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✉ **François Labelle, Ph.D.**

Université Québec à Trois-Rivières
francois.labelle@uqtr.ca

✉ **Christophe Leyrie**

Université du Québec à Chicoutimi
Christophe_Leyrie@uqac.ca

“STAKEPARTNER MANAGEMENT” IN PROJECTS

A turn-of-the-century TURNAROUND AT ALCAN

ABSTRACT

The ideas behind project management have changed significantly since the 1980s. Traditionally based around engineering principles, project management is now primarily focused on creating value for various groups of stakeholders (SH). In turn, an integral part of stakeholder management moved from a basically contractual approach to a communication focused, or public relations, approach before recently evolving yet again to a partnership approach. The aim of this article is to illustrate the move towards partnership management of stakeholders and to use a case study to discuss the consequences of such a move on management and leadership. The case study in question involved the implementation of a new project management philosophy at Alcan, a multinational company in the aluminum sector, during the construction of an aluminum smelting plant at Alma in Quebec in the early 2000s. This large project involved an investment of over two billion CAD and had the potential to cause significant environmental and socio-economic impacts. Alcan's new project management philosophy and new stakeholder approach directly influenced every stage of the process and were translated into specific and innovative actions that allowed the company to complete the project in the best conditions while obtaining a very high level of social acceptability.

INTRODUCTION

The ideas behind project management have changed significantly since the 1980s. Traditionally based around engineering principles, project management is now primarily focused on creating value for various groups of stakeholders, thereby stepping outside the limitations of the traditional time-cost-scope triangle. The value of a project is now linked to the level of social acceptability achieved following negotiations between stakeholders representing different, and often contradictory, interests and needs. To this end, Turner (2009) has suggested that the success of a project should be judged according to criteria defined by the various parties involved throughout its life cycle in order to measure short-term performance and long-term impact.

This receptiveness to the interests and needs of stakeholders has allowed the effective management of stakeholder-project relationships to become an important success factor (Achterkamp and Vos, 2008). The literature identifies many failures caused by neglecting these relationships. Conversely, several successes have been attributed to the support of stakeholders who went on to play a key role in the projects. For this reason, stakeholder agreement and support must be obtained, and managers must build sustainable relationships with the stakeholders. Managers must ensure they understand stakeholder aims as well as their power and influence in order to integrate their needs and expectations, thereby ensuring project success (Sutterfield, Friday-Stroud et al., 2006).

Today, the growing importance of challenges facing projects and an increasing complexity linked to the number of stakeholders have led to questions surrounding the opportunity and method of clearly integrating stakeholders representing social, ecological and economic aspects of the project.

To illustrate this change of project management perspective and to discuss the consequences of such a move on management and leadership, the results of a case study will be presented below.¹ The case study in question involved the implementation of a new project management philosophy at Alcan, a multinational company in the aluminum sector, during the construction of an aluminum smelting plant at Alma² in Quebec in the early 2000s. This large project involved an investment of over two billion CAD and had the potential to cause significant environmental and socio-economic impacts. The implementation schedule covered a period of about 4 years. Alcan's new project management

¹ The case was studied at first within the framework of the completion of the thesis of one of the authors of the article.

² The town of Alma is located in the Saguenay-Lac-St-Jean region of Quebec and counted 26,127 inhabitants in 1996. There are approximately 60 towns and 300,000 inhabitants in this region. Saguenay-Lac-St-Jean is about 400km from Montreal, also in Quebec.

philosophy, considered herein to be a partnership management style, directly influenced all stages of the process and translated into specific and innovative actions.

Through the Alcan experience in Alma, it has been possible to identify the contextual and organizational elements that facilitated this conceptual change. The case study will also be used to classify a range of practices that exemplified the company's new project management values. Next, the new model will be compared to previous ones used by the company. Finally, the role of managers during the process and the new skills they needed will be discussed.

However, before presenting the case study and subsequent analyses, a literature review looking at the evolution of stakeholder management within projects will be carried out and the methodology used will be explained.

1. Project management and stakeholder management

The concept of stakeholders first appeared within a project management context at the end of the 1970s (King and Cleland, 1978). Since then, interest in the idea of stakeholders has grown continuously, both in practice and research, to the point where the concept is now a key part of the field (Littau, Jujagiri et al., 2010). This approach, usually called stakeholder management, seems to have largely coevolved with the conceptualization of project management, which has gradually progressed from an engineering-based perspective to one primarily focused on creating value for all partners. This section will summarize the coevolution through its three phases or stages, which will be named and linked to stakeholders, contracts, public relations and partnerships.

