
Visioning Information Technology at Cirque du Soleil

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Danielle Savoie, recently appointed Chief Information Officer (CIO) at Cirque du Soleil, was delighted. She had just met with the firm's Executive Committee to present the very first information technology (IT) strategic plan in the history of Cirque. The plan presented a coherent and organized vision of IT use at Cirque. The Executive Committee had reacted very positively to her recommendations, although the members of the committee were not accustomed to discussing issues as technical as IT. At Cirque du Soleil, IT was deemed a significant but not always necessary cost. Indeed, it was sometimes perceived as a useless expense. Danielle Savoie's main challenge now was to discover how IT could best serve Cirque. She was convinced that in order to meet this challenge, she had to develop an IT strategic vision that would be accepted by Cirque's top management, deploy a highly professional IT group and enhance the credibility of IT among the leaders of the firm.

Before being hired by Cirque du Soleil in April 2000, Danielle Savoie was the Vice-President of Strategic IT projects at Desjardins, a credit union and one of Quebec's largest financial institutions. Obviously, the transition from a financial institution to one of the world's most innovative and creative enterprises represented a major challenge, yet Ms. Savoie also considered it a very interesting one. Her mandate as the first CIO at Cirque du Soleil was clear: she had to find an effective way for IT to support growth at Cirque. She had given herself three months to assess the current IT situation. It was at the end of this three-month period that she presented her strategic plan to Cirque's Executive Committee.

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Cirque du Soleil – A Fantastic Journey¹

In 1984, a group of street entertainers established in Baie St-Paul, a small municipality located east of Quebec City, convinced the Quebec government to subsidize the development of a show that would be presented as part of the festivities surrounding the 450th anniversary of the arrival of Jacques Cartier in Canada. The show was titled Cirque du Soleil, and the group was founded by Daniel Gauthier and Guy Laliberté. The intention behind the show was to reinvent the concept of the circus. Until then, most circuses were based on the traditional model created by Barnum & Bailey and Ringling Brothers in the 1880s in the American Far West. The type of entertainment offered by these companies had barely evolved over the years, and their shows generally incorporated a variety of acrobatic acts, clowns and animals.

The first show presented by Cirque du Soleil was dramatically different from the traditional circus: it featured no animals, spectacular costumes, a modern original musical score, more sophisticated characters than the traditional clowns, and astonishing lighting. It combined the spectacular side of traditional circus, like acrobats and a big top, with the more dramatic and sophisticated elements of theatre.

Audiences and critics alike were immediately conquered. Success was instantaneous. Cirque du Soleil succeeded in redefining the circus experience for the audience by capturing the imagination of the public. The show was presented in 10 cities in Quebec. In 1984, 73 people worked for Cirque du Soleil. This first show established the foundations and the concept. During the years that followed, Cirque grew very quickly. By 2000, Cirque du Soleil had evolved from its modest beginnings to become a complex organization with operations in several cities and shows on the road around the world. In 2000, Cirque du Soleil had three permanent or resident shows: *Mystère*, which had been presented at Treasure Island in Las Vegas since 1993, *Ô*, presented at the Bellagio in Las Vegas since October 1998, and *La Nouba*, presented at the Walt Disney World Resort since December 1998. At the time, Cirque also had five touring shows, which moved every two months.

The firm inaugurated its international headquarters (IHQ) in Montreal in 1997. The headquarters were also known as “the Studio.” It was at the Studio that all the activities related to show creation and production took place, as well as support activities such as casting, training studios, and costume and accessory creation. Support activities such as marketing, logistics and human resource management, as well as information technology, were also centralized in Montreal.

In 2000, Guy Laliberté became the sole owner and Chief Executive Officer of Cirque du Soleil. At this time, Cirque had regional offices in Las Vegas, Orlando, Amsterdam and Singapore, for a worldwide total of close to 2,000 employees. An office in charge of managing the permanent shows in Las Vegas and Orlando was established in Las Vegas. It was responsible for supporting each show by overseeing operations, finance, human resources, marketing and IT. Three regional offices supervised the touring shows; the regional offices had structures similar to that of the Las Vegas office. All shows touring in America were supported by the Montreal regional office,

¹ Cirque du Soleil, “A Fantastic Journey,” http://www.cirquedusoleil.com/cirquedusoleil/pdf/pressroom/en/historique_en.pdf.

while the shows that were presented in Europe were supported by the Amsterdam regional office and the shows presented in the Asia-Pacific area were supported by the Singapore office.

