# mInfo

SHANGHAI, CHINA. SEPTEMBER, 2010. CEO Alvin Huang Graylin and CTO Derrick had come a long way in a very short time. From the launch of their mobile Internet search company in early 2005 until now, they had built a company of 100 employees with a user base of tens of millions of mobile subscribers. And the company's performance had reached cash flow breakeven since Q4 of 2009. This had not been easy. Though born in China, Graylin had been raised and educated in the United States; thus, he had to learn the ins and outs of Chinese business culture, and was generally perceived as a foreigner by regulators and telecom company clients. Threading a course through government officialdom had also been a challenge. Entrepreneurs in the Peoples Republic of China—both foreign and domestic—had to master an opaque regulatory system and patiently build relationships with bureaucrats.

China was very different than the hi-tech entrepreneurial environment in which Graylin had forged his career. He had spent five years after graduate school helping Intel in its Shanghai Office, doing business development in the PC industry. Now, with five years of mInfo under his belt, with mInfo, and with the help of his Chinese co-founder, he had learned how to get things done.

# The Company and its Service \_\_\_\_

mInfo was initially founded as an SMS mobile (text messaging) search service. Within six months, and after using their own savings, the two founders had developed a working prototype. With the backing of US and domestic investment capital<sup>1</sup>, the company was soon able to address the search needs of the large and growing Chinese market of mobile Internet users, and had become that country's leading English and Chinese language mobile search service. mInfo was also China's only "natural language" search provider. "We've only raised about \$6 million in financing," says the CEO, "but here in China, where operating costs are much lower, that kind of money can take you a long way."

For Graylin and CTO Huang, mobile Internet computing represented the next big wave in an industry cycle that began with mainframe computing in the 1950s (Figure 1). Mobile Internet technology made it possible for people to use "smart phones" such as the iPhone and Droid

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<sup>&</sup>lt;sup>1</sup> From its inception through mid-2010, mInfo raised \$6 million in capital through a seed round and two A financing rounds. Roughly 70 percent of that capital had come from US investors, with balance put forward by Chinese financiers.

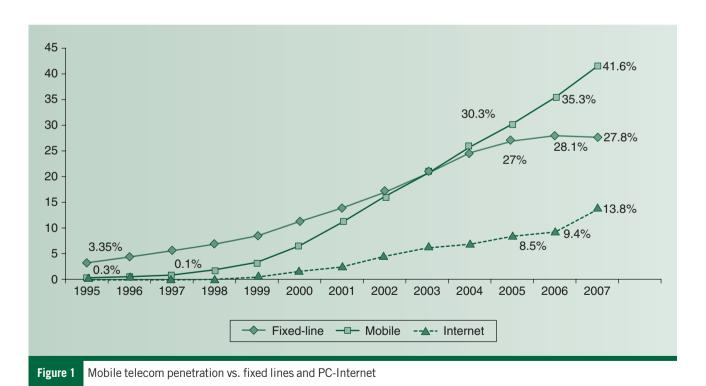
<sup>&</sup>lt;sup>2</sup> Natural language processing refers to the interaction of computers and human, or natural,

to send and receive email, access the Web, and conduct online searches for news, weather, phone numbers and addresses, restaurant reviews, and other information. Because smart phone screens were small and their bandwidths are narrower than those of desktop and laptops machines, mobile online searches were limited in the volume of information they could deliver. These constraints represented challenges to search service companies such as mInfo. Since these companies cannot deliver page after page of search results, they must assure that the results they provide to subscribers are on target and the best available. "It has to be fast, and it has to be right," said founder Graylin.

mInfo's initial technology strategy was to provide mobile SMS. Over time, that strategy migrated to mobile search on the Internet, and then to a hybrid "automatic/operator" model. The latter delivered some 90 percent of search responses automatically; the remaining hard-to-find subscriber queries were addressed through a combination of search engines and human operators. This use of human operators raised the cost to mInfo, but it assured higher quality service to subscribers.

China's mobile telecom market was the world's largest. Dominated by China Mobile, China Unicom and China Telecom, it had grown from 400 million subscribers in 2004 to over 800 million in the U.S. 2010. In contrast, the number of mobile subscribers in 2010 was only about 270 million.<sup>3</sup> Subscribership in China was forecasted to continue at a rate of more than 7 million *per month* over the next several years. The rate of penetration of this technology (though less than half the penetration rate of the US) had far surpassed those of fixed-line telephone and PC-based Internet communication (see Figure 2).

