Supply Chain Leadership
Distinctive approaches to innovation, collaboration, and talent

October 2014
Deloitte Consulting LLP
The treacherous global landscape

- Intensifying Competition and Rising Customer Expectations
- Increased Global Complexity
- Changing Regulatory Requirements
Breaking the efficient frontier

Source: Deloitte's 2014 Global Supply Chain Survey
Supply chain excellence = Financial excellence

Supply Chain Followers

- Well Below Peers: 10%
- Operating Margin: 52%
- Well Above Peers: 38%

Supply Chain Leaders

- Well Below Peers: 2%
- Operating Margin: 98%
- Well Above Peers: 52%
Supply chain leaders more likely to concentrate on integrating, innovating and growing

Supply chain Objectives

**Integration**
- 92% leaders
- 64% followers
- 28% gap between leaders and followers

**Innovation**
- 96% leaders
- 65% followers
- 31% gap between leaders and followers

**Growth**
- 98% leaders
- 73% followers
- 25% gap between leaders and followers

Source: Deloitte’s 2014 Global Supply Chain Survey
Pillars of a sustainable competitive advantage

Corporate strategy

Senior supply chain leadership

Integration
- Customer alignment / Segmentation
- Integrated business planning
- Supplier collaboration

Innovation
- Multiple types
- Disruptive technologies
- Analytical tools

Talent
Supply chain as a strategic function

Senior Leadership

More often headed by EVP/SVP

Strategic Alignment

More likely to align with corporate strategy

Corporate strategy

56%

33%

Most Followers owned 3 or less

Roughly half of leaders owned all 6

End-to-End Span of Control

Source: Deloitte’s 2014 Global Supply Chain Survey
Supply chain leaders more likely to concentrate on integration

Supply chain Challenges

Integrating with customers
- 69% leaders, 41% followers
- 27% gap between leaders and followers

Integrating with Sales and Marketing
- 67% leaders, 44% followers
- 23% gap between leaders and followers

Integrating with Suppliers
- 90% leaders, 64% followers
- 26% gap between leaders and followers

Source: Deloitte’s 2014 Global Supply Chain Survey
Reliance on third-party suppliers as a virtual extension of a supply chain

Coordination with Third-Party Providers

- **Forecasting**: 88% (53%)
- **Risk sharing**: 73% (41%)
- **Visibility to third-party production, production capacity, or in-transit shipments**: 70% (51%)

Resilient supply chain framework

- **Governance**
- **Flexibility**
- **Visibility**
- **Collaboration**
- **Control**

...supported by a clearly defined governance structure

**Source:** Deloitte’s 2014 Global Supply Chain Survey
Supply Chain Leaders have a mandate to fuel growth through innovation

Supply chain objectives identified as extremely or very important

- **Enabling growth**: Leaders (98%) > Followers (73%)
- **Innovation**: Leaders (96%) > Followers (65%)

Source: Deloitte’s 2014 Global Supply Chain Survey
Evolution of the bookstore: 1994
Innovation is not invention

TEN TYPES OF INNOVATION

Network
Connections with others to create value

Process
Signature or superior methods for doing your work

Product System
Complementary products and services

Channel
How your offerings are delivered to customers and users

Customer Engagement
Distinctive interactions you foster

Profit Model
The way in which you make money

Structure
Alignment of your talent and assets

Product Performance
Distinguishing features and functionality

Service
Support and enhancements that surround your offerings

Brand
Representation of your offerings and business

EXPERIENCE

OFFERING

CONFIGURATION
More innovation types = superior financial returns

5-Year Indexed Stock Price Returns of the Top Innovators vs. S&P 500

- 5+ Types of Innovation: 45 companies
  - Stock Price (indexed to 100)
- 3–4 Types of Innovation: 59 companies
- 1–2 Types of Innovation: 34 companies
- S&P 500
Potentially disruptive technologies offer platform for innovation

Emerging Technologies in Supply Chain

3D Printing  Advanced Analytics
How will 3D Printing impact your industry?

Extensive Use of 3D Printing

Percentage Responding “Use Extensively”

Source: Deloitte’s 2014 Global Supply Chain Survey

“[3D Printing] is growing rapidly in ways that promise to replace the almost 100-year-old mass-production model that defined the industrial revolution.”