Mission of Cirque du Soleil – Invoke, Provoke, Evoke

The mission of Cirque du Soleil is to invoke the imagination, provoke the senses and evoke the emotions of people around the world.¹ Experts have described Cirque du Soleil's strategy as being the "simultaneous pursuit of both differentiation and low cost."² By "reinventing the circus," Cirque du Soleil has been able to develop a cost structure that is significantly lower than that of traditional circuses. First, Cirque's shows do not use animals. At the time of the creation of Cirque du Soleil, this was most unusual, and it immediately set Cirque apart as a special class of circus. The decision not to use animals also helped lower Cirque's cost structure compared to traditional circuses. Indeed, circus animals are costly to shelter, transport, feed, and maintain in good health. Second, most traditional circus shows feature three rings where performers present their acts concurrently. This approach not only diverts the attention of spectators, it also raises the cost of a performance. Cirque du Soleil opted for a single ring that would captivate the audience's attention.

Reinventing the circus also involved crossing boundaries and bringing some of the drama, artistry and sophistication of theatre into the circus acts. A Cirque du Soleil show is not a series of unrelated acts, as is often the case with traditional circus shows. Rather, the audience is offered a theatrical performance featuring acrobats, gymnasts and clowns rather than actors. Indeed, as early as 1985, Cirque's shows were created and directed by gifted theatre directors. Among the key conditions that have allowed Cirque du Soleil to sustain its differentiation advantage is its ability to find and nurture key talents, including acrobats, athletes, dancers, singers, musicians, clowns, writers and actors.

Cirque du Soleil – A Unique Business

At Cirque du Soleil, a touring show is a very complex matter. As Danielle Savoie describes it:

When we raise our big top, in some field out in the middle of nowhere, what we're actually building is a village, and it needs electricity, phones, water, offices, Internet and, of course, a computer network. A tour is a little village travelling from city to city; a village that is practically self-sufficient, with its own kitchen, its own workshop for maintenance and repairs, its box office, and its heating and air conditioning system. It's a village of about 150 people, and it needs the very best technology to meet their needs, which range from basic bandwidth requirements to ticket sales, payroll and phone systems. And this is a village that moves every six or seven weeks, which means that it has to be constantly torn down and set up again.

Everything has to be precise and methodical. Every part, hose, wire, piece of rigging and bolt has its place to make everything supremely efficient. So, if you think assembling IKEA furniture is

¹ Cirque du Soleil, "Cirque du Soleil at a Glance," http://www.cirquedusoleil.com/cirquedusoleil/pdf/pressroom/en/cds_en_bref_en.pdf, page 1.

² W. Chan Kim and Renée Mauborgne, "Blue Ocean Strategy," *Harvard Business Review*, Vol. 82, No. 10, October 2004, p. 76-84.

complicated, imagine what it's like setting up and tearing down a big top that seats 2,500. Imagine the logistics when over 55 trailer-loads of equipment have to be hauled from place to place, and at each site, everything has to be in working order within 30 hours, not to mention the technical documentation that's needed to support this whole logistics effort, because we're not talking about moving into vacant office space, we're talking about empty land or parking lots."

At Cirque du Soleil, casting is a key process. Indeed, the quality of the shows relies heavily on the availability of excellent artists, acrobats, jugglers, athletes, singers, etc. As Danielle Savoie describes it:

Casting's talent scouts are always on the move, travelling to the ends of the earth. The Casting director [who was there when Danielle Savoie arrived at Cirque] described the essence of her work as maintaining a pool of artists for the eight shows that Cirque had then and the many events, and recruiting artists for new shows in the future. She and her team roamed the planet auditioning for a soprano who radiated childlike energy for *Quidam*, or an artist with gestures guaranteed to get laughs. Or they might be headed for a Polynesian temple in search of a fire dancer for the show *Ô*. And wherever they are, around the globe, they needed to record all the information they were collecting on each artist quickly, and save video references for each of them.

