



### **Abstract:**

We present a case on how a returnee entrepreneur succeeds in the Chinese high technology chemical material supply market through its understanding of local market and local customers, and through its innovative commercialization process. Innovative factors that may have made a contribution to this successful case are explored. For instance, the entrepreneur's intangible assets due to his training and experiences overseas in high technology knowledge, outstanding strategic operation management skills, and deep customer knowledge including unique sales strategy.



### Importance of commercialization capability

### Linkage between Customers and Business Opportunity

Lin (2010), Zweih & Vanhonacker's (2006), Filatotchev, Liu, and Wright, 2011; Kenney, Breznitz, and Murphree, 2013; Dai & