invest \$500 million in [biofuels research](#).

The New York Times featured a series on ["The Business of Green"](#) (May 17).

Warner Bros. launched a new [environmental initiatives website](#).

GE reported [Ecomagination revenues](#) (from energy efficient and environmentally innovative products) of over \$10 billion in 2005.

Reading & Resources

[From Challenge to Opportunity: The Role of Business in Tomorrow's Society](#)

Executives from BP, Procter & Gamble, and other leading companies discuss the role of business in the context of poverty, environment, population, and globalization (*Feb. 2006*).

[Carbon Value Analysis Tool](#)

Downloadable tool to help companies integrate the value of carbon dioxide emissions reductions into energy-related investment decisions.

[The Triple Bottom Line: How Today's Best-Run Companies Are Achieving Economic, Social and Environmental Success – And How You Can Too](#)

Forthcoming book on corporate sustainability (*Aug. 2006*).

[True ImpactSM](#)

Web-based tool (subscription required) that calculates the business and social value of a firm's community, environmental, and corporate social responsibility (CSR) activities.

[Rethinking Corporate Social Responsibility](#)

Fleishman-Hillard survey of American consumers' attitudes about corporate social responsibility practices.