Not only is casting a delicate and involved activity, but once a performer is hired, he or she has to go through a series of steps before actually participating in a show. One of those steps is the make-up lessons that ensure that performers can apply their own make-up for the various roles they play in a given show. At the time, make-up for each part of every show was documented with 35-mm photos and forms listing the products used and the procedure to follow, all of which was kept in big binders that the make-up artists had to cart around with them on their numerous trips to the various Cirque sites. Not only were the binders heavy, but there was always the risk that documents could be lost along the way or forgotten somewhere. After the make-up lessons, the performer had to go to the costume workshop for measurements. A total of 50 measurements were taken at different points on the performer's body. These very precise data were required to customize the performer's costume pattern, which had to be perfectly fitted to his or her measurements. Cirque has several thousand intricate costume patterns. Information about costumes and measurements was being stored in Excel files and in various unconnected applications. After the performer's measurements were taken, a plaster cast of his or her head had to be made, in three copies. The casts are used to make the masks, wigs, and hats that the performer wears during shows. Three copies were required because sometimes a hat, a mask and a wig were made simultaneously for the same performer. Keeping track of the plaster heads and their model's identity was very challenging.

At the time, even though efforts were being made to keep the information about potential talents in a very organized fashion, all the information about artists was kept in paper folders of various colours, with each colour representing a different discipline. One can imagine the piles of files, video recordings, pictures and so on that the casting director had to carry around the globe and send to the International Headquarters.

Information Technology at Cirque du Soleil in 2000

Danielle Savoie's nomination followed a decision by Cirque's top management to acquire SAP to support the firm's basic business processes: human resources, logistics, and finance. The implementation of such a complex technology required a re-examination of how IT was managed and operated. Cirque needed to implement more organized and professional IT management than it had at the time.

Upon her arrival at Cirque du Soleil, Danielle Savoie introduced herself to the general managers and to the key players involved in each of the areas related to show production: Creation, Cirque Image, Finance, Merchandising, Resources, Marketing, Legal, Production, SAP, Planning and Public Affairs. She then devoted her first weeks on the job to meeting the people in charge of the various creative and administrative units in order to establish her diagnosis. This allowed her to develop an understanding of the uniqueness of Cirque's business.

She realized that each touring show had its own unique IT infrastructure; Danielle Savoie has described the touring shows as being distinct little islands.¹ Yet, according to Ms. Savoie, the installation of the IT infrastructure of a show was a critical step. At the time, the technician in charge of installing the touring show's IT hardware had to be on site several days before the other members of the tour in order to ensure that the IT infrastructure was ready when they arrived. This installation could take quite a long time, since the technician had to unpack the servers and reinstall them each time, then connect the workstations and phone equipment for all administrative activities – including the many ticket windows of the box office trailer (nine for *Quidam*, which was touring in North America at the time) and the cash registers (28 for *Quidam*). The installation was quite cumbersome, involving the use of copper cables, among other things.

Some of the main features of Cirque's IT environment in 2000 were:

- Servers: several hardware platforms, most of which were clones assembled on the spot. The majority of the servers ran on Windows NT 4.0, with some servers operating with Novell Netware;
- Network: a variety of equipment using various standards, such as Ethernet 10, Ethernet 100, and Ethernet Giga, shared or wireless in certain sites;
- Desktops: a variety of equipment from at least 10 different suppliers;
- Operating systems: various versions of Windows (95, 98, 98SE, NT 3.51, NT 4.0, 2000) with various levels of corrective measures (Service Packs);
- MS Office Suite in several different versions (95, 97, 98, 2000);
- Applications: more than 800 applications and software packages were installed, many of them supporting the same function – personal preferences often being the deciding factor. The applications were most varied and rather unconventional, given the nature of Cirque du Soleil's activities. For instance, one such application tracked the performers' medical records. This type of application was deemed extremely important, given the fact that the performers are a critical resource at Cirque du Soleil;

¹ Alice Dragoon, "The Amazing Traveling IT Show," *CIO*, Vol. 16, No. 3, November 1, 2002.

- Data sharing: most applications were standalone. The various shows operated as independent businesses rather than parts of single organization. Collaboration between employees across different business units was difficult.

