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# ERP Implementation Gone Terribly Wrong: The Case of Natural Springs

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Abstract:

A Russian start-up company successfully introduced bottled still water to the Russian market and, despite the rapid growth of competition, three years later remained the market leader. The firm's CFO convinces the CEO of the need for an Enterprise Resource Planning (ERP) system. He justifies the ERP as the means to enhance financial and administrative controls, to prepare for an IPO, and, among other reasons, to create efficiencies by better linking the St. Petersburg headquarters with their bottling facility located 100 miles to the north. The implementation fails, primarily due to widespread resistance within the factory as well as from the firm's COO. The Case provides students with a rich look at implementation and counter-implementation of information systems as well as the high-level politics that can often seemingly mysteriously impact systems implementation. Further interest and opportunities for discussion are added via the Russian context and the transition to free markets, as well as the technical and operational work-arounds often required to deal with the inadequate public infrastructure often found in less developed parts of the world or, as in this case, in sections of a particular country.

**Keywords:** teaching case, ERP, implementation, failure, socio-technical, resistance, politics

**Editor's Note:** A teaching note for this case can be obtained from *vlad.krotov@adu.ac.ae*. Only active MIS faculty who are currently listed in the AIS Faculty Directory are eligible to receive the teaching note.

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## I. NATURAL SPRINGS COMPANY[1]

### The Early Years

In 1992 a successful British entrepreneur ("the CEO") celebrated the sale of his company by treating himself and his family to an extended tour of Europe. One stop was St. Petersburg, Russia; there the CEO boarded ship for a leisurely cruise along the Neva River. While the cruise was enjoyable, the boat's tap water was not—it had a most unpleasant taste. To his dismay and surprise, the CEO discovered that bottled still water was unheard of in Russia. The CEO and his family, like most of the other tourists on board, had to settle for the sparkling mineral water available from the ship's bar.

Later that day, the ship stopped in Kivgoda, a small town approximately 100 miles North-East of St. Petersburg. There, while touring an architecturally notable seventeenth century building, the CEO mentioned his "drinking problem" to the estate's owner ("the Landlord"). The Landlord told the CEO that he owned land nearby that was the source of several natural springs that were highly prized sources of drinking water. The CEO said he would like to try this water and perhaps even bring some back to the boat for the trip back to St. Petersburg. The Landlord was happy to oblige. Moments after the first few sips, the idea of bottling and selling the water jumped into the CEO's mind. He proposed a joint venture to the Landlord.

The company the CEO envisioned, and convincingly described to the Landlord, would introduce to the emerging Russian free market a new product: bottled still water. While the Landlord was easily convinced, the plan to sell what had always been free encountered considerable skepticism and even derision. While hundreds of carbonated mineral water brands existed in the former USSR, bottled still water was unheard of. "Why," people asked, "would anyone pay for something without value adding ingredients such as carbonation, minerals, syrups, etc.?"

Nevertheless, factory construction began the following year. Most of 1993 and 1994 were spent putting up the factory, installing equipment, designing bottles, designing a distribution strategy and marketing campaign, and so on. The CEO and his newly hired Chief Operations Officer (COO) oversaw the work. The initial products were 1.5 liter and 0.5 liter bottles. Sales in that first year, 1994, were less than a million U.S. dollars and disappointing. A Chief Marketing Officer (CMO) and a Chief Financial Officer (CFO) were added to the executive team, helping to fuel sales growth in 1995 to several million U.S. dollars. By 1996 sales had exploded as the product category was now well accepted, at least in the major metropolitan areas. Natural Springs bottles were sitting on the conference tables in the Kremlin, distributed on Aeroflot flights, and supplied to a number of upscale hotels in Moscow and St. Petersburg. 1997 promised to be another high growth year. Natural Springs began to extend their product line and leverage their brand and distribution channels. Among the first additions were carbonated water and bottles of additional sizes.

Leveraging that success, the company went through a successful round of private equity financing, attracting the attention of two international investment funds. Management was now eying an initial public offering (IPO) in London. No one was laughing at the business potential of bottled water now. While dozens of competitors had now sprung up, Natural Springs remained the undisputed market leader. The future looked very bright.

