Jim Sommerville stood ready to go on-stage at the worldwide launch of WindScape®. Jim, an industrial designer in the trade show display industry, had been involved since the very first days of the project. And here he stood, ready to walk out and demonstrate this radical innovation (an air-powered trade show display product line) to the world. He reflected on the many reasons this day may never have happened. After all, he was at the front line through the years, witnessing the many obstacles first-hand. Could the company design and build a high-quality product that met the market requirements? Could the company overcome some organizational and other barriers to the creation of a radical innovation? Would the market accept this radical innovation?

Jim reflected that the “could” questions had been answered or he would not be waiting to go on-stage. Nonetheless, it certainly wasn’t easy getting there. The only question still not fully answered was whether the market would accept the product. Jim felt pretty good about the market response so far. The product line had been previewed by some key distributors, and the feedback was very positive. The marketing and product management team members were fierce advocates and had created a very innovative launch strategy. Bill Dierberger, Skyline’s president, was fond of asking Jim and the other WindScape team members: “How many times in a life do you get a chance to change an industry?” Jim stepped onto the stage, eager and ready to find out if the team had done just that.

Skyline Exhibits and the Trade Show Industry

At the time of the launch, Skyline Exhibits® was a worldwide market leader in the trade show display industry. It was a relatively small company that had approximately 250 employees. It sold its products through a worldwide network of dealers. The company created and sold the structures and displays needed to create a trade show booth, ranging from small tabletop displays to large custom island exhibits comprised of elaborate standing and hanging structures.

The company began in 1984 when its founder developed a pop-up wall display system that was unique in the industry at the time. The company continued to expand its product lines and create new product lines, but the company’s share of revenue from new products had declined by the early 2000s. In 2005, the company hired Julie Heck as director of product marketing and
marketing communications to implement a new product development process. As a result, the amount of revenue from new products rose from 6% to 24% of overall revenue over a period of five years. In 2012 the company won the Outstanding Corporate Innovator award from the Product Development and Management Association (PDMA).

While the company was enjoying success, its business outlook was constrained because of forces impacting the trade show industry as a whole. Many mature industries suffer from similar forces:

- The industry was experiencing increased pricing pressures as low-cost, lower-quality competitors in Asia or on the internet provided cheaper alternatives. This resulted in pricing pressures on the higher-end solutions and threatened reduced profits for incumbents.
- The overall cost of trade show participation was escalating, threatening participation by its customers.
- The industry was characterized by incremental improvements that provided some new benefits to customers but did not “move the dial” on revenues and profits.

The industry participants all knew the fundamental challenges -- there was less and less differentiation between various solutions, and all medium or large solutions were extremely costly. The total cost to the end user only started with the purchase or rental of the exhibit structures and displays. The structures, which could be very elaborate and large, were mostly built of wood, metal, and fabric. These structures were packed in shipping crates and sent to the trade show venue. Shipping could be very expensive, as some large exhibits required a dedicated tractor trailer. Once at the destination, another cost known as drayage was incurred. This is a materials handling fee incurred with companies that unload the crates, bring them to the booth location, remove and store the packing materials, return the packing materials at the end of the show, and reload the crates. Drayage was charged based on the total weight (crate plus contents) and could exceed the two-way shipping cost. Setting up and dismantling the exhibits was also complex (requiring specialized tools) and very expensive, often requiring the exhibitor to hire carpenters, electricians, and other trade specialists. This whole elaborate process also added to the travel expenses of the personnel of the exhibitor because they may have needed to be at the venue extra time before and after the actual show in order to oversee the process.

All companies providing exhibits and display understood the cost drivers, and no company offered a comprehensive solution to dramatically reduce the cost elements -- until WindScape. The basic concept of WindScape was a light, easy to transport line of exhibit displays that was easy to set up and take down.

While the concept of WindScape was simple, the journey to create WindScape was long and fraught with technical dead-ends, inter- and intra-departmental conflicts, cultural issues, waxing and waning of resource commitment, and changes in leadership. In addition, many at Skyline knew that the market expected high-quality products with a professional fit-and-finish because of
the company’s position as a market leader. It was not clear throughout the development process whether the team could overcome all of these obstacles.