The IT situation was plagued with several difficulties: the demands made on maintenance support were very high; users had to change their work methods and adapt to each workstation or workplace where they happened to be, and this had a significant impact on their effectiveness; it was extremely difficult to deploy applications that worked on all the workstations and in all regional contexts; the infrastructure was unstable; and it took a considerable amount of time to solve any technical problems that arose.

After spending several weeks learning about Cirque, Danielle Savoie came to several conclusions. The IT group was small, and its role was essentially one of support. Cirque had no development team, nor did it have any standards or procedures governing the use of IT. The management of IT was highly decentralized, each unit acting independently of the others, without any coordination. This situation is typical of a small business that has grown rapidly and devoted all its resources to the development of its core business. The deficit in IT credibility seemed to be due to: a poor ability to deliver the desired IT solutions with the required degree of depth, reliability and operational uptime availability; insufficient leverage of user investment in terms of efforts and funds caused by a lack of project management, weak integration of IT solutions and incoherent technology; a lack of vision with respect to IT direction in the organization, the delivery of business solutions, infrastructure acquisition and investments and technology transfer. In a nutshell, it was clear that in its current state, Cirque's IT could not support its growth. A complete overhaul of IT management was needed.

Information Technology Strategic Plan

The plan developed by Danielle Savoie during the three months following her arrival at Cirque read as follows: "Establish IT solution requirements to support and enable respective business visions for Cirque du Soleil service and products & work functions requiring significant IT support during the next two to three years."¹

Danielle Savoie's observations led her to conclude that in 2000, the nature of the business landscape at Cirque du Soleil required a range of IT enabling solutions and technologies that would depend on each other and that needed to be open so that they could interact accordingly. In addition, the IT solutions implemented at Cirque would have to be linked to those of their business partners so that business plans and agreements could develop smoothly. It therefore appeared unrealistic to develop an IT strategic plan based on the adoption of a single set of technologies, such as SAP, for all IT business solutions. SAP had already been implemented to support the basic business processes. One strategic approach would have been to protect all available options to integrate IT solutions with SAP, as opposed to adopting, by default, SAP as a unique integration channel. Another strategic approach would have been to ensure that IT integration capabilities would be agile and flexible to support growth and rapid responses to quickly changing, unpredictable market conditions.

¹ "IT Strategic Plan – Stage One," presented at the Executive Committee meeting by Danielle Savoie, July 11-13, 2000.

It was stated that the critical success factor of the IT strategy would be the ability of IT integration capabilities to provide seamless connections between a diversity of IT solutions based on a significant range of technologies.

Lion's Den¹

After assessing the IT situation at Cirque du Soleil, it became clear to Danielle Savoie what needed to be done. She had three major objectives: (1) develop a strategic IT vision that would be accepted by Cirque's top management; (2) deploy a highly professional IT group that would have the required resources; and (3) improve the credibility of the IT group among the leaders of the firm. Most importantly, she had to promote the IT strategic plan to the Executive Committee. The Committee was chaired by Guy Laliberté, cofounder and owner of Cirque du Soleil, also known as "the Producer."

During the Executive Committee meeting in July, Ms. Savoie used the analogy of a sailboat to illustrate the role of IT within the organization, knowing that Guy Laliberté adored sailing. During her presentation, she showed a slide representing a sailboat. That simple picture had quite an impact. She explained that the sails were the IT applications that could be fully deployed – or not – depending on the intensity of the winds or the business needs. The boat's hull was a representation of the IT infrastructure. She explained that without a solid hull, the boat would sink, which is the same for the business if it is not effectively and efficiently supported by the right IT infrastructure. The "helmsperson" holding the tiller was her, governing IT, and the person standing in the front of the sailboat, providing direction, was Guy Laliberté.



When she left the meeting room, Danielle Savoie was well aware that she had just begun the difficult task of carrying out her IT strategic plan. Her next concern was to set up the proper governance mechanisms that would help her achieve the IT strategic plan. For her, the structure of governance was "the set of mechanisms for decision making, the roles and the responsibilities necessary to make it possible to align IT with the business objectives of the company and to maximize the added-value of IT."

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¹ Before each new show, a special performance called "the Lion's Den" takes place. During this performance, each act is judged by a selected group of experts, but most importantly by Guy Laliberté. This is a very stressful moment for everyone involved in the creation and production of the show, because a decision is made as to whether the act, the performers or anything else will be kept or not.