Not all telecom subscribers, however, owned devices capable of mobile Internet search. Smart phones (3G +) were more costly in China than in the West, often running to \$500–700—easily twice the monthly salary of a worker in China's urban commercial centers. Consequently,



Source: Information from the Ministry of Information Industries, the People's Republic of China.

<sup>&</sup>lt;sup>3</sup> World Bank, "World Development Indicators," updated 27 July 2010.

only 15–20 percent of mobile phone users subscribed in 2010 to Internet services. Rising incomes and the relative decline in smart phone costs, however, were likely to increase that percentage. With China's GDP growing at 8–10 percent per year, rising household incomes and buying power would increase demand for smart phones—a highly prized personal luxury item in China's modern cities and a symbol of personal success. And the number of mobile Internet searches would escalate in step. One industry analysis forecasted 52 percent compound annual growth in the number of those searches between 2007 and 2012.

## WHAT ARE MOBILE INTERNET USERS SEARCHING FOR?

According to the company, in 2010, 65 percent of mobile subscribers searched for news; 59 percent use it to "chat"; 42 percent read novels on their mobile devices; and 39 percent searched community forums for information. Others searched for stock prices, directions, phone numbers, weather forecasts, and so forth.

# Business Model

By 2010, mInfo had successfully negotiated service contracts with several telecom companies, including the country's two giants: China Telecom and China Mobile. During the Beijing Olympics, it won the contract to be the Games' official search provider.

Under the terms of its agreement with provider clients, mInfo received a fixed annual fee plus incremental revenues once the number of subscriber searches exceeded a particular annual level. The company also generated revenues by placing ads on its pages. It has agreements with many ad companies. As of 2010, Graylin believed that it has only scratched the surface of this potentially huge revenue source. Much more was anticipated as 3G mobile technology and broader bandwidth continued to gain a broader foothold in the Chinese market.

# An Entrepreneurial Journey

Graylin was born in China in 1971. His Chinese father was a Western art professor of over 20 years at the Guangdong Art Academy; his mother—half Chinese and half American—was a dancer with the BJ ballet troop who had studied for a time in the United States. Eager to give Alvin and his siblings an opportunity to experience life in the West, the parents moved their family in 1980 to Seattle, Washington. They were among the first Chinese families to do so as their homeland emerged from decades of isolation.

The move to Seattle was economically difficult. "My parents came to the US with only \$500 in their pockets," Graylin recalled. "My father couldn't find work in his field immediately and had to take two jobs painting ad signs and whatever else he could find. My brothers and I were expected to help the family by taking odd jobs after school."

After completing high school, Graylin attended the University of Washington, where he majored in electrical engineering. Midway through that program, he took a nine-month internship with IBM in Minnesota. Inspired by that first taste of real world technology development, he returned to Seattle and finished his degree, graduating at the top of his class.

During those final years at UW, Graylin and four classmates launched and ran an enterprise that provided systems integration and custom programming to local educational institutions and small businesses. At its peak, the venture generated about \$500,000 per year, half of which was profit.

#### Intel

Upon graduation in 1993, Graylin took a chip design and system architecture job with Intel, which would employ him in many capacities over the next seven years. One of his early assignments (1994) took him to Shanghai, where he and two other US expats set up a new office and he led a team 25 employees focused on growing the Chinese consumer PC business. Its goal was to develop and bundle hardware and software, and find a business model that would break through the then-sluggish pace of Home PC adoption in China. This was a large order for a 23 year-old with limited experience, but Graylin rose to the challenge. As he recalled, "It gave me a chance to hone my management skills, and it kindled my interest in business." Within three years, his Shanghai unit was able to reduce the retail price of consumer PCs from roughly \$2,000 to a more affordable \$600. This greatly expanded the sales of PCs to consumers in China, many of which had "Intel Inside."

## MIT and iCompass

His assignment completed in 1997, Graylin rotated back to the US, and to life in the corridors of Intel. The pay was good, and he enjoyed being back where he would spend more time with his relatives and friends. But missing the independence and responsibility he had enjoyed in Shanghai, be began looking for another situation. He found it at MIT in 1998, where, with Intel's support, he enrolled in a dual masters degree program in business management and computer science, in the University's renowned "Leaders in Manufacturing" program.<sup>4</sup>

While at MIT, Graylin entered two business plan competitions with a team of classmates. One of them was for an Internet marketing analytics company called iCompass. The company's proprietary technology was capable of discerning the search patterns and profitability potential of online shoppers—something that direct and online retailers were eager to know.

