



Ross School of Business at the University of Michigan

Independent Study Project Report

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STUDENT : Ada Mok

TITLE : How one telecommunications company, New Global Telecom, coped with changes in the macro-environment

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How One Telecommunications Company, New Global Telecom, Coped With Changes in the Macro-Environment

By

Ada Mok

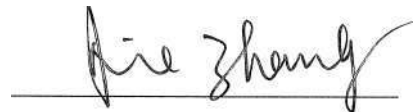
A research paper submitted in fulfillment of the requirements for 1
credit,

UNDERGRADUATE INDEPENDENT RESEARCH PROJECT Winter Term
2001,

Professor Jie Zhang, Faculty Supervisor.

Faculty Comments

This research report is based on Ada's summer internship experience at a telecommunications company New Global Telecom (NGT). It analyzes the challenges and opportunities faced by NGT in a fast changing market environment. The report focuses on NGT's expansion strategies in the Latin American markets. Her analysis is very thorough and well-supported. Job well done!

A handwritten signature in cursive script that reads "Aie Zhang". The signature is written in black ink and is positioned above a horizontal line.

Signature of Faculty Supervisor

Assistant Professor of Marketing

Title

BACKGROUND

Once in a while, a company is able to find a niche in an otherwise large market and to profit from selling to consumers in this niche. However, a major drawback of such a focused strategy is that a company becomes extremely vulnerable to changes in market conditions. This is what happened to a company called New Global Telecom (NGT), which I worked for over the summer of 2000. NGT's core competency was long distance re-selling. In other words, NGT would buy long distance minutes from one company (such as AT&T) and then resell it to another company (such as MCI WorldCom or firms like 10-10-321.) Although it may seem to make more sense for companies to directly sell their minutes to each other, the prices of long distance minutes for different carriers between various cities can change quite rapidly and very often. As a result, it is actually cheaper for a long distance carrier to pay a middleman to monitor these rates for them, allowing them to get the cheapest rate, than for the long distance carriers to do this themselves.

NGT Faces Changing Macro-Environment

When New Global Telecom was founded in 1997, long distance wholesaling was a lucrative business. There were few competitors and high margins. However, by the year 2000, the situation had changed drastically. Many companies had now entered the market, leading to shrinking margins. In addition, the emergence of new technologies such as DSL¹ and cable modems meant that VoIP² was now possible. Now that

¹ DSL stands for Digital Subscriber Line. It is a technology developed in the late 1990s that dramatically increases the digital capacity of ordinary telephone lines into the home or office.

² VoIP stands for Voice over Internet Protocol. This refers to the transmission of voice over the Internet, or in layman's terms, making phone calls over the Internet.

consumers could get access to a faster method of data transfer, the quality of calls made over the Internet started to approach the quality of calls made over the phone. (There was no longer a delay between when one person said a sentence and when the person on the other line heard this sentence.) There was even an abundance of websites³ offering users access to free long distance calls over the Internet.

FACING THE CRISIS

So, what was New Global Telecom to do? Clearly, they could not rely on their old core business to continue supporting the company and had to diversify into other businesses. It is interesting to note that until the year 2000, NGT had never even had a marketing division. All of its executives came from technical or engineering backgrounds, and they had never seen the need to hire marketing personnel. They felt that their core business needed people with technical, not marketing, expertise and they had been doing quite well without a marketing department. In fact, even as an intern, I was only their third marketing employee although they had close to 300 employees worldwide. However, during my 10 weeks there, three other marketing directors were hired. Their job was to identify what markets New Global Telecom could diversify into, and what new products and services they could offer that could also work well with their current products and services.

Currently, Latin America is the fastest growing telecommunications market worldwide, and this was the region that New Global Telecom wanted to target. In particular, it focused its attention in Venezuela, because this was one of the more

³ Examples include dialpad.com, net2phone.com, and deltathree.com.

economically and politically stable Latin American countries. Nevertheless, the mountainous terrain of this country and the fact that a large percentage of the population lives in rural areas make it a challenge to build a telecommunications network. (In fact, the number of mobile subscribers is fast approaching the number of landline users⁴ due to difficulty in getting access to landlines.) As a result, NGT considered alternate methods for entering this market rather than using traditional landlines. (Also, since this was a small company when compared to major telecommunications providers, it lacked the capital needed to invest in cable for fixed landlines.) One of the technologies NGT considered was LMDS⁵, because it had received an offer from a Venezuelan firm to purchase its existing LMDS license. However, due diligence soon showed this technology was still very costly. Although Sprint and AT&T had made considerable investments into researching and developing this technology, the cost of using LMDS was about three times higher than the break-even cost. In addition, this technology was so new that an estimate could not even be made as to what the market potential or size would be. As a result, NGT turned to another technology, satellite. An advantage of this over LMDS or microwave technology is that satellite does not suffer from the same line of site problems. Another major advantage is that if a large area needs to be covered, satellite becomes a cheaper option because it requires fewer transmitters than LMDS.

⁴ According to the CIA World Fact book, there are 2 million mobile cellular users compared to 2.6 million main line users.

