

SKANSKA

## Scorecard Solution Helps Construction Company Promote Injury-Free Environment

### Overview

Country or Region: United States  
Industry: Construction

#### Customer Profile

Part of the Skanska AB global group of companies, Skanska USA Building is a leading national and local provider of construction, pre-construction consulting, general contracting, design-build, and pharmaceutical validation services to a broad range of U.S. industries. The company is headquartered in Parsippany, New Jersey, and has approximately 4,100 employees.

#### Business Situation

In 2004, Skanska USA Building embarked on a mission to become an injury-free environment. As part of this enterprise-wide safety drive, Skanska launched a campaign that featured posters with the message "They expect you to come home safely. So do we." Skanska also introduced mandatory safety training for everyone in the organization. But to effect real, long-lasting change, Skanska needed to communicate its safety goals to everyone in the organization, measure performance against these goals, and drive improvements in problem areas while rewarding superior performance.

#### Solution

An Injury-Free Environment (IFE) Report Card that monitors 15 key performance indicators (KPIs) based on a combination of common safety measures and Skanska-specific factors. Skanska's IFE Report Card was built with Microsoft® Office Business Scorecard Manager 2005.

#### Benefits

- Enhanced visibility into safety performance
- Ability to identify persistent safety issues or trends before incidents occur
- Ability to link KPIs to reports and trending charts and graphs to provide a contextual perspective on safety issues

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Chris Stockley, CIO and Senior VP of IT, Skanska USA

In 2004, Skanska USA Building, based in Parsippany, New Jersey, began an ongoing, multifaceted safety awareness campaign. Skanska knew that if the initiative was to succeed, it had to clearly communicate campaign goals to employees while also monitoring performance to ensure that activities were aligned with the company's injury-free philosophy. So, Skanska built a scorecard—the Injury-Free Environment Report Card—using Microsoft® Office Business Scorecard Manager 2005. The scorecard tracks safety practices across the enterprise and is accessible to Skanska's largely mobile workforce of approximately 4,100 employees. Having implemented a successful scorecarding solution the previous year, Skanska already had most of the required technology—and the technical and business expertise—in place. So it was no accident that, with the efforts of four people and within only three weeks, it built and deployed a highly effective and user-friendly Injury-Free Environment Report Card.



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Allen Emerick, Director of IT, Applications and Integration, Skanska USA

## Situation

Skanska USA Building is a leading national and local provider of construction, pre-construction consulting, general contracting, design-build, and pharmaceutical validation services to a broad range of U.S. industries, including pharmaceutical and biopharmaceutical, educational, high-tech, healthcare, aviation, transportation and sports and entertainment. The company, part of the Skanska AB global group of companies, is headquartered in Parsippany, New Jersey, and has approximately 4,100 employees.

At Skanska USA Building, the imperative to work safely is, literally, laid out in black-and-white. At the start of 2004, the top-ranked company launched a campaign as part of a company-wide mission to adopt an injury-free environment (IFE). The campaign included black-and-white posters of a child whose forehead is pressed against a glass window as she waits for her parent to come home. “They expect you to come home safely,” the poster’s tagline reads. “So do we.” These posters are prominently displayed at most of Skanska’s job sites across the United States.

“The concept of an injury-free environment is a big focus for us,” says Dan Wurzburg, Skanska USA Building’s Senior VP of Environmental, Health, and Safety. “The message that we’re putting across to our workers, clients and prospective clients is that we want to have injury-free sites on all our projects, so this whole initiative is a culture-changing exercise to get people to rethink about safety as a natural part of the job.”

“The human rationale behind Skanska’s injury-free drive is clear and simple,” says Wurzburg. “Skanska managers genuinely care about the health and safety of their employees.”

But the business case is just as compelling: construction companies with a strong safety record find it easier to recruit and retain skilled employees. And clients concerned about preserving the integrity of their company’s brand prefer to deal with construction firms that are known to operate safe project sites.

“For us, building a safe environment is about caring for our fellow workers, but it’s also about business issues related to costs resulting from accidents, and costs relating to recruiting and retaining people,” says Chris Stockley, Skanska USA Building’s CIO and Senior VP of IT. “And it’s important in terms of enhancing our competitive advantage.”

In addition to its ad campaign, Skanska introduced mandatory personal safety awareness training for everyone in the organization, regardless of position. But Skanska also recognized that effecting profound, long-lasting changes requires a strategic process that involves communicating goals, monitoring performance against targets, and sharing these results with everyone so they can continually improve their performance. So, the company set out to build an Injury-Free Environment Report Card.

“A big part of our focus is to personalize safety and get personal accountability towards ensuring that accidents never happen,” says Stockley. “So we decided to create a safety scorecard that would be available to every single person in the organization.”

## Solution

**A Tried and True Solution**  
Getting management buy-in for the IFE Report Card was a non-issue for Skanska: in 2004, following a consolidation of its nationwide building companies, Skanska had implemented an enterprise-level scorecarding

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solution. Aimed at aligning its managers to a consistent set of business goals, the scorecarding solution helped Skanska cultivate a performance-oriented organization where managers had greater accountability and could easily access the data they needed to make better-informed decisions. This scorecarding solution was so successful that by the time Skanska launched its IFE initiative the following year, scorecarding had already become embedded in the company's management culture.

“We had already seen first-hand the benefits of scorecarding,” says Allen Emerick, Skanska USA Building's Director of IT, Applications and Integration. “So when we launched IFE, it was a given that we would be scorecarding this initiative.”

In developing its IFE Report Card, Skanska determined that it needed to find a way to raise and maintain a constant awareness of safety issues throughout the organization. Skanska made it clear that the intent of the project was two-fold: to give employees a clear view of their performance so they could make improvements in yellow- or red-light areas and keep up the good work in green-light areas, and to increase senior management's involvement with project teams regarding safety.