### Succession Plans

By 1996, the CEO of Natural Springs had grown bored with hands-on management. He was more interested in formulating new strategies, developing new products, and working the financial markets. At the end of 1996, the CEO announced his intention to soon resign as CEO and to assume the new title of Chairman. In that role he intended to play an advisor-like role.

The COO saw himself as the obvious heir to the throne. The COO was born in Brazil to a Russian émigré family fleeing the Russian Revolution of 1917. Eventually he made his way to Canada, where he worked in a variety of engineering and managerial capacities. Shortly after the collapse of the Soviet Union, the COO, who spoke fluent Russian, relocated to Russia where he eventually joined the Natural Springs start-up and was charged with building

[1] The name of the company, geographical names, as well as certain facts have been altered in order to hide identity of people involved in the case.

and operating the factory. Because of his traditional upbringing, the COO enjoyed undisputed power and respect among the parochial factory workers in Krivogda. His successful tenure with the company had also earned him the unconditional trust of the CEO. Moreover, as a devout Orthodox Christian (common among émigrés but rare among Russians born under communism), he was on good terms with the Landlord, another devout Orthodox Christian.

The CFO was the second legitimate contender. A Russian national, he spoke fluent English and held an MBA from an American university. His previous experience involved several years in the CFO role of a regional office of a prominent American consumer goods company. He was credited with building Natural Spring's financial and administrative controls—controls that were essential for attracting venture capital and building the foundation for an IPO.

The CMO was the third contender for the CEO position. He was young, British, and graduated with a degree in Marketing and Russian from a top school in the UK. He was a rising star; under his watch and via his marketing programs Natural Springs had enjoyed spectacular sales growth. Moreover, as a UK national, fluent in both English and Russian, he enjoyed the confidence of British investors.

### Teething Pains

Despite its early success, Natural Springs faced significant challenges, though they were similar to those of other firms operating in the emerging free markets of the former Soviet Union. The Russian banking system was slow and unreliable. Telecommunications, while tolerable in St. Petersburg, were unavailable, unacceptably slow, or unreliable in provincial cities, including Krivogda. The postal system was generally agreed to be all but useless for business purposes such as mailing invoices. Further problems involved poor road infrastructure, crime (organized and otherwise), a repressive and confiscatory tax regime, and widespread corruption.

Furthermore, as a company experiencing rapid growth, Natural Springs needed to hire more employees, but qualified people were hard to find. The company wanted employees unencumbered by the deeply ingrained Soviet ways of management. Usually, this meant hiring young people without much experience and training them "on the job."

Internal controls, something that the CEO viewed as being essential for Natural Springs success in the chaos of the emerging market, still lagged behind sales growth. With still more growth predicted, and greater competition, rapidly emerging controls had to be further strengthened if costs were to be kept in line. In the beginning of 1995, the CEO asked the CFO to move to Krivogda to strengthen the controls at the factory. While the CFO actively resisted the move away from St. Petersburg, the COO, who was located in Krovogda, viewed the CFO's move to the factory town as a turf invasion.

## II. THE ERP PROJECT

Near the end of 1995, and after a few months at the factory, the CFO pitched to the CEO the idea of implementing an Enterprise Resource Planning (ERP) system.

### The Business Case

The CFO felt an ERP system would help the company in several areas and laid out the justifications for the CEO as summarized in Table 1.

The CEO of Natural Springs was convinced and approved the project in early 1996. The CFO was charged with responsibility for selecting and implementing the system.

### System Selection

The company selected a British ERP system—Sun Systems (marketed by the Systems Union). The system was popular in Britain and the Commonwealth Nations and was gaining popularity in Russia.

Before joining Natural Springs, the CFO had worked for a Russian subsidiary of a prominent American consumer goods company. The subsidiary reported to the European headquarters in London. When the CFO joined the subsidiary, he was directed to implement Sun Systems, which the company had already implemented in other Eastern European subsidiaries. The system worked fine for such applications as inventory and sales management, International Accounting Standards based financial accounting, Western standard human resources management, etc. But, he had initially found the system to be poorly suited for Russian Accounting Standards, Russian human resource management requirements, etc. His previous employer brushed the CFO's concerns aside. In time, the

**Table 1: Justifications for ERP**

1. Both the head office in St. Petersburg and the factory in Krivogda keep manual records of business transactions. This leads to errors and delays. The company desperately needs an electronic system for recording and processing business transactions.

