Laboratory for Sustainable Business
S-LAB
Richard M. Locke
15.992 S-LAB Class #1
February 04, 2008

Agenda

- Introductions
- Goals of Course
- Illustration: Nike Case
- Requirements, Course Overview, Key Themes, Important Dates
Course Goals

- Introduction to key issues and opportunities for Sustainable Business. What Can Companies Do?
- Action Learning. Mini-Internships with Organizations seeking to promote more sustainable business practices (either through new start-ups or redesigned existing practices)
- Demonstrate that there is a lot that business / you can do to regenerate our planet and build a more sustainable economy
Why Nike?

1. What is Nike doing?
2. Why is it pursuing these strategies?
3. How do they measure success / impact?
4. What do you think?

Why Nike?: Success Through Global Sourcing

Figure 1 - Net Income

Source:

a) 1978-97: HBS Case #9-299-084 "Nike, Inc.: Entering the Millennium."
   March 31, 1999.

b) 1998-2001: Company financial information

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Why Nike?: Suppliers Engaged in “Poor” Working Conditions

Images of Nike workers removed due to copyright restrictions.

Why Nike?

Unfavorable media mentions
Major World newspapers

Unfavorable media mentions
Major World newspapers

# of mentions

Sweatshop  Child Labor  Exploitation

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Factory Conditions Vary Across Sectors & Countries

First M-Audit Scores across all factories (Nov. 2002 to Jan. 2005)

Histogram: First M-Audit score

Number of Observations: 575
Average M-Audit Score: 65%

Similar patterns of variation within sectors (footwear, apparel, equipment) and within countries.

Are Things Getting Better?

Change in Compliance Rating Inspections

<table>
<thead>
<tr>
<th>Change in CR Rating</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3 (Down by 3 degrees)</td>
<td>20</td>
<td>2.62</td>
</tr>
<tr>
<td>-2 (Down by 2 degrees)</td>
<td>74</td>
<td>9.70</td>
</tr>
<tr>
<td>-1 (Down by 1 degree)</td>
<td>181</td>
<td>23.72</td>
</tr>
<tr>
<td>0 (No change)</td>
<td>323</td>
<td>42.33</td>
</tr>
<tr>
<td>1 (Up by 1 degree)</td>
<td>116</td>
<td>15.20</td>
</tr>
<tr>
<td>2 (Up by 2 degrees)</td>
<td>42</td>
<td>5.50</td>
</tr>
<tr>
<td>3 (Up by 3 degrees)</td>
<td>7</td>
<td>0.92</td>
</tr>
<tr>
<td>Total</td>
<td>763</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: A is 4, B is 3, C is 2, and D is 1, and the change in CR rating is the score in the most recent audit minus the score from the earliest audit, ranging from -3 to 3. For example, if a factory has a score C in the earliest audit and a score A in the most recent audit, then it has a change of +2.
Qualitative Analysis
– A Tale of 2 Factories

Workplace Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Plant A</th>
<th>Plant B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Weekly Wage</td>
<td>$ 86.00 USD</td>
<td>$ 67.80 USD</td>
</tr>
<tr>
<td>Team Work</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Job Description</td>
<td>Multi-Tasks</td>
<td>Single Task</td>
</tr>
<tr>
<td>Job Rotation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Worker Participation in Work-Related Decisions</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>Mexican</td>
<td>Chinese</td>
</tr>
<tr>
<td>Supervisors</td>
<td>Mexican</td>
<td>Chinese</td>
</tr>
<tr>
<td>Production Workers</td>
<td>Mexican</td>
<td>Mostly Mexican</td>
</tr>
<tr>
<td>Overtime</td>
<td>Voluntary and Within Limit</td>
<td>Mandatory and Over Limit</td>
</tr>
</tbody>
</table>

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Qualitative Analysis
– A Tale of 2 Factories continued

Comparison of Production Systems

<table>
<thead>
<tr>
<th></th>
<th>Plant A</th>
<th>Plant B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of Workers in one line or cell</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>T-Shirts per Day per line or cell</td>
<td>900</td>
<td>800</td>
</tr>
<tr>
<td>Daily Wage per Worker (Fixed Salary + Bonuses)</td>
<td>$ 17.20 USD</td>
<td>$ 13.60 USD</td>
</tr>
<tr>
<td>T-Shirts per Worker</td>
<td>150</td>
<td>80</td>
</tr>
<tr>
<td>Cost per T-Shirt</td>
<td>$ 0.11 USD</td>
<td>$ 0.18 USD</td>
</tr>
</tbody>
</table>

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Qualitative Analysis
– A Tale of 2 Factories continued

Comparison between Old and New System of Production in Plant A

<table>
<thead>
<tr>
<th></th>
<th>Old System (module)</th>
<th>New System (cell)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of Workers</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>T-Shirts per Day</td>
<td>1200</td>
<td>900</td>
</tr>
<tr>
<td>per module or cell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity per Worker</td>
<td>120</td>
<td>150</td>
</tr>
<tr>
<td>Average Weekly Salary</td>
<td>$ 67.80 USD</td>
<td>$ 86.00 USD</td>
</tr>
</tbody>
</table>

GEN III: Evolution

FROM: GEN I & II
1. Firefighting.
2. Policing.
4. Giving Specific Solutions.
5. Informing BU’s of progress.
6. Focus on Issues.