Unlike Skanska's first scorecarding project, which was designed to be viewed only by managers, the IFE Report Card would be accessible to all of Skanska's 4,100 employees. Wurzburg, the safety scorecard's executive sponsor and primary user, would define the key performance indicators (KPIs) based on a combination of common safety measures and Skanska-specific factors.

Data for Skanska's IFE Report Card would come from job safety audits, which are carried out randomly by Skanska's management. These managers visit project

sites, meet with project team members to discuss safety, and inspect the site. The site inspection uses an IFE Report Card form developed with Microsoft® Office InfoPath® 2003 information-gathering program and is completed via a Tablet PC. Because Business Scorecard Manager is integrated with Microsoft Office SharePoint® Portal Server 2003 managers can enter results from wherever they're located. When a wireless connection exists, the manager normally accesses and enters the results online in real-time through Skanska's intranet. But in most situations, the managers have to work offline, says Emerick, in which case they simply document their findings on their Tablet PC and then upload the results to the intranet at the earliest possible opportunity.

“From a technical perspective, the challenge is that our organization is very mobile, very virtual and you never know where people are going to be online or offline,” says Emerick. “So we had to build a fairly sophisticated infrastructure that could accommodate the complexities of our business.”

**Keeping Score for Safety's Sake**  
Emerick describes the deployment of the IFE Report Card as “extraordinarily successful. We did it all in three weeks and with four people. The architecture facilitated this because we already had most of the technology infrastructure needed to build a safety scorecard.”

The IFE Report Card, which tracks on-the-job site safety across the enterprise, has a total of 15 KPIs for such safety factors as hard-hat compliance, appropriate use of body harness, and appropriate use of eye protection. Results are displayed starting from the enterprise level then cascading down to the account manager, office, and project levels.

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Users logging on to the company intranet will immediately see their scorecard on the Home page.

To make its safety scorecarding results truly meaningful, Skanska linked the individual KPIs to reports that would show the actual numbers behind the scores. Those who want to go all the way to the source to determine the root cause of a particular safety problem can drill down to the original safety audit form.

"So if the result in a particular category is yellow, you can find out who needs help and in what specific area," says Emerick. "The tablet form also allows for note-taking, so you can even view on the dashboard any notes that the manager made during the audit."

Emerick says that Skanska intends to link its safety scorecard KPIs to more contextual information in the near future. For instance, users viewing KPIs for hard-hat compliance would be able to link to a Microsoft Word or PDF document that explains hard-hat regulations and highlights recent changes to the law. Similarly, a user looking at safety harness KPIs might be able to link to a diagram illustrating how a harness should be worn.

What is now proving invaluable, says Emerick, is the ability to connect the IFE Report Card to data visualization such as charts or graphs. "We can do trending quite easily with charts and tables on Excel®, which people here are most comfortable with," he says.

Given the mobility of its workforce, ensuring that relevant users are monitoring their scorecards constantly was a key challenge for Skanska. To address this issue, Skanska located its IFE Report Card on a SharePoint site that can be accessed remotely. But Skanska added yet another layer of

insurance: it tied scorecarding results to managers' compensation and bonuses. This incentive has the effect of making managers more proactive about tracking their team's performance and constantly taking steps to improve.

Emerick says Skanska will soon be boosting the proactive aspect of its safety scorecard even further by turning on the Alerts feature so users are notified immediately of any significant changes in their safety performance. "We believe this is really key to ensuring we are doing all that we can to prevent accidents from happening," he says.

## Benefits

Reduction in Lost-Time Injuries  
From both quantitative and qualitative perspectives, Skanska's IFE Report Card can be declared a success. Aggregate results so far show a 96 percent rating towards KPI targets.

"Most significantly, actual safety conformance of employees, as measured by our IFE Report Card, has improved," says Stockley. "In part we attribute this to a 15 percent reduction in lost-time injuries in the third quarter of 2005."

User participation, so crucial to scorecarding success, has been very high, says Stockley. "Because scorecarding has become a pervasive corporate initiative at Skanska, user adoption and participation has been extraordinary," he says.

While it is hard to get an accurate reading of the pulse of corporate culture, Stockley says Skanska's culture now definitely beats to the mantra of an injury-free environment. Thanks to a safety immersion strategy that combines ubiquitous posters, mandatory safety awareness training, and a scorecard that provides ongoing, real-time feedback on safety performance, a constant vigilance

## For More Information

For more information about Microsoft Office Business Scorecard Manager 2005, go to:  
<http://www.nexdimension.net>

against at-risk behavior and accidents has now become an integral part of Skanska's corporate mindset.

### Saving a Life: An Immeasurable Return on Investment

But the most significant benefit of Skanska's IFE Report Card is impossible to measure, says Wurzburg. "What's the return on investment for saving somebody from harm or from saving a life?" he asks. "What is that worth? You can put a value or measure on safety practices, but you can't put a value on someone's life. For us, that's the greatest return on our scorecarding investment."

## Microsoft Office System

Microsoft Office is the business world's chosen environment for information work that provides the software, servers, and services that help you succeed by transforming information into impact.

For more information about the Microsoft Office System, go to:  
<http://www.nexdimension.net>

### Software and Services

- Microsoft Office System
  - Microsoft Office Business Scorecard Manager 2005
  - Microsoft SQL Server
  - Microsoft Office SharePoint Portal Server 2003
  - Microsoft Office 2003 Editions
  - Microsoft Office InfoPath 2003

### Technologies

- Microsoft SQL Server Analysis Services
- Microsoft SQL Server Reporting Services

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