Contract Phase

Until the end of the 1970s, project management generally only occurred in a limited number of fields such as engineering, construction or military, space and aviation programs (Jolivet, 1995). Projects were characterized by fixed, more or less repetitive targets or aims within a stable environment with predictable, regular developments. Everything was built around an implementation phase. Other phases linked to the beginning and end of the project, such as design or completion, represented “black boxes” for managers (Lundin and Soderholm, 1998) as in an environment of predictable change and excluding some suppliers, only endogenous variables from within the project needed to be considered.

Inspired by Schön’s metaphor (1983), this was less a conversation with a situation than a monologue.

At the time, project management was focused on obtaining results or standards that were predefined outside a project manager’s sphere of influence and that were centered on the “virtuous triangle” of cost-time-scope. The key was for the resources used to produce an effective performance (Hazebroucq and Badot, 1996) and little attention was paid to the surrounding environment (Wideman, 2003). Only participants who were contractually linked to the organization were recognized as stakeholders. These tended to be clients and suppliers whose interests were deemed to be taken into account by the terms of their contracts. From a project manager’s perspective, stakeholder management was therefore limited to respecting the terms of the contract. According to the analysis framework suggested by Freeman (1984), there was practically no level of “stakeholder” maturity as there was no systematic process of identifying, analyzing or taking into account their interests, and even less of a negotiation mechanism.

Public Relations Phase

The first shortcomings in this approach surfaced in the early 1980s and large projects were stopped due to external opposition (Morris, 1999). Projects started to be seen as open systems that interacted with an environment characterized at the time by change and uncertainty caused by the shift from a demand-driven to a supply-driven economy. Companies were measuring their health by the number of projects they were running (Aurégan and Joffre, 2002). The previous stability which allowed management to focus on endogenous variables was replaced by uncertainty that required managers to focus on exogenous variables. Within this context, where projects were continuing to grow in number and visibility, the quantity, variety and importance of participants involved also followed the same trend. Projects now needed to achieve deliverables with a scope that reflected compromises acceptable to all stakeholders based on external events. This was “reality” entering the dialogue.

While the exact definition of stakeholders was open to debate, it extended beyond those contractually involved projects and was generally based on the actual or perceived level of investment or interest of groups and individuals in relation to the project, as well as on the level of control or influence that they could have on the project (Achterkamp and Vos 2008). This expansion translated

into a larger number of expressions of different, divergent and potentially contradictory interests which needed to be taken into account during project management. In this situation, acceptable deviations were managed in relation to initial concepts and, with the need to include client satisfaction, the limits of the “virtuous triangle” were revealed (Hazebroucq and Badot, 1996). Project management needed to become more strategic. Initially developed to complete given steps within known, contractual, and, particularly technical, constraints, the discipline became more global and focused on value (Morris, 1998).

Stakeholders were now managed more systematically as they were a part of the success or failure of the projects (Elias, Cavana et al., 2002). In addition to being a source of uncertainty in relation to project execution (Karlsen, 2002), they were known to cause difficulties by acting in such a way as to cause projects to be cancelled, modified, changed in scope or technical options or even to receive reduced funding, thereby threatening the aims and specifications (Jergeas, Williamson et al., 2000; Pan and Flynn, 2003; Bourne and Walker, 2005). It became clear that the way in which the various participants involved were managed would determine the impact their actions could have on project performance (Sutterfield, Friday-Stroud et al., 2006; Achterkamp and Vos, 2008). From an operational perspective, different tools and more or less structured procedures were developed and implemented in order to allow managers to identify stakeholders, improve predictions of their potential impact and develop relevant strategies (Bourne and Walker, 2006). Within this context, communication was often presented as key factor: a tool for change and influence and even for social acceptability (Olander and Landin, 2008; Lehmann, 2010; Savard, 2010). Often incantatory, with instructive information, this communication was mainly designed to convince once the design process was completed (Libaert, 1998). According to the Freeman framework (1984), “stakeholder” maturity was higher in this situation as actions were carried out at a rational (*identification and analysis of stakeholders*) as well as a procedural level (*taking stakeholders into account during project management*). However, it remained didactical as its primary aim was to facilitate project performance and satisfy developers.