- Greg Emerson, The Street, October 14, 2010
Analytics as tool for innovation and integration

Extensive Use of Analytics
Percentage Responding “Use Extensively”

- Optimization software: 75% (75% usage)
  - 34% (34% usage)

- Supply chain visualization software: 67% (67% usage)
  - 28% (28% usage)

- Mobile technologies: 75% (75% usage)
  - 30% (30% usage)

- RFID tags: 65% (65% usage)
  - 27% (27% usage)

Source: Deloitte’s 2014 Global Supply Chain Survey

Analytics Applications

- Operational
  - Dynamic Re-routing
- Tactical
  - Source Switching
- Strategic
  - Product Complexity Reduction
What will it take to stay on top?

Senior supply chain leadership

- Integration
  - Customer alignment / Segmentation
  - Integrated business planning
  - Supplier collaboration

- Innovation
  - Multiple types
  - Disruptive technologies
  - Analytical tools

Talent

Source: Deloitte’s 2014 Global Supply Chain Survey
Sustainability trends in the marketplace
BGGB evaluates brands based on environmental sustainability perception and performance

**Best Global Brands**
- In order to be eligible for BGGB 2014, a brand must be in the top 100 of Interbrand’s 2014 Best Global Brands (an assessment of brand value)

**Perception**
- Public perception of brands’ environmental sustainability is evaluated through surveys in the 10 largest global economies

**Performance**
- Environmental sustainability performance is evaluated through an assessment of brands’ publicly available environmental sustainability information and data, typically in corporate sustainability reports and websites and from information from the Asset4 database

**Gap**
- The gap is the difference of the performance and perception scores, with a positive gap indicating performance stronger than perception
The performance score is calculated by Deloitte and is composed of 83 metrics across six pillars

- **Products & Services** (30 possible points)
  - Description of environmental management structure
  - Disclosure of environmental impacts and targets

- **Governance** (12.5 possible points)
  - Identification of stakeholders and issues
  - Engagement with the relevant stakeholder groups on environmental issues

- **Stakeholder Engagement** (12.5 possible points)

- **Transportation & Logistics** (5 possible points)
  - Energy use
  - GHG emissions
  - Water use
  - Waste management
  - Toxic emissions

- **Supply Chain** (10 possible points)
  - Supply chain engagement
  - Supply chain environmental impacts
  - Supply chain impact reduction initiatives and targets

- **Operations** (30 possible points)
  - Product efficiency
  - Sustainable materials
  - Sustainable packaging
  - Innovation

- **Environmental Performance Score**
Auto companies - consistently ranked among the leaders

www.bestglobalgreenbrands.com
On average companies earned less than 55% of available points across all pillars.

The automotive average exceeds the overall average for all pillars and years.

Automotive companies are particularly strong in the Governance and Products & Services Pillars.
Auto companies – increased quantification of impacts

- Focus on quantifying GHG emissions first, followed by waste and then water
- Quantification of environmental impacts has increased since 2011
Water Risk and Stewardship
Water scarcity is projected to increase

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### Water Availability: 2000

- Regions of water stress, scarcity, and extreme scarcity across Asia, Africa, and Europe

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### Water Availability: 2025

- Extreme water scarcity projected to be widespread across all continents

Water withdrawals are predicted to increase by 50% in developing countries, and 18% in developed countries by 2025.²

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1 – Center for Environmental Systems Research, University of Kassel.
Water scarcity has a *current* economic impact

**Supply Cutbacks**
- Reduced surface water deliveries of 6.6 million acre-feet of water, or 32.5% of normal water use by Central Valley growers

**Lost Ag Production**
- Fallowing of 410,000 acres means higher food prices and fewer choices for consumers

**Lost Farm Jobs**
- Estimated loss of 17,100 seasonal and full-time jobs and household income decline of $555 million

**Industry Decline**
- Direct costs of $1.5 billion to the Central Valley’s agricultural industry

**Disproportionate Impact**
- 60% of the economic losses will occur in the San Joaquin Valley, which is responsible for producing about 1/3 of the nation’s field, vegetable, fruit and nut crops

**Harm to State Economy**
- California GDP decline by $855 million

Business Responses
What should we be worried about?

- Will you have access to **water in 20 years at any price**?

- How much will this **cost to secure**? And what strategies do you have in place to ensure this?

- What is my **business value at risk** from water risk? What is the potential for **stranded assets**?

- What are the Capex **water requirements to support growth**? And who else is competing for that water?