The Beginning of WindScape

By the early 2000s, pricing pressures and commoditization at the low end of the trade show industry display market were apparent. Suppliers in Asia and via the internet were forcing prices down, and it was only a matter of time before the pricing pressure would impact higher-end solutions. In 2005, the members of upper management at Skyline held an off-site retreat to discuss how to return to its roots of innovation, reinvigorate the industry, and escape the trap of pricing pressures by creating unique solutions that could be protected by patents.

There were a number of ideas that resulted from the off-site retreat, and some were implemented or in development during the long road that eventually led to WindScape. The most dramatic suggestion was to provide an air-powered system. The idea was to make an inflatable display system that would be light-weight, easy to transport, and easy to set up and take down. Because these projected attributes solved the biggest problems experienced by exhibitors, the idea was attractive. However, it seemed unrealistic to some because they thought of the air-powered bouncy guy at car dealers or bouncy castles for children. These associations persisted for some throughout the WindScape development process.

Nonetheless, the founder and then-president, Gordon Savoie, was intrigued by the idea. Initially the concept was envisioned only as a tabletop solution. He tasked four designers to work on the idea in the background. They had his permission to spend some time experimenting with various approaches when they had time available. In other words, this was a classic case of a skunk works project. This is a classification given to projects that are advanced or secret, in which the team members have a high degree of autonomy and little or no bureaucratic oversight.

The company had four core competencies at the time: printing, fabric finishing, metal, and wood. An air-powered system would require the company to move beyond those core competencies. Therefore, this original skunk works team had to find solutions in completely different industries that had similar problems to solve: products that were light, portable, rigid, and that set up and dismantled easily. They looked at military and sporting solutions. They bought fabric from fabric stores and cut apart bicycle tire tubes and conducted many experiments. The eventual inspiration came to Jim by studying camping and water sports products. When the project became an official and funded project it was given the code name of “Eddie”, which came from the pop-up tents available from Eddie Bauer.

Eventually, the team created a prototype for a tabletop air-powered display. There was a meeting of senior management and a few people from marketing. This meeting was outside of the company’s standard product development process. The president of Skyline at the time of the meeting was Bill, who had been with the company for many years and had a background in sales. He became president after the death of Gordon, who was the initial champion of the
concept of an air-powered display system. Bill stated that when he saw the prototype he started pacing the room because his mind was racing with the possibilities of the innovation. He believed the concept could go far beyond a tabletop display and perhaps become an entire product line. Sofia Troutman in marketing, who eventually became the segment manager for WindScape, also described her immediate support for the concept.

This informal meeting launched Eddie from a skunk works project to an official development project. Figure 1 illustrates the standard New Product Development Process implemented by many companies and similar to the one implemented by Julie at Skyline. It illustrates the various stages and decision points along the path of development once a project becomes an official project. Not all projects begin as skunk works projects. In fact, most projects are enhancements to existing products and known as incremental innovations. In these cases, the idea generation and screening and business case and technical investigation stages are very brief. In the case of Eddie, the skunk works period preceded even the idea generation and screening stage. The skunk works period proved that a particular concept would work, but once it became a formal development project, the concept needed to be applied to actual potential product ideas.

![Figure 1: Standard New Product Development Process](image)

The Rocky Road

The elevation of Eddie to an official project widened the number and type of people who needed to be involved. The prototype was created by four young industrial designers. As a formal development project, it now required the involvement of engineering and marketing. These were three separate organizations that had good people with good intentions, but different skill sets and perspectives. The industrial designers had the vision and the passion. The engineers wanted to know how to make something that would have the high quality and fit-and-finish of the existing products. Marketing wanted to be sure that the product would improve the end customer’s experience at the trade show. The expansion of the people involved in the project, reporting to three different leaders in the organization, led to natural conflict.

One obvious source of conflict came from the fact of the different backgrounds and perspectives of the members of the new, expanded team. There was tension between marketing and engineering, engineering and industrial design, and industrial design and marketing. There was
also tension between the original skunk works team and the seasoned engineers and marketing personnel who sometimes had a “been there, tried that, didn’t work” attitude. Meetings would take place in which decisions were made, agreed upon, and then ignored. The three separate departments were often in a state of unresolved conflict.