Partnership Phase

During the tail end of the previous phase, starting about fifteen years ago, competitive pres-

sure started to manifest itself as projects became more open to their surroundings and developed an enhanced need for flexibility. Some authors allude to an era of strategic projects (Aurégan and Joffre, 2002). Increasingly, systematic opposition to certain large projects was based on greater project visibility, due to growing media coverage, greater sensitivity to environmental challenges and an enhanced legal framework. The concept of performance was at the heart of a set of short and long-term internal and external criteria (Cooke-Davies, 2004). Project effectiveness was now measured through products as well as long-term impacts for higher or “macro” level stakeholders such as users or neighboring organizations (Atkinson, 1999; Lim and Zain, 1999; Bryde and Robinson, 2005). Project boundaries became more flexible in response to the number and type of people or groups interconnected with the project (Winter, Smith et al., 2006).

This new reality influenced project management and specifically, stakeholder management. The latter became more important and their greater involvement became expected across all phases of the projects. Alongside existing tools and procedures, new approaches based on principles of trust, partnership and long-term relationships were introduced (Pinto, 2009). Communication became participative. The information flow was no longer unidirectional but transformed into a dialogue that allowed participants to take part in developing the project (Libaert, 1998). “Stakeholder” maturity was at its highest level as, beyond existing rational and procedural levels, a new transactional level was integrated, involving negotiation or mediation (Freeman, 1984). The utilitarian perspective which saw stakeholder interests only in relation to their ability to contribute to or hinder project aims was replaced by a perspective in which these interests assumed a more intrinsic value. According to Donaldson and Preston (1995), this normative perspective of stakeholder management was responding to a moral ideal on which the foundation of stakeholder theory was based.

The phases described above follow an evolutionary path but are not mutually exclusive and correspond to three styles of management used in organizations. Some still consider stakeholder management to be the respect of a contract between developer and agent, particularly in small to medium technical projects. Others, and this is probably the largest group, see a communication device to sell a project to people or organizations that may contribute to or harm the project. Finally, a few see stakeholder management as a collab-

orative approach that aims to meet the needs of a large number of people or organizations that may be directly or indirectly affected by the project.

2. Methodology

The aim of this research was to study the evolution of the “philosophical-practical” relationship within project management through its journey from contractual project management to an increasingly partnership-based style. The events behind these changes will also be discussed. However, to achieve this, the changes must be linked to their context, subsequent actions-interactions and their effects. As time and movement are interlinked throughout this section, a longitudinal study seemed to be the best approach. An in-depth case study was therefore chosen. This is also an excellent method for theory development, (Harrison and Freeman, 1999, p. 482), which the “project and stakeholder management” research field needs.

To this end, it was decided to revisit a previous case study from a different perspective.³ The case meets the following criteria:

1. The case relates to the experience of a for-profit, shareholder-owned company. This was a way of ensuring that the position of project managers would not be predetermined by the company’s targets (e.g., NPO).
2. The case highlights different, even divergent, expectations in relation to the project proposed by the company.
3. Comprehensive documentation from various sources guarantees the availability of relevant information required to answer questions to triangulate data and sources, ensuring credibility for the research.

The case selected was the construction of the Alcan plant in Alma at the end of the 1990s. This involved an investment of over two billion CAD. It was the largest project in the company’s history and the biggest planned construction site in North America at the time. The schedule was spread over a period of approximately 4 years, until the autumn of 2000. During peak periods, over 1,800 workers would be required.⁴ The project was expected to create 225 new jobs as well as 425 transferable jobs.

³ This data was first used by one of the authors while researching a PhD thesis.

⁴ In fact, over 3 billion CAD would be invested and over 4000 workers would be involved at the site in the autumn of 1999.

Specifically, the project involved building a smelting plant that would include the following components: potrooms (*432 pots*), a pot coating workshop, an anode production unit, a casting center, handling and storage systems for raw materials, fuel and end products as well as an electrical substation. Various linked infrastructure elements were also included in the project: power transmission lines, natural gas supply lines, a railway, plant access roads, the water supply network, the sanitary sewage system, rain water collection tanks as well as corresponding outfalls. (BAPE, 1997, p. 7 and p. 13) With a surface area of over a kilometer in length, half a kilometer in width and a production capacity of 370,000 tons of aluminum per year, the plant was built in Alma, 2.5 kilometers away from the Isle-Maligne plant it was replacing. The availability of power and water supplies, proximity to a railway, ease of road access and appropriate geotechnical conditions all supported the choice of location. Moreover, Alcan owned several plots of land in the area. Finally, Alma was chosen with the aim of promoting the closest town to the facility. It is easy to imagine the considerable impact of the project on a community such as Alma and on regional communities as well as the region’s ecosystem.