TO: GEN III
1. Coaching.
2. Capacity Building.
3. Providing data for the factory to provide answers.
5. Engaging BU’s for leverage.
6. Focus on systems & root causes.
2001 MOU with WWF

WHERE WE WORK & MOVING PEOPLE:

Reduce carbon dioxide (CO2) emissions 13% below 1998 levels by 2005.

Includes:
- CO2 from Nike-owned facilities and business travel
- Conserving energy, buying green power, and investing in community energy-efficiency projects

MAKING PRODUCT & MOVING PRODUCT:

Supply Chain CO2 baseline—2003
- Footwear and Apparel contracted manufacturing
- Logistics
- Remove GHG from Products (pre-existing commitment)

Achieved Goal

COMMITMENT: Reduce carbon dioxide (CO2) emissions 13% below 1998 levels by 2005.

FACILITY AND TRAVEL CO2 SUMMARY

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Facility Electricity TCO2</th>
<th>Facility Gas TCO2</th>
<th>Green Power (MWh)</th>
<th>Total Facilities GHG TCO2</th>
<th>Travel TCO2</th>
<th>Travel Offset TCO2</th>
<th>BETC Projects TCO2</th>
<th>Total Travel TCO2</th>
<th>TOTAL CO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>84,597</td>
<td>12,364</td>
<td>0</td>
<td>96,961</td>
<td>30,177</td>
<td>0</td>
<td>0</td>
<td>30,177</td>
<td>127,138</td>
</tr>
<tr>
<td>1999</td>
<td>85,791</td>
<td>12,585</td>
<td>(450)</td>
<td>97,926</td>
<td>29,648</td>
<td>0</td>
<td>0</td>
<td>29,648</td>
<td>127,575</td>
</tr>
<tr>
<td>2000</td>
<td>90,152</td>
<td>13,157</td>
<td>(771)</td>
<td>102,539</td>
<td>30,618</td>
<td>(4,341)</td>
<td>0</td>
<td>26,277</td>
<td>128,816</td>
</tr>
<tr>
<td>2001</td>
<td>87,895</td>
<td>12,810</td>
<td>(771)</td>
<td>99,734</td>
<td>30,234</td>
<td>(5,067)</td>
<td>0</td>
<td>25,167</td>
<td>124,901</td>
</tr>
<tr>
<td>2002</td>
<td>89,269</td>
<td>12,493</td>
<td>(846)</td>
<td>100,816</td>
<td>36,283</td>
<td>0</td>
<td>(15,331)</td>
<td>20,852</td>
<td>121,668</td>
</tr>
<tr>
<td>2003</td>
<td>89,234</td>
<td>12,370</td>
<td>(3,637)</td>
<td>97,966</td>
<td>38,109</td>
<td>0</td>
<td>(46,263)</td>
<td>(8,154)</td>
<td>89,812</td>
</tr>
<tr>
<td>2004</td>
<td>86,212</td>
<td>10,740</td>
<td>(6,259)</td>
<td>88,993</td>
<td>50,795</td>
<td>(4,000)</td>
<td>(15,040)</td>
<td>31,755</td>
<td>120,448</td>
</tr>
<tr>
<td>2005</td>
<td>84,409</td>
<td>10,750</td>
<td>(17,475)</td>
<td>77,684</td>
<td>47,754</td>
<td>(8,143)</td>
<td>(13,299)</td>
<td>26,312</td>
<td>103,996</td>
</tr>
</tbody>
</table>

GOAL

|                  | 96,961 | 110,610 |

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SF6 Elimination from Product

- Began R&D in 1995, Completed phase out in 2005
- Measured and verified by ERT

Baseline emissions and 2005 baseline.

Emission estimates include both SF6 and C3F8.

Our Climate Goals

WHERE WE WORK
- Nike Brand Climate Neutral Facilities by 2011
- Nike, Inc. Climate Neutral Facilities by 2015

MOVING PEOPLE
- Climate Neutral Business
- Travel by 2011

MOVING PRODUCT
- (Logistics to first point of distribution)
  30% Absolute Reduction in CO2 footprint from 2003 Baseline by 2020

MAKING PRODUCT
- (Footwear contracted manufacturing)
  Reduction Target TBA
- (Equipment contracted manufacturing)
- (Apparel contracted manufacturing)

Nike Footprint: 1.36 m metric tons
Course Overview

2. What Can Companies Do?
   – Get House in Order (Operations)
   – Supply Chain Redesign
   – Launch New Products / Markets
   – Engage with other Firms, NGOs, Governments

DISCUSSIONS

Review Syllabus

1. Requirements:
   – Class Participation & Attendance 30 %
   – Project Work Plan 5 %
   – Intermediate Report 20 %
   – Final Report 45 %
2. Read Syllabus. Due Dates
3. Visit Course Website