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IT PROJECT FAILURE AND VENDOR RELATED RISKS: IS OUTSOURCING A SOLUTION OR A PROBLEM?

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Abstract

*Many organizations consider outsourcing their information system development as an attractive project risk mitigating approach. In such an engagement, the vendor may agree to complete a project for a fixed cost and according to a defined time schedule. Nevertheless, while the vendor is liable for the traditional **project risks**, other forms of risks may arise, that are the **vendor risks**. This paper presents a recent case study of a project failure, which demonstrates some of the major vendor risks and their contribution to system development failure. The risks discussed in the paper are (a) Adversarial relationships and loss of trust between the vendor and the client; (b) Vendor de-escalation of commitment; and (c) Difficulty in breaking the contractual engagement. The case shows that outsourcing may only transform the nature of the project risks but not eliminate them. In conclusion, a more vendor-client partnership and risk-sharing approach is suggested.*

Introduction

Although there have been many advances in methodologies and tools, system development projects are still risky, and recent reports show that they frequently fail (Standish Group, 1999). Many organizations consider outsourcing their IT development projects as an attractive risk mitigating approach. In such outsourcing, the vendor may agree to complete a project for a fixed cost and according to a defined time schedule. In addition, the vendor may also be legally liable for the involved risks – bear excess costs, pay compensation for late system delivery – and all this, while ensuring that the system will meet the agreed upon success (acceptance) criteria. Indeed, it looks to be an almost risk-free undertaking for the client. Nevertheless, while in such engagement the vendor is liable for the traditional **project risks**, other forms of risks may arise, that are the **vendor risks**.

Extensive research has been recently conducted on IT project risks (e.g Keil et al., 1998; Cule et al., 2000; Ropponen and Lyytinen, 2000; Schmidt et al, 2001). Within this field, a widely accepted research method is the analysis of project failure cases (Oz 1994a; Oz 1994b; Glass 1998; Montealegre and Keil, 2000). However, little attention has been given so far, to vendor risks and their impact on the project success. This paper presents a recent case of a project failure, which demonstrates some major vendor risks, their causes and effects on system development failure. The risks discussed in this paper are (a) Adversarial relationships and loss of trust between the vendor and the client; (b) Vendor de-escalation of commitment; and (c) Difficulty in breaking the contractual engagement. Although the work is still in process, the paper concludes with some preliminary lessons.

Bezeq Billing System - Background

The project that is presented here is the development of a billing system for Bezeq, a \$2 billion revenue telecommunications company, which took place in the years 1997-1999. The project vendor was the international software company AMS. Data for the case was collected from the Israeli GAO report¹ and from a court judgment,² both of which are external, objective and

¹State of Israel, the state comptroller, Audit Report on Corporations, May 23, 2001.

²AMS Technical Systems Inc. v. Bezeq Israeli Communication Company, Civil File 1371/99 Jerusalem.

accessible as public domain records. It is not the concern of this paper to identify who is to blame in the project failure but rather to learn about the risks that may be posed on the organization, when a vendor undertakes the development of a project.

After a long process of closed bidding and vendor selection, AMS signed a \$55M fixed price contract with Bezeq, in September 1997, for the delivery of new billing system. The project was based on the customization of an existing system of another AMS client.

This system was regarded to be very strategic for Bezeq, as after many years of monopoly, deregulation in the Telecom market was expected to bring it in direct confrontation with new competitors. The overall budget for the project, including the cost of complementary systems by a third party, and integration efforts that were to be conducted by Bezeq IT staff, was about \$100M. The system was scheduled for delivery in two Core Releases (CRs): CR1 – after two years (September 1999) and CR2, bigger and more complicated in scope, six months later (March 2000).

Unfortunately, the actual outcome was different. In the month of August 1999, Bezeq canceled the contract with AMS, claiming breach of contract. The project terminated while not even a single line of code of the first Core Release (CR1) had yet been delivered. As for CR2, – it had not even reached the design approval stage.

Approximately a year later, in September 2000, Bezeq recovered all payments made to AMS, in an out-of-court settlement. This amounted to \$21.8M, with an additional compensation of \$1.7M. Bezeq losses however, after the settlement, were estimated by the Israeli GAO to be about \$5M. AMS losses from the case were not disclosed.

What led to the failure of this project? In the rest of this paper, we shall raise some of these issues that can all be categorized as **vendor risks**.

Adversarial Relationships Between Parties

In IT development projects that frequently require the cooperation of strangers in tough, high stress situations, there is a great need for trust between the parties. Such trust is more difficult to develop in an outsourcing project than in an internal IS development project. This is due to (a) the participants' lack of both prior relationship and long term relationship beyond the current project, and (b) the engagement's legal contracts defining deliverables, penalty clauses and reporting arrangements (Subherwal, 1999). In addition, a fixed price scheme may result in more adversarial relationships between vendor and client than cost plus (Bajari and Tadelis, 2001).