Under new regulations implemented by the government of Quebec, this was the first time an industrial project was subject to a process of public hearings. (Le Soleil, 1996, B1) This feature ensured comprehensive documentation and revealed many points of view (over 40 recorded statements, BAPE report, newspaper clippings). Moreover, it was possible to read verbatim reports of ten interviews with key participants and regional observers, including the project managers. Below is a presentation of what can be learned from this case about the partnership style of project management. However, before going forward, it should be noted that the transformation of the “philosophical-practical” relationship within Alcan project management was closely linked to the evolution, over 80 years, of the company’s relationships as a whole with stakeholders, including employees, governments and local communities in regions where the company is based. The aim of this article is to focus on project management without neglecting the impact of company values and organizational context.

3. A key trigger: failure at kemano in British Columbia

Aside from being a significant socioeconomic influence in Quebec, Alcan has also been involved in the development of northwest British Columbia where major rivers and fjords open year round were suitable for the creation of smelting plants. In exchange for creating jobs, particularly for the Aboriginal population, Alcan expected to be offered land at very low prices and exploitation rights for several rivers and basins. Aside from several protests, everything went well for 40 years. The expected results were on their way.

It was within this context that Alcan spent over \$500 million between 1987 and 1991 on a construction project for a new plant and linked facilities:

“Kemano I was one of the most expensive projects ever carried out in Canada: a dam, 16km of tunnels, an 896MW hydroelectric plant, an 80km power transmission line crossing the mountains, a smelting plant (272,000 tons per year), a town – Kitimat – a sea port on the Douglas Channel, roads towards Prince Rupert and Prince George, a railway. The current dollar value of the project would be over 3.5 billion for the hydroelectric facilities alone.” (Germain, 1996).

During construction of the project, several activist groups, including farmers, fishermen, aboriginal groups and all types of ecologists, went to war against the company, alleging that the project represented a threat to marine ecosystems. Over half of the tunnel that was going to link the new power plant (540 mW) to the Nechako reservoir had already been dug when a judge in the Federal Court finally suspended work to impose public consultations within the framework of an environmental study.⁵ After nine months of consultations, held between December 8, 1993 and August 10, 1994, and over 200,000 pages of statements, the government of British-Columbia decided to stop the project from going ahead. (Canadian Press, 1995, Le Devoir).

This failure truly shook the beliefs of Alcan’s management and the confidence of their investors in the ability of management teams to complete

⁵ It should be noted that Alcan always maintained that this project did not need an environmental impact study.

major projects (Banford, 1998). Several of the company’s senior managers confirmed that the Kemano failure was a real lesson. Jacques Bougie, President and CEO, mentioned the impact: Alcan would henceforth never initiate a major project without first obtaining consent from local people, approval from stakeholders, a “license to operate” and social acceptability for its projects. Not one single major project would be undertaken without prior public consultations and the tacit support of all parties concerned. It is within this context that the feasibility study was carried out for the Alma plant construction project.

4. Alma plant construction project

The project studied was part of the movement described in the previous section and illustrated by the following points:

- ❶ “The Kemano failure forced a turnaround in the way Alcan has always perceived its relationship with the communities in which it was involved. The company will now ensure that it builds plants only in areas where it will be welcome. And it is the inhabitants of Alma who will be the first to experience this new philosophy...” (Néron, 1997).
- ❷ “[...] In fact, Alcan wants to start building the biggest industrial site in the world within a context of general approval to reassure company shareholders put off by the Kemano experience” (Banford, 1998).

In 1996, Alcan filed a project notice with the Ministry for the Environment to build a smelting plant in Alma. The Minister asked Alcan to carry out an impact study, the contents of which were defined by the Ministry. Initially, the company was required to hold consultations with concerned organizations, groups and individuals. This suggestion was easily accepted by Alcan as it saw in the measure a way of achieving its own aim of creating a project that was socially, economically and environmentally acceptable (BAPE, evening of June 9, 1997, p. 11). Alcan would have gone ahead with the public hearings even if there had been no legal requirement to do so.

5. Alcan’s consultation process

The company organized 45 information and consultation meetings between October 1996 and March 1997. A total of 2,200 people, including

1,488 employees, 181 neighbors and 512 representatives from regional organizations, were consulted. In addition, 500 people requested information about the project from the consultation office. (BAPE, 1997, p. 17).

To stimulate community participation, the consultation went beyond standard impact studies to include all concerns raised by participants. The team included the Consultation Director, Project Team Director and Plant Director for the new plant as well as environmental and communication specialists. The involvement of project and plant directors demonstrated that the consultation was not a simple public relations exercise.

The aims of the consultation were defined as follows:

- ❸ “To establish a constructive and continuous dialogue with the local population from the moment the project notice was filed, and provide them with all available information so they can make an informed decision;
- ❹ To find out what concerns the community and employees have early on in the process, so as to be in a position to integrate these into the impact study;
- ❺ To work within the community to create a “better project” for both the company and the community.”⁶ (BAPE 1997, Final report, p. 7).

From the beginning, in order to ensure they were available, the consultation team opened a public office and set up a free telephone line. One of the first documents produced clearly stated that Alcan intended to design its project in harmony with the environment (SNC, 1997). In the same document, Alcan stated that it wanted all participants to express their opinion in a spirit of cooperation and dialogue (SNC, 1997).

This exercise identified several concerns that were grouped according to a few recurring themes, ranging from regional economic impacts to local industrial tourism or desired regional partnerships, etc. Improvements were made to the initial project to address these concerns, which were also included in the impact study and incorporated into innovative practices that will be illustrated further in this document. It should be noted that concerns closest to the project have been selected (e.g., the regional partnership extends beyond the plant construction project and includes the historical relationship between Alcan and the region).

⁶ This is in direct contrast to Alcan’s attitude in Kemano, where the company held only a few consultations with the aim of convincing stakeholders.

Local and Regional Socioeconomic Impacts

The most common concern among all regional participants and local inhabitants was to ensure that the project became a regional catalyst, which meant maximizing the socioeconomic impacts across the region.

In response to these expectations, Alcan estimated that regional construction expenses would probably be in the region of \$707m to \$786m, or 46.5% of the total project (*SNC, addenda, 1997, p. 22*). This rate was not only 10% higher than that achieved by previous building projects, it was much higher than the rate achieved by large-scale projects from other companies. To achieve these figures, a strategy was to be defined in partnership with local communities to maximize positive impacts. A summary of the strategy presented at the time is set out below:

- “Competitively priced local companies will be favored.
- Preliminary engineering will ensure contracts are divided up (split lots) to ensure regional businesses are able to submit bids more easily.⁷
- Regional engineering and architect companies will participate in the project.
- A list of potential regional companies and manufacturers will be drawn up.
- Pre-qualification questionnaires are already available at the information points to allow businesses to make Alcan aware of the fields in which they can work together.
- The developer will ensure that the type of goods and services needed during the project are released in advance.
- A list of companies authorized to do business with Alcan will be sent to all bidders invited to the tender process to facilitate regional subcontracting.
- An information clause relating to hiring a regional workforce will be included in the tender documents.
- The billing method will provide the ability to measure the regional and local impact of the project and will, therefore, ensure this is monitored.
- No bid deposits will be required when submitting bids. (BAPE, 1997: final report, pp. 23-24).

The socioeconomic impact maximization strategy also included training, the potential of which was vital: 280,000 hours were anticipated, equivalent to a total of approximately \$28 million. The following measures were defined in conjunc-

⁷ Alcan returned to this method of dividing up contracts while building their plant at Laterriere. This was an innovation that would subsequently be picked up by other large-scale projects in Quebec.

tion with training providers (*public and private*) and the training management team for the Alma plant project:

- Creating a single service to coordinate training.
- Transferring regional expertise.
- Integrating skill development to all project phases.
- Health and safety integrated into training.

A group of regional educational institutions was set up to coordinate training elements linked to the project, including training in safety regulations for the building site of the future smelting plant (*Alcan’s aims were clear: “no accidents”*), and training required to adapt potential workers to the company’s needs.