The iCompass concept and technology attracted attention from both investors and potential customers, enough so that Graylin and his colleague were able to raise \$1 million in a first round of financing. Shortly thereafter, however, in March 2000, the "dot-com" bubble burst, share prices fell off a cliff, and investor interest in technology companies evaporated. Like many comparable startups, iCompass folded in 2001. But for Graylin, "Getting customers, raising money, and hiring a team had been a great learning experience," which he would carry forward to subsequent ventures.

#### Back to China

Between 2001 and late 2004, Graylin worked for two security software companies, the first in Taiwan, the second in the United States. In each case he was given business unit responsibility and opportunities to deal with people in North America, Europe, and Asia.

Frustrated by the internal politics of the last of these firms ("We had three CEOs in one year"), Graylin was ready for self-employment. So, in late 2004, he quit his job and spent the next several months looking for a promising new opportunity. Among his first contacts was Derek Huang, a Chinese electrical engineer he had hired years earlier, during his days with Intel in Shanghai. Huang was familiar with the mobile messaging business in China and shared Graylin's entrepreneurial spirit. Huang had been the CTO of two VC funded startups after leaving Intel in 1999. After a lunch meeting discussing opportunities, the two identified a potential opportunity that was still unfilled in China. Mobile Search. Graylin had been working on search related projects with a VC firm since leaving his last job and Huang was an expert in mobile

<sup>&</sup>lt;sup>4</sup> Later named the "MIT Leaders for Global Operations."

technologies and had access to a qualified technical team in Shanghai. The next day, they both wrote emails to each other, saying there could be a billion dollar market for this space long term. Working together, they planned and launched mInfo in mid-2005.

Graylin's initial investments came from wireless/tech industry angels in the Seattle area and they provided a lot of support and advice for getting the project off the ground. Graylin was also able to recruit former WA governor, Gary Locke, to serve on his board for over three years until he was picked by President Obama to be the US Commerce Secretary. Locke was viewed as a rock star in China being the highest ranking Chinese American in the US government At that time. He helped open many doors during his term with mInfo.

Graylin's earlier experience in mainland China had been useful, but much had changed in that country over the past decade. Besides the usual startup challenges of business development and connecting with customers, he and his partner had to overcome difficulties in several other important areas: special if not unique to the Chinese business and consumer environment.

#### **Human Resources**

By the mid-2000s, China's blistering GDP growth (typically 9–10 percent per year) had created wage inflation, particularly at mid- and upper-levels of the technology and managerial labor markets. Further, demand for individuals with proven skills had grown so strong that that recruiting and retention were very difficult. Many talented employees could pull up stakes one week and begin work with a competitor the next—often at a higher salary.<sup>5</sup>

Graylin and Huang had to cope with this situation as they began recruiting programmers in 2005–2007. As Graylin recounted later, "Hiring was and remains one of our most difficult issues." He discovered that only a minority of experienced technical people in China were attracted to small, unknown entities, and very few had entrepreneurial experience. In general, both seasoned and newly minted engineers and programmers preferred employment at large, stable, "brand name" firms. Many experienced people were working for state-owned companies; Graylin found most of these skilled workers unsuited by temperament and work ethic to the requirements of a startup entrepreneurial firm.

In the end, the two entrepreneurs found that the most productive approach to their human talent needs was to recruit directly from the best technical universities. New people were brought on as interns, giving the company an opportunity to assess their abilities and work ethics as a prelude for formal employment. Graylin explained his HR strategy further: "We provided a combination of industry average cash compensation, stocks and generous social/welfare benefits. Our cash comp wasn't the best, be we were generous with stock and had many fun activities for the team. Even still, finding and keeping staff was not easy. And most people didn't know the value or potential value of Stock Options.

Graylin continued: "In terms of salary, the cost of low-level employees is very inexpensive. The salaries of mid- and upper-level people are lower than their counterparts in the States, but not dramatically lower."

The mobility of technical workers was a large concern for Graylin and Huang because it jeopardized mInfo's emerging intellectual property. This was in a computing culture where, at the time, the majority of software used on desktops was unlicensed or pirated. mInfo decided to take specific steps to assure that no individual employee had access to the entire code base. Huang designed and controlled the architecture and then assigned specific teams to program certain pieces. Only a small and highly trusted team under Huang's direct supervision assembled these components for the final build and test.