While disagreements between vendor and client are normal, it can become dangerous when the engagement falls into a "vicious cycle" (Subherwal, 1999). In such a cycle, lack of trust leads to a conflict that yields poor performance which in turn damages the trust even more and causes more conflicts, and so on (even though the specific conflict may somehow be resolved). At a certain point, trust has reached such a low level, that any new conflict, even over a minor issue, may "blow" the entire project (the "straw that broke the camel's back" syndrome).

If we study the chronological developments of the AMS-Bezeq project closely, the process of the trust erosion from one crisis to the next can easily be seen. The first major dispute between AMS and Bezeq broke out at the outset, in the first days of the project, regarding the work procedure and the project methodology. At this early stage, the two sides were full of goodwill to resolve the dispute and indeed in December 1997, Bezeq finally approved the project plan. AMS started development with the general design, in expectation of finishing it in April 1998.

However, in February, due to the political situation in the Middle East and the Persian Gulf area, most of the AMS project personnel, including the Project Manager, left the site for a month. This incident caused the client increased annoyance.

A new dispute arose in March 1998 when AMS submitted the general design document. In the context of the project, this document included the customization needed to meet Bezeq requirements. During the review, Bezeq rejected the document and claimed that many of the original requirements were not included. The company charged that due to the fixed price nature of the project, AMS sought to reduce the scope of changes. On the other hand, the fact that Bezeq was not familiar with the baseline system, detracted from their ability to evaluate the completeness of the design. To resolve the dispute, the parties agreed to conduct a "gap-analysis" phase that would repeat the general design phase, but in a more cooperative framework. Bezeq agreed

to waive the fixed price format of the engagement, and to pay an additional \$2.5M for this extra effort. Bezeq also agreed to the AMS request to postpone the project's milestones by 8 months.

The next dispute to occur, concerned the scope of CR1. In October 1998, AMS claimed that as a result of the gap analysis, it would require an additional 1000 workdays in order to complete CR1, due to extended Bezeq requests. Bezeq rejected this, claiming that the problem was with the original baseline software that lacked functionality that AMS had claimed to have existed. Again, this dispute was resolved by Bezeq agreeing to reduce the scope of its requirements (equivalent to 900 days). In December 1998, the CR1 design was approved and transferred to development in the AMS headquarters

Soon after, however, in January 1999, the final unresolved crisis arose. As the CR2 design phase progressed, the scope of customization needed, and the real cost of the project for AMS became evident. AMS, in an attempt to manage the increased scope, proposed a new approach for CR2. They recommended using a third party's software package. This proposal was duly rejected by Bezeq, which feared entering into an unknown adventure. The series of previous disputes had already seriously damaged the trust between the parties. Hence, the current dispute that was not significantly more serious than the previous ones left an unbridgeable gap between the parties.

It is interesting to note, that during the long history of disputes, and especially the final one, the possibility of arbitration was not exploited, although this dispute resolution mechanism was clearly prescribed by the contract. Instead, it became evident at this point, that the only option left was project termination. This can be corroborated by Bezeq's statement in court, which claimed it was impossible to continue the engagement since it had lost its trust in AMS.

Vendor De-escalation of Commitment

It is well known, that an IT project cannot succeed without full commitment by management. Recent studies have focused on the **user's** management commitment, including decisions of escalation and de-escalation of such commitments (Keil et al., 1995; Keil and Robey, 1999; *Montealegre and Keil, 2000*). Less attention has been given in researching the **vendor's** commitment to the project. This commitment seems to have been taken for granted, possibly due to the contract that legally enforces the commitment, or maybe due to potential damage to the vendor's name that de-escalation of commitment may cause. The Bezeq-AMS case shows that this does not always hold true. Generally, the vendor's commitment may not be an issue if the project is profitable for the vendor. It does, however, become an issue when an adverse financial outcome may result from the project.

There is ample evidence that hard competition and a poor economy pressures software vendors to accept fixed price projects with probable losses (Gilbert and Ricadela, 2001). In many cases, losses may be economically justified if the project has strategic value. Typical cases of such strategic gain include:

- The project is in a new area and if successful, it will bring in more projects in that line of business.
- The code that is being developed can be reused in other projects.
- The project is highly visible in the market, considered to be prestigious, and will reflect well on the vendor's ability to sell himself to other prospective clients.

At the beginning of January 1999, soon after the final crisis, Bezeq found out from meetings with AMS officials, that AMS intended to withdraw from its commitment to the project due to expected heavy losses. However, when Bezeq's CIO broached the subject, AMS management denied this, and reassured that they were strongly committed.