Environmental Impacts

Several regional organizations and individuals mentioned concerns about the impact the new plant and its construction would have on the risk of contamination to the water table as well as the subject of liquid (*sanitary wastewater, process water, rain water*) discharge into the neighboring river. Other groups questioned Alcan about atmospheric emissions of CO₂, SO₂ and SF₆, to ensure these would be minimized. From the start of the project, the company was committed to implementing all practical measures to prevent or reduce any form of pollution that could result from its activities. It was also looking to reduce its consumption of energy and natural resources. Finally, the company suggested implementing several mechanisms to monitor real-time environmental impacts.

“Rigorous environmental monitoring has been planned during construction to control dust, noise and waste, as has appropriate drainage surveillance. During plant operation, the plant site, atmospheric output, runoff water and residues will be monitored and classified. Environmental monitoring around the factory will focus on air quality, sound levels, and surface and underground water quality as well as fluoride levels in pastures; any required tests will be carried out at several sites. A weather station will record data and vegetation will be inspected.” (BAPE, 1997, June 9, p. 17).

In terms of irritants (*lighting, noise, visual impact, etc.*) Alcan was conciliatory. For example, the company was prepared to follow recommendations for night-time lighting made by the Illuminating Engineering Society in order to respect its neighbors. To decrease noise pollution linked

to plant operation, a 4-6 meter high embankment would be built to act as a sound barrier.

6. Public hearings and levels of social acceptability

Following the consultations, public hearings were held between June and August 1997. Fifteen sessions were held and forty statements recorded, a quarter of which came from ordinary individuals. Given the amount of work that had gone on previously, the public hearings did not reveal any surprises. This was noted by developer representatives at the start of the sessions.

“In fact, the consultation allowed us to identify peoples’ concerns and incorporate solutions to these concerns into the project. The impact study includes a detailed report on this subject. [...] each question asked was important to us.” (BAPE, 1997, June 9, pp. 11-18).

The public hearings were where the social contract between Alcan and the stakeholders was formed and where everyone was able to see the high level of social acceptability towards Alcan’s project. The following statements were taken from many similarly positive statements and are from these public hearings:

- We are aware of the efforts that were made by the developer to establish a privileged relationship with the local community and we approve of these efforts;
- We consider that Alcan has been completely transparent with all participants throughout this process;
- This attitude (editor’s note: transparency, cooperation and openness) is a solid guarantee that the mitigation actions and environmental monitoring program will be rigorously applied, and that the excellent cooperative links that currently exist between the developer and the local community will be maintained;
- Power consumption per ton of aluminum produced will be significantly reduced [...] which directly meets the aims of efficiency and effectiveness that support the concept of sustainable development that is being tested in the regional SLSJ experiment;
- A pilot-project of this scale can only be considered a practical model of partnership used to teach integrated resource management, and Alcan should be particularly proud;
- This way of doing things has never been seen in a private company before and this is a credit to the managers at Alcan;

- This is a beautiful project that, because of its quality, should serve as a future reference at an international level;
- We can see that the overall project seems to be achieving strong regional approval and has solutions that are environmentally, socially and economically acceptable, which respects the basic principles of so-called sustainable development;
- In truth, we have noticed significant interest in relation to respecting the working environment, localization and harmonious implementation of the complex in relation to the environment and neighboring areas;
- This project has the potential to structure the economic future of the SLSJ community while offering solid environmental guarantees;
- The developer has demonstrated their respect for directions taken by the local community and the whole SLSJ region in relation to the concept of sustainable development; (extracts from statements given to BAPE, 1997).

Reading the comments made by participants from all walks of life, it is impossible not to see that this new way of designing projects, integrating stakeholders’ economic, social and environmental concerns from the very beginning, allowed Alcan to obtain a level of social acceptability well above that which marked the end of the project management model used by Alcan in British Columbia.

This, however, was not the end of the challenge taken up by Alcan. To achieve both socioeconomic as well as environmental targets, constant communication with the local community needed to be maintained. The “stakepartner management” style needed to be supported by a set of multi-stakeholder governance mechanisms that would accompany the stakeholders before, during and after construction of the plant. While consultations and hearings had supported stakeholders before the project, the following committees would subsequently be the preferred method of coordination.