<sup>&</sup>lt;sup>5</sup> The Economist Intelligence Unit/Mercer HR Consulting, 2009.

## Government Bureaucracy

Regulators presented another hurdle for the founders. mInfo needed a special telecommunications operations license. To obtain that license, Graylin had to have a specified level of capital in the bank. And as a company with foreign backers, mInfo needed a three-tier structure: it had to be under the umbrella of a foreign holding company; it had to register as a wholly-owned foreign entity; and it had to give evidence that it had contractual relationships with local Chinese partners. The company's US legal counsel handled these details, setting up the holding company in the Cayman Islands at a cost of roughly \$50,000. The lawyers deferred payment of that bill until such time as the company had completed its first financing round.

To meet the capital requirements of the law, Graylin and Huang borrowed the requisite amount of money and put it in their company bank account.

Adherence to regulatory requirements was the easy part. Getting approvals from an inscrutable bureaucracy was another matter. In contrast to the US, where licenses and other approvals can often be obtained in straightforward ways, often online, Chinese regulators must be appealed to with personal visits and, in many cases, gifts.

As a westerner, Graylin found these requirements both frustrating and time consuming. "Sometimes an official would make us wait four hours or more for a five-minute meeting. In other cases, scheduled meetings would be canceled at the last minute for no apparent reason. They'd say, 'Sorry. Reschedule next month.'" Many officials did not return phone calls. Patience and persistence were the entrepreneur's only recourse in dealing with this system.

He also discovered the importance of gifts. Gift giving is part of Chinese culture and extends into the world of government. The tradition is to bring a gift when visiting an official. "And during holiday periods, the expectation is that gifts will be more valuable—for example, you might bring a \$700 smart phone as a gift." Graylin also noted that officials where much more open to visits during holiday periods, when the expectation of a fine gift was highest.

## Contracts

In the West, any contract that does not violate the law or public policy is enforceable in court. In China, contracts are less than "iron clad."

mInfo successfully negotiated contracts with several mobile telecom providers and advertisers—and it depended on those contracts for its success. In several cases, however, and mid-way through the life of their contracts, customers would ask to renegotiate contract terms. "They'd figure," says Graylin, "'Well, those guys [at mInfo] are making lots of money. Let's cut them back." mInfo had very little power to oppose these requests from valued customers. In the end, mutual self-interest, and not the language of contracts, ruled.

## Interpersonal Protocols

Graylin also discovered the importance of properly matching hierarchical "levels" when conducting business with customers, suppliers, and regulators. In contrast to the informal and egalitarian culture of the US, Chinese culture expected that CEOs meet with CEOs, that mInfo sales representatives meet with mid-level customer officials, and so forth. Mismatching levels during sales calls and negotiations were deemed breaches of protocol.

### **RELATIONSHIPS COME FIRST**

It's often said that "relationships" are an essential part of business life in China—and in Asia in general. Research by Edward Hall and Mildred Hall<sup>6</sup> has identified "low- and high-context" cultures. In the former (e.g., northern European countries and North American), business people like to get right to the point with little ceremony and a minimum of perfunctory small talk. In contrast, business in high-context cultures (which include Korea, Japan, China, and Arab countries) is preceded by more extensive formalities and relationship building. For example, a prospective Asian customer will ask to know about the visitor's company and about the visitor's personal background. A luncheon or dinner may be a necessary prelude to any substantive discussions. According to Hall, these preliminaries may take substantial time, but time is less important to people in high-context cultures. For low-context Westerns, who are eager to get down to business, the value of these formalities and relationship-building activities are not always appreciated.

<sup>6</sup> Edward T. Hall, *Silent Language* (Garden City, NY: Doubleday, 1959) and Edward T. Hall and Mildred R. Hall, *Hidden Differences: Doing Business with the Japanese* (Garden City, NY: Doubleday, 1987).

# Discussion Questions

- 1. Alvin Wang Graylin is a highly skilled and energetic businessperson, with experience in many parts of the world. Why do you think he was so attracted to China?
- 2. Put yourself in Graylin's shoes as he began his venture in Shanghai. As you organize and develop your business, what would you describe as "different" from the US or other non-Chinese environment? What would be the same?
- 3. If you found an irresistible hi-tech venture prospect in China tomorrow, what preparations would you make for handling that country's unique labor market and its business and regulatory cultures?
- 4. What are the lessons learned by this entrepreneur operating in a foreign country?