Another source of conflict was about the priority of Eddie, an experiment with many unknowns, against the company’s proven, market-leading, and respected product lines. Quite rightly, most people within the company and in its dealer network were proud of what they had achieved with the existing products. It was easy to re-allocate marketing, engineering, or design resources to existing product lines or customer projects because they were tangible, and Eddie was not. In addition, there was fear by some that, if successful, Eddie would cannibalize the sales of the company’s cash cow, the Mirage line.

In the end, the solution was to restructure the company and bring in additional leadership. Bill hired Pierre Menard to lead a newly-combined design and engineering team, and Jon Althoff to lead marketing. Pierre and Jon were hired at about the same time, about a year from the planned launch of Eddie. As Jon described it, the two were “bonded by fear” and knew that they needed to pull together as a team to turn this invention into a product.

The two leaders made a point of meeting together in public spaces and behind closed doors. In meetings with the Eddie team, they made a point of modeling respectful debate. Once they agreed upon a topic, they stuck to that decision unless new information surfaced. Pierre devoted consistent design and engineering resources to Eddie. The team gained confidence that there was a cohesive management team determined to make the launch of Eddie a reality.

There were still many difficulties. As stated, the company was trying to develop a new core competency and a new product line at the same time. As Pierre described, the company had confused product development with technology development by putting a launch date on a project that had so many uncertainties. One main difficulty was finding vendors that had the ability and willingness to assist in the creation of the product. Skyline needed to find vendors entirely outside of its normal set, for example sporting goods manufacturers, and to convince them to support a product line that was completely outside of their own comfort zone. The resolution of this problem took a very long time and the company experienced false starts. The vendor issue was a part of the larger problem of building an entirely new core competency in air-powered systems.

Understanding the Customer Experience

Eddie began with knowledge about the “points of pain” (the inconveniences, hassles, and costs) felt by the end users of the trade show displays. It was that knowledge that prompted the team to pursue a solution that was lightweight, easy to transport, and easy to set up and take down. Beyond those high-level market needs, the team members wanted to know more about the end-user experience on the trade show floor. However, because it had a worldwide network of
distributors, Skyline had indirect contact with the actual end-users. Management believed that end-user input was filtered through the distributors.

In order to counteract the indirect feedback, Skyline invested in ethnographic research during the development of Eddie. Ethnographic research is often employed by companies that want to understand how a product is actually used. The researcher observes a product’s usage within its intended environment. Upper management sent designers, engineers, and marketers to trade shows to observe the set up and dismantle process and to talk to the exhibitors. The goal was to be sure that the team members gained a nuanced understanding of the customer experience.

The team learned a lot. Most exhibitors were female and were climbing ladders in skirts to set up displays that were six feet tall or even larger. All exhibitors had to wait after the close of the trade show to have their booths dismantled and packed up, often causing them to spend an extra night away from home and extra hotel, car rental, and meal expenses. The tools required to assemble and dismantle the displays were problematic. Some tools had a single purpose and if it was misplaced progress on the set up or take down stalled.

The team members were able to use the insights they gained through this ethnographic research to make decisions based on what would improve the customer experience, not what was easy or practical for the company. For example, Sofia (the segment manager in marketing) had indicated that Eddie displays should be set up and dismantled using no tools. Engineering pushed back, asking if a simple Allen wrench could be required. Sofia stood her ground and said “no tools”. Because of the new respectful team dynamics fostered by Jon and Pierre, the engineers accepted her directive and created a solution that required no tools.

**Launching a Radical Innovation**

WindScape (néé Eddie) was a radical product innovation in the trade show industry. In addition to this product innovation, Skyline’s marketing department was very innovative in the launch of the product line. It began with a set of teaser videos sent to dealers and the sales force about two months before the launch. The videos hinted at WindScape without detailing it, but stated that it would change the industry.

Interestingly, the videos had a somewhat negative impact. Bill (the president) was traveling with a key member of the Skyline sales force, who expressed concern that the company was setting expectations too high. Bill called Jon at 9 p.m. that night, saying that it was better to under-promise and over-deliver. Jon spent a restless night, and conferred with Pierre the next morning. The two confirmed to themselves that they were solving four or five of the key points of pain felt by customers. This story highlighted the self-doubt that can creep in when an established company is introducing a game-changer.