7. Communicating with the local community during and after construction: follow-up committees

The developer believed that the partnership with the local community should not only continue for the duration of construction, but also afterward,

during plant operation. Initial consultations set the tone and the following committees were set up or maintained by the project team to ensure constant communication with the local community and effective monitoring of work and anticipated impacts.

1. Regional Economic Impact Maximization Committee

In line with most of the concerns mentioned by participants from the local community, the Regional Economic Impact Maximization Committee, coordinated by the Regional Council for Dialogue and Development, was created in November 1997. A partner in the process, the committee’s mandate was to monitor the Alcan smelting plant project in Alma and contribute to the maximization of local and regional economic impacts without hindering completion of the construction program within anticipated times and costs. Its aims were divided into four key areas:

- 1. “Support economic impact maximization efforts by:
 - ➊ enabling communication between partners, particularly by distributing and exchanging information;
 - ➋ enabling and encouraging businesses to participate in the preparation and training process;
 - ➌ examining maximization opportunities.
- 2. Monitor economic impact maximization efforts at a local and regional scale by verifying results, using data supplied by the developer;
- 3. Gather, evaluate and respond to key concerns raised by the local community that relate to the project and specifically, to the maximization of economic impacts;
- 4. Formulate recommendations for the relevant participants and refer any project monitoring question that exceeds the committee’s mandate to the CRCD Board of Directors (Gagnon et al., 2002, p. 43).

The committee included the Mayor of Alma, the Director of the Alma Town and Socioeconomic Planning Department, Alcan representatives, including the Community Relations Manager for the Alma Plant Project, two representatives of the Regional Association of Industrial Commissioners (ARCI) and, finally, a representative from the Ministry of Industry, Trade and Technology for the Government of Quebec.⁸ In fact, the whole local community would be involved (*Idem*).

8 Two members of the Alma smelting plant social impact monitoring modeling team from the University of Quebec at Chicoutimi also sat on the committee as observers.

2. Environmental Development and Monitoring Committee (CASE)

In 1998, the Alma town council created the Environmental Development and Monitoring Committee. This was as a follow-up to the undertaking announced by the council at the final Public Hearing (*August 6*).

“The aims of the committee, as set out in the council resolution, were to:

- ➊ a) Participate in planning the development of the site (land surrounding the Alma plant);
- ➋ Contribute to minimizing the negative impact of construction work;
- ➌ Receive information relating to environmental monitoring from the Alma plant;
- ➍ Share these results with relevant audiences;
- ➎ Suggest, where necessary, any relevant measures to limit the impact.

Aims specific to the construction phase were to:

- ➊ Participate in planning and implementing landscaping work in the area surrounding the Alma plant;
- ➋ Share information relevant to construction impact monitoring (nuisances and inconveniences in relation to the content of the impact study and authorization certificate);
- ➌ Enable communication with site neighbors.” (Gagnon et al., 2002, pp. 36-37).

The Committee included 12 people:⁹ two developer representatives, two town councilors, the Director of the Alma Town and Socioeconomic Planning Department, a representative from the Improvement Committee, two inhabitants, a farming representative, a representative from the recreational tourism industry, a manager from the Lac Saint-Jean Priority Intervention Zone (ZIP) and, finally, a member from the Regional Environmental Council (*Idem*, pp.36-38). This group of community representatives would also be a project partner.

3. Regional Research and Intervention Group University of Quebec at Chicoutimi¹⁰

In the autumn of 1997, the team from the Regional Research and Intervention Group from the University of Quebec at Chicoutimi was given the task of creating a model to monitor the social

9 Two members of the Alma smelting plant social impact monitoring modeling team from the University of Quebec at Chicoutimi also sat on the committee as observers.

10 Information relating to this group was taken from its internet site, the complete final report and some meetings with key researchers.

impact of the Alma smelting plant. This involved responding to various questions such as:

- ➊ What are the impacts, both positive and negative, on individuals and local and regional communities?
- ➋ What are the social impacts (and challenges) in real time and in the field, in comparison with those identified previously during the environmental procedure:
 - ➌ Short term: during construction;
 - ➍ Long term: during plant operation.

Research took place within the framework of broader environmental management in the context of feasible (*sustainable*) local and regional development. Monitoring was based on several indicators (*60*), grouped into seven generic variables. The selection of this research group to complete the task was a direct response to requests expressed during the public hearings. Funded by Alcan, among others, the research group brought together twenty professors, Master’s and PhD students, and met one of the concerns shared by all regional community representatives, that of rigorous and impartial monitoring of impacts linked to the project.