- **Multinational growth projections**….are they reasonable?
Water scarcity risk is a current business risk

2014 World Economic Forum

- # 3 – Water Crisis
- # 8 – Food Crisis

2013 CDP Water Program Global 500 Report

- 70% of respondents have identified water risks as a substantive business risk
- 64% of reported risks are expected to impact businesses now or within the next five years
- Near-term substantive risks reported have increased by 16%
### Physical
- Temporary non-availability of water disrupts supply chain
- Water scarcity drives up input prices (~2%-20%)

### Regulatory
- Intensifying competition for scarce water constrains growth
- Suspension or withdrawal of supplier’s water license or discharge permits disrupts supply chain
- Suspension or withdrawal of supplier’s water license or discharge permit disrupts operations

### Reputational
- Competition with household water demand constrains suppliers’ growth
- Responsibility "by association" for suppliers’ water pollution damages brand or reputation, hinders growth

### Financial Impact
- Lost revenue from disruption of water supply
- Higher costs from:
  - Supply chain disruption
  - Changes in production processes
  - Capital expenditure to secure, save, recycle, or treat water
  - Regulatory compliance
  - Increasing price of consuming or discharging water
- Public outcry regarding water intensity of product damages brand, reputation, hinders growth

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Water risk and value at risk dimensions

- COMPLEXITY OF THE RISK TO QUANTIFY
- IMPACT ON BUSINESS CONTINUITY

- PHYSICAL RISK
- REPUTATIONAL RISK
- REGULATORY RISK
- DYING AND STRANDED ASSETS?
- BUSINESS DISRUPTION AND INCREASED COSTS?
Elements of a water stewardship strategy

Companies should:

- **Incorporate water risk** into ‘traditional’ corporate risk management processes
- **Quantify the “real” value** of water to the business
- **Understand the energy-water nexus** and its potential business implications, set targets across the value chain
- **Increase** focus on engagement and innovation
- **Look for opportunities** in the overlaps
- **Make a public commitment** to water stewardship
- **Practice “radical transparency”** about water and seek opportunities to collaborate – or clear the (internal) path for collaboration

Customers often have similar goals – open collaboration for mutual benefit is a key trend

Water stewardship and business growth strategy

INCREASING VALUE AND COLLECTIVE ACTION

No strategy
- Actual or perceived water scarcity is not acknowledged as a salient issue
- All resources are treated equally
- Cash flows are heavily weighted
- Current market price of water governs decisions

Efficiency strategy
- Recognizes water scarcity as a driver of cost
- Costs of acquisition and use of water are considered
- Profitability risks are heavily weighted
- Focuses on water conservation—efficiency
- Targets and goals set for internal water efficiency

Risk strategy
- Risks of water scarcity are managed at the facility or business-unit level, but not consistently at the enterprise level
- Stakeholder engagement is pursued to improve access to water, in some cases on an ad hoc basis
- May calculate the full cost of water or use a “shadow price”
- May participate in public policy formulation
- Ad hoc investment in technology innovation at the facility level
- “Social license-to-operate” risks are heavily weighted

License-to-grow strategy
- Internalizes externalities (e.g., water and ecosystems)—considers these external issues
- Recognizes the need to manage water scarcity as a platform for growth
- Where relevant, develops products or business models that take into account scarcity, and product/service offerings address water scarcity
- Consistently quantifies value of water, not just its cost or full cost
- Proactively engages with stakeholder and leads water-focusses initiatives and collective action programs—more than just participating
- Participates in water-related policy development
- Invests in and accelerates technology innovation at the corporate level
- “Social license-to-grow” mindset regarding water issues

Mapping financial value at risk (physical scarcity)

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![Map showing financial value at risk](map.png)

Source: Financial value at risk calculations are based on assumptions around physical supply disruptions (quantity or quality) and are based on facility specific estimates of the likelihood of an event occurring and the severity if an event were to occur.

Physical risks and “value at risk”

Plotting the water risk exposure score against potential value at risk identifies logical breakpoints for risk mitigation activities – this does not indicate priority, but differentiates between the requirements.

Categorization of Potential Risk Mitigation Activity

- **Category A**: 54% of F20 production
- **Category B**: 14% of F20 production
- **Category C**: 12% of F20 production
- **Category D**

Value at Risk (US Million Dollars)

Water Risk Exposure Score
Managing reputational risk by leveraging social media

MAP THE AUDIENCE
- Size
- Conversation
- Key platforms

Determine appropriate ratios and metrics for ambassadors and content to optimize perception shift results.

IDENTIFY AMBASSADORs
- Influencers
- Advocates

TACKLE NEGATIVE PERCEPTION
- Positive comments generated by advocates

1:3 comment ratio negative to positive

DEPLOY CONTENT STRATEGY
- Educate
- Entertain
- Assist/Support
- Excite/Inspire
- Leadership/Trust

Optimized for client, 50-75% of content must be created by audience

ACTIVATE AUDIENCE
- Monthly drumbeat activation
- Quarterly splash activation
- Ongoing injection of energy and new voices
I will not waste water
I will not waste water
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