Before the official launch, Skyline held an event for approximately 500 dealers and partners to unveil WindScape. The incredibly positive feedback gave everyone confidence that the product
could, in fact, change the trade show industry and possibly other industries as well. At the event, some partners indicated that they could see the technology applied in many industries outside of the trade show display industry. For example, theatrical sets and outside displays were mentioned.

Another aspect of the marketing communications strategy leading up to the launch was an intensive social media effort utilizing Twitter, Facebook, and LinkedIn. The company sent daily Tweets to its nearly 4,000 Twitter followers and retweeted to its field sales force using the hash tag “#ThisChangesEverything”. Three examples of the promotional tweets (link addresses excluded):

- “Set up a complete 10 foot trade show display in under 5 minutes? See how…#ThisChangesEverything”
- “A 10 foot trade show display with case that weighs 33 pounds? See it here…#ThisChangesEverything”
- “Those who’ve seen our new product say it’s a game-changer. Attend our launch & see for yourself…#ThisChangesEverything”

The goal of the worldwide launch of WindScape was to gain awareness and trial of the product line by simultaneously launching the product worldwide with a hybrid live/virtual event. The team knew they needed to go beyond the company’s usual product launch to get faster adoption of its newest product in order to get as large a first-mover advantage as possible over potential future copycat competitors. The live event was held at the Skyline headquarters in St. Paul, Minnesota and streamed to simultaneous events at Skyline 27 dealer offices worldwide. Attendees in locations without a live event could watch the entire event streaming online.

At the headquarters, there were two large shipping crates near the stage emblazoned with the international “not” symbol. After remarks from Bill, Jim and Pierre emerged, one carrying a backpack and one rolling a carry-on suitcase. They each opened their bag, took out a pump, plugged it into a wall, and flipped a switch. In less than a minute, a tabletop display emerged from the contents of the backpack. Another two minutes and a ten-foot wall display emerged from the contents of the suitcase. Later, two young women walked across the stage, easily holding a column display over their heads that was almost thirteen feet long. In wood or metal, that column would have weighed hundreds of pounds. They set it down on the floor horizontally, and two engineers sat on it; it did not sag or collapse. The launch event perfectly demonstrated the key attributes of WindScape: light, transportable, rigid, and easy to set up and take down.

Social media was also integral to the live launch event. Attendees (at headquarters and virtual attendees worldwide) were invited to share their reactions on Twitter. Mike Thimmesch, who directs the company’s customer engagement department, monitored the Twitter traffic, responded to questions, and relayed some of the comments he was receiving during the event. There were 741 Tweets that referenced the global launch on the day of the event. A sampling of Tweets that were from end users, not Skyline employees or dealers:
“#Windscape might be the answer to my prayers! Been looking for something lighter and easy but still stylish. #thischangeseverything”

“@SkylineExhibits WOW – very impressed! WindScape is amazing so many possibilities! #thischangeseverything”

Loving the innovation of the new Skyline WindScape displays. Just shows that companies can make good things better. #thischangeseverything”

“#thischangeseverything is the real deal. Gotta love innovation! Great job skyline.”

“@SkylineExhibits windscape is a great product! #thischangeseverything”

“Skyline WindScape – WOW! No tools, super quick set up, packs light..my sales guys are gonna LOVE this! #thischangeseverything”

“Skyline has come out with a new line of inflatable trade show booths. Pretty cool stuff. #ThisChangesEverything”

“@SkylineExhibits #thischangeseverything blown away J Windscape is extremely impressive!”

“@SkylineExhibits How cool would it be to be the first one with a WindScape at the next show? #thischangeseverything”

“Thanks @SkylineExhibits for creating WindScape from the customer’s perspective. #thischangeseverything means everything to tradeshow mgrs.”

“I’ve seen enough, just take my money! #Thischangeseverything”

At the end of the day, the team gathered to debrief and reflect on the global launch. Everyone – Bill, Pierre, Jon, Julie, Sofia, Jim, Mike, and all of the other WindScape team members – felt that they had just witnessed the beginning of a new era of innovation for Skyline. Bill repeated his question to the team: “How many times in a life do you get a chance to change an industry?”