8. Discussion and conclusion

The Alcan case study has provided a glimpse into the paradigm shift in project management that occurred during the course of the 1990s. The move from a “contract and public relations” model to a “partnership with stakeholders” model was recognizable during this decade. The “contract and public relations” paradigms coexisted during the Kemano episode in British Columbia. Alcan’s parent company obtained approval from some secondary stakeholders, including national and regional politicians. Information was then transmitted to the general population in a unidirectional manner with no feedback process to adjust the project to the expectations of the various social participants, each with their own opinion on what should or should not be done. This was instructional and strategic management of stakeholders, using communication to influence public opinion of the project’s social acceptability. The standards established fell outside the project managers’ control and management parameters. These managers were given a mandate in which cost-time-scope were the only variables that could be considered. While managers could have reacted well before Alcan sunk 500 million CDA into

the project, they were unable to do so, blinded as they were by their management paradigm.

This episode caused the infamous Kemano plant construction project failure and challenged the project management model used by Alcan. From that point, only a partnership-based project management model would be used. This model allowed a complex system to be built to support the three phases of the plant construction project in Alma, from design to implementation to completion, and then on through the long term. The project managers’ mandate was expanded and required them to have a constant dialogue and conversation with the stakeholders, who became partners in the adventure. The aim was no longer limited to achieving developer and funder satisfaction, but also included the satisfaction of various stakeholders who wanted to participate in a win-win relationship based on trust. Within this context, managers had to recognize higher level stakeholders while expanding the scope of the arena in which the project compromise was negotiated. Flexibility surrounding the organizations involved was increased considerably and general governance procedures supported the process (*e.g. multiple multi-stakeholder committees*). Moreover, this contributed to the fact that the project was completed within the time limits and planned budget, and that it exceeded the many targets set by regional partners.

The role of project managers was significantly modified. As technical experts, they had to mobilize and lead all the stakeholders involved in the project towards an acceptable compromise. They also had to lead participation in the multi-stakeholder governance system set up before, during and after construction of the plant. Their role was to participate as a group member, without letting the group move in directions that were incompatible with other stakeholder positions. In these circumstances, it is clear that the project managers were able to adapt to the new configuration of their role. However, and this will be discussed further below, preparation to meet this challenge was rapid.

The case being discussed provided a glimpse of a radical change in project management philosophy and practices over a very short period of time. The Kemano failure occurred in 1994 and the Alma project, with Alcan’s new, partnership-based project management methods, was announced in 1996. Between these two events, the company had little time to change both structures and procedures linked to project management, and its internal culture in particular. In fact, although at the time of the Kemano incident the



authors



✉ **François Labelle** (Université du Québec à Trois-Rivières), Ph.D Professor of Strategic Management. Director of the Laboratory for Research on Sustainable Development in context SME and intelligence center and popular science at Vigie-PME (www.vigiepme.org).



✉ **Christophe Leyrie** (Université du Québec à Chicoutimi). Professor of project Management and member of the Multidisciplinary studies laboratory in project management (LemGP - UQAC).

The case being discussed provided a glimpse of a radical change in project management philosophy and practices over a very short period of time.

company was adopting a mixed “contract and public relations” perspective, it was really a “top-down” approach that was dominating: the company launched the project, provided minimal information, imposed itself and believed that its legal rights conferred legitimacy. An inherited paternalistic attitude and culture were still dominant. At Alma, the situation was completely turned around. Managers went from a “paternalistic” method to a “partnership” model. How can such a rapid and successful cultural change be explained? Did the company implement training, codes of conduct, or employ new managers who favored a cultural change? Was the scale of failure at Kemano the most decisive variable in the change? These are questions that would benefit from

further research. However, these questions also highlight the limitations of this research.

One of the key limitations is time-related. This case study describes events that happened over 10 years ago. Since then, several events have occurred, such as important changes to the legal ownership of the company, strikes and “lockouts” that have affected working relationships and weakened the trust established between partners, closures and relocation of some plants, which have shaken local partners, etc. Is the project management model described in this article still used at Alcan? Or was it only a temporary model, rejected by the company due to the operational complexity that it involved? These are some of the questions that remain unanswered and that should be addressed by new research into the subject.



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