2. An ERP system will streamline communication between the head office in St. Petersburg and the factory in Krivogda, improving the customer order fulfillment process. As a reminder, here is how the process currently works:

- The factory receives orders from the St. Petersburg salespeople by phone
- After contracting local truckers, the factory telephones the shipping information to the St. Petersburg office
- The St. Petersburg office then prints invoices. Since neither email nor faxes from St. Petersburg can reliably reach the factory, St. Petersburg dispatches a courier with printed invoices who meet the trucks at a prearranged location. The courier then rides with the truckers and delivers invoices directly to customers. It is too risky to hand invoices to truckers since the documents can be intercepted by either organized crime groups or local tax authorities who would use them to extort money from the company. The postal system is too unreliable to mail them. Faxing or emailing invoices to customers is insufficient since they must have original hardcopies for statutory reasons

As we know, this process is riddled with inefficiencies and fraught with the potential for, and the reality of, errors. Frequent reconciliations of shipments and invoices are the norm. An ERP system can help us automate and streamline exchange of information related to customer order fulfillment process.

3. An ERP system will help Natural Springs strengthen its internal controls. The St. Petersburg office finds it difficult to exercise financial and inventory controls. Although major purchasing and accounts payable activities are done out of St. Petersburg, the factory needs cash for local purchases, payroll, etc. In the factory, unbudgeted funds are often disbursed without consulting with the CFO. The St. Petersburg office needs real time access to factory accounting data if we are to tighten controls over budgets. Further, real time access to factory data can provide St. Petersburg with up-to-date inventory information, which is very useful for sales and labor forecasting, purchasing, and cash flow planning.

4. Our plans for an IPO require the ability to produce financial reports fast as well as demonstrating the adequacy of our internal controls. The ERP is an essential element of the IPO strategy.

5. A successful implementation of the ERP at the factory can open the way for an eventual transfer of most of our back office functions to Krivogda, thus, lowering our administrative overhead.

CFO developed significant expertise and increased his confidence in the system. His conversion from resistor to champion had been facilitated when the local partner of the Systems Union developed makeshift ways of producing Russian accounting statements using the Sun Systems output.

Thus, when he arrived at Natural Springs and needed an ERP, Sun Systems seemed the easy choice. No other ERP system was seriously considered.

## Implementation at the St. Petersburg Office

The initial implementation in 1996 was limited to the St. Petersburg office and included only the sales and financial accounting modules. Before the implementation, the CFO recruited an experienced accounts receivable clerk from his former employer as well as a bright young systems consultant who previously had worked for the Russian partner of the Systems Union. The duo proved invaluable in solving the technical problems related to the system implementation. All users of the new system in St. Petersburg reported to the CFO who had personally hired and trained them. They were predominantly young with little previous experience. The St. Petersburg implementation went relatively smoothly and encountered little resistance.

## Factory ERP Implementation

While everybody agreed that a factory system was necessary, there were two areas of concern: the network connection between the two offices and system selection for the factory.

### System Connection

The ideal solution to the connection problem was to install a high speed Internet connection at the factory and link it to a wide area network (WAN) within the factory. Another possibility was to acquire a private line between St. Petersburg and the factory and implement an intranet over it. Many other possibilities were discussed, but the telecommunications infrastructure in and to the factory town was so poor that a real-time WAN proved infeasible. Thus, the initial plan of having a centralized ERP system accessed in real-time from both the headquarters in St. Petersburg and the factory town in Krivogda was abandoned. The company had to settle for two systems—one run on a server in St. Petersburg, another on a server at the factory. These systems would be synchronized daily using elaborate algorithms and batch transmissions at the close of business each day.

### System Selection

The other problem area was the choice of the system for the factory. The CFO naturally wanted to implement the Sun Systems ERP. He demonstrated the system to the factory bookkeeping staff. Having spent literally decades working with Soviet and then similar Russian accounting standards and often lacking basic IT literacy, the factory bookkeeping staff did not want to learn the system. Instead, they wanted to purchase a Russian ERP package called "1C" with locally available support. This package was tailored to produce statutory accounts. It also had human resources, inventory, manufacturing, and other modules conforming to the all too numerous Russian regulations. This package was poorly suited for producing IAS or GAAP accounts, but this was of no concern to the factory staff—IAS and GAAP accounts were produced in St. Petersburg by the CFO. The COO supported his staff and opposed the package favored by the CFO.

The CEO, loath to arbitrate between the COO and CFO, compromised. The factory had to implement the Sun Systems. However, the CEO allowed the COO to purchase the Russian ERP system to meet Russian statutory needs. The factory would run parallel systems.

### Preparing for the Implementation

Since the existing factory staff claimed to be too busy to run both systems, an additional clerk was hired to run the Sun Systems at the factory. The factory IT manager was trained to support the Sun Systems and shown how to carry out the synchronization data transmission and procedures.

To begin to quickly capture some of the promised benefits of the ERP, the executive team decided to speed up the transfer of the back office functions to the factory. The invoicing responsibility would be transferred immediately. Henceforth, invoices would be issued at the factory and distributed to the truckers in sealed envelopes. The St. Petersburg office still retained the accounts receivable responsibility. From then on, it would get invoice information from the factory via the daily batched synchronization transmissions.

### The Factory Implementation Begins and Bogs Down

At the start of the factory implementation, CFO spent almost all of his time at the factory. Everything went smoothly. The local IT manager fulfilled his responsibilities quite well. The factory Sun Systems clerk was a bright and hard working individual who quickly demonstrated a good grasp of the system. Two weeks after the factory implementation started, the CFO went on a previously scheduled two-week family vacation to California. With high international telephone charges and no Internet connection, he was essentially unreachable.

The CFO returned to find the St. Petersburg office in disarray. The accounts receivable system was a disaster. The factory had failed to follow the data transfer protocol. A variety of technical reasons were given, but the bottom line was that St. Petersburg did not have invoice information and, therefore, could not verify the accounts receivable. Moreover, with no invoice information, sales reps could not provide order status updates to inquiring clients: they did not know when the order was shipped (if at all) and could not estimate delivery time. The CMO and sales reps were now under pressure from customers and had to scramble to prevent several of the company's major clients from deserting Natural Springs. The CFO tried a number of ways to resolve the situation, including a visit to the factory. The factory visit produced little results. The factory staff (including the factory IT manager and Sun Systems clerk) did little to help resolve the problem. They cited such reasons as technical and functional inadequacy of the system, lack of technical knowledge, and time constraints due to them being occupied with their immediate job responsibilities. Having received no cooperation from the factory staff, the CFO eventually decided to pull the plug; the company returned to the previous manual system for handling invoices. The factory meanwhile continued to run

the Russian ERP system. The data provided by it were manually translated by the CFO to prepare GAAP and IAS accounts.

## III. AFTERMATH

The implementation failure left the CFO deeply disillusioned and upset at the obstinacy and incompetence of the factory staff. His stature within the company was badly shaken. The failure also badly reflected on the COO who was now perceived to be parochial and uncooperative. A few months after the implementation failure the COO left the company, citing reasons unrelated to the ERP project. The CMO, who was largely untouched by this imbroglio, was promoted as the new CEO of Natural Springs. While continuing to work for the company, the CFO saw his authority gradually chipped away by the new CEO. The CFO was quietly ousted in the beginning of 1999.

Natural Springs was sold to a leading multinational food and beverages company in 2002 for an undisclosed amount.

## IV. EPILOGUE

Several months after the failed implementation, the factory clerk who had been in charge of the Sun Systems, came to St. Petersburg for technical training. The CFO invited the clerk for a dinner in one of St. Petersburg's restaurants. After several glasses of wine, the CFO started asking for opinions of the ERP failure. He learned that the clerk and the factory IT manager had been ordered by the COO not to synchronize data with the St. Petersburg office. They had also been ordered not to talk about it.

## LIST OF ACRONYMS

| | | | |
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| 1C | A leading Russian ERP package | COO | Chief Operating Officer |
| CEO | Chief Executive Officer | ERP | Enterprise Resource Planning |
| CFO | Chief Financial Officer | GAAP | Generally Accepted Accounting Principles |
| CMO | Chief Marketing Officer | IAS | International Accounting Standards |

## ABOUT THE AUTHORS

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