Nevertheless, in May 1999, after a series of contacts at the top managerial level, the AMS chairman admitted in a letter to Bezeq's CEO, that AMS in fact could not continue with the project, unless a change would be made to the pricing scheme, or alternatively, that there would be a substantial change to the project scope. He claimed that the Bezeq requirements were damaging and unrealistic, and clearly beyond the cost of the system described in the original contract.

This vendor de-escalation of commitment may be attributed to the project itself: The increasing project scope, as discovered during the design process, resulted in expected losses in the fixed price contract. However, this in itself was probably not the sole cause for the de-escalation. Although there was an expected loss, had billing systems been a strategic long-term market area for AMS, then it is very likely, that its commitments may not have been de-escalated. Unfortunately, a few months earlier, AMS had probably changed its strategy so that the Bezeq project was no longer considered strategic. In October 1998 in an interview with AMS' new CIO this strategic shift was described: "The key to AMS' turnaround was diversifying away from large, risky telecom

contracts. AMS works in eight vertical markets: telecom, federal government, environment, insurance, utilities, health care, state and local government, and financial services. The latter two areas have been the engines for AMS' recent success" (Mullich, 1998).

Evidently, it was a combination of reasons, – both the expected losses in the project, and the loss of strategic importance of the telecom market, – that led AMS to de-escalate its commitment to the project. As with the client commitment, the project was doomed to failure when the vendor commitment had been lost.

Breaking the Chains

The phenomenon of management continuing to fund troubled projects – “throwing good money away on a bad project”, – is well documented. A few explanations are given for this. First, it is management's common tendency to attempt to salvage the time and money already sunk into the project, by further investment (Keil et al., 1995). In addition, studies found that management may not even be aware of the project's bad state, because the project leaders deliberately delay their reports (Oz 1994a) and because of the so called “mum effect”(Smith et al., 2001). Nevertheless, in an outsourced project, another explanation exists for failing to terminate a troubled project in time: The contractual obligation chains both parties to each other. In the absence of agreement, the only way to terminate a project while preserving the right to sue for damages, may be as a result of a breach of contract by the other party. Attempts by one party to free himself from the binding contractual shackles, may immediately result in him losing points in the expected legal battlefield.

By May 1999, it was evident that any resolution was beyond reach, and that the project was going nowhere. The parties at the highest level stood firm in their positions: AMS would de-escalate commitments unless the project was restructured with a more limited scope and solution type, vs. Bezeq that refused changes to the original scope and requirements.

Nevertheless, the project kept moving on, and none of the parties abandoned it. The project teams kept to their useless work schedule according to the project plan, including the mutual design meetings between the parties. Although there was disagreement on the project direction, no actual breach of contract occurred at that moment. Each of the parties had to continue with the project, be careful not to breach the contract, and wait for the other party to do so.

The opportunity arrived at the end of June 1999, when the CR2 design document failed to be submitted. On July 14, 1999, Bezeq sent a notice of breach of contract to AMS, demanding, – as required by contract, – to rectify the situation within 30 days. To the disappointment of Bezeq, AMS submitted the required document on August 12. At the end of August, Bezeq sent a letter of cancellation, claiming that the “... design document does not comply with the contract requirements”.

The bottom line is, that for a period of four months, from the point where the project failure became evident, up to the project termination, both parties continued to deliberately commit resources to the hopeless project. Unfortunately, due to legal considerations, the parties were trapped in a situation in which wasting time, effort and costs was inevitable.

Conclusion

As increasing number of companies outsource their projects in an attempt to transfer the risks to the vendor, here is a word of caution: Although the vendor may accept the full risk involved in the project, the engagement with the vendor, in itself, opens the door to new risks. In essence, the outsourcing may only **transform the nature of the risks** the client needs to face, but it **may not actually eliminate them**.

In addition, it is not realistic to expect that a legal contract, as specific and detailed as it can possibly be, will fully protect the client from the vendor risks. Furthermore, the contract itself may be a problem. For example, it inhibits development of trust between parties and makes it difficult for the client to cut losses and cancel a project unilaterally.

This paper reports on a work in progress. More field research is needed to understand the vendor risks involved in information system projects. Note also, that the case presented by this paper demonstrated only some of the vendor's basic risks. It is, therefore, too early to prescribe mitigation strategies for these risks. Recently, however, interest has increased in a partnership approach for information system projects (Ralphs, 1999). Partnership quality (in terms of participation, communication and

information sharing) has been identified as a key predictor of outsourcing success (Lee and Kim, 1999). Perhaps, since placing all risks on the vendor is impractical, clients and vendors need to learn how to handle risk sharing as part of their partnership.

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