⁵ This stands for Local Multipoint Distribution Service. It is a combination of satellite and microwave technology. Transmitters are placed on the roof of buildings that are able to transmit to 2-4 mile radius around the transmitter. A drawback of this technology is that if objects are in the way (such as trees or tall buildings) the signal could get blocked. In addition, it suffers from rain fade, or when it rains, signals bounce off raindrops and as a result, get lost or faded.

Since NGT had limited access to capital, it avoided having to invest large sums of money into developing a satellite system by acquiring a current player in the Venezuelan market. It was also able to leverage this company's current expertise in the Venezuelan market and connections with the Venezuelan government. (Although Venezuela had a more transparent government and legal system than many other Latin American countries, one could still encounter a lot of bureaucracy and red tape if one did not have the right connections or follow the proper procedures.)

Another area that New Global Telecom diversified into was collocation . Two of NGT's current offerings were managed data and managed network services. This meant that NGT would manage a telecommunication company's data and networks. It would include routing calls, handling transactions with customers and vendors, and also handling a company's intranet. A logical area to branch out into would be to manage a company's servers. This is exactly what collocation involves. Since NGT was already involved in telecommunications in Latin America, it chose to target Latin American companies wishing to seek out US customers through their websites or Internet promotional material. As a result, NGT was looking to place a data center in Miami - one of the closest US cities to Latin America. Research was done into the Miami collocation market and through this NGT realized that it was a largely untapped market. There were a few small local firms currently offering collocation services, but the major collocation companies such as PSINet and Exodus did not currently have a data center in

⁶ Collocation is used when companies that have websites do not want to manage the servers needed to support these websites. Servers need 24 hours surveillance to ensure that websites stay up and running. As a result, many companies wishing to avoid the hassle of monitoring their servers choose to pay to have another company manage and host their servers at locations called data centers.

Miami or were only currently constructing such a facility. In addition, the capital expenditures needed to support the building of a data center were relatively small (only about \$1-2 million dollars) and NGT could take advantage of the knowledge of its current employees for this project.

Another benefit from offering collocation is that companies who started using NGT's data centers and who were pleased with the service provided might then buy NGT's managed data and/or managed network services. As a result, NGT would be able to use its Miami data center to promote and sell its current product offerings.

WILL IT WORK?

These were just two ideas that New Global Telecom was developing over the summer of 2000 in order to sustain the growth of its company. NGT was late to realize the importance of marketing because it was in a heavily technology oriented field. Once it realized, however, that it could not continue depending on its past method of doing business, it quickly developed a marketing department and mobilized its resources. Without the expertise of its marketing personnel, NGT might not have discovered the collocation opportunity in Miami, nor have done the research needed to determine the best way to enter the Venezuelan market.

To be frank, the opportunities NGT is currently pursuing will not solve all of its problems. The telecommunications business is highly sensitive to technological advances. It is also a business where it will be difficult to roll out new products or services. To clarify, a shampoo manufacturer can easily change a product to sell it to a different segment by reformulating it so it smells different, or repackaging it so it looks

different. A telecommunications company, however, would be hard pressed to change how a phone call is made, or to add any new services that have not been developed already (such as Caller ID and Video Conferencing). The only options are to provide service to new countries or cities, and to diversify, like how NGT is adding data services to its voice services.

In addition, the increasing advances of technology have given consumers increasing options on how to make their long distance phone calls. The increasing popularity of VoIP may pose a threat to long distance carriers in the future. Furthermore, companies like Priceline.com now offers consumers the ability to pay only as much as they want to pay for their long distance calls. Since businesses still make the bulk of long distance calls, these new ways of making long distance calls will probably not pose a severe threat to the long distance market, though profit margins will continue to shrink. Moreover, although the method of communications may change (e.g. from over phone lines to over Internet connections), people will always need a means to communicate. Therefore, telecommunications companies offer a service that is a necessity that will not disappear anytime soon, though the means this necessity is delivered to consumers may adapt and change with technological advances.

CONCLUSION

It will be interesting to see if New Global Telecom will be able to capitalize on these opportunities and if it can continue thriving as a company, especially in light of the recent downturn in the economy and the collapse of the Internet bubble. In fact, PSINet (a major company in the collocation market) announced on March 20 that it needed to

hire a financial adviser to restructure the company's debt in order to avoid defaulting on payments to its creditors⁷. NGT was planning to go public in the beginning of 2001, but these plans are now on hold. The future of this company is still uncertain, although it announced in March that it was able to secure an additional \$25 million in financing.

It will be worthwhile to take a look at this company a year in the future, and to see how far it has come since its beginnings as a long distance wholesaler.

⁷ In the March 20, 2001 issue of the Wall Street Journal, PSINet said it had hired Dresdner Klein wort Wasserstein to restructure its debt, but still warned that its common stock may have no value even if this restructuring is successful.

Form 2 — Faculty Summary Form

(This Section to be Completed by the Faculty Supervisor)

In my judgment, Ada Mok has satisfactory completed the Business School research project described above. I have supervised and guided this student/these students in this project, graded the results, and completed the Faculty Comments Section of the paper. I confirm that the course be assigned 1 hour(s) of credit.

In addition, I have reviewed the completed research paper for this project and find it satisfactorily completed in compliance with the academic requirements for the course. Attached, please find the Grade Sheet and/or Supplementary Grade Report for this course.

- Business School Student — Kresge
- Non Business School Student

Faculty Signature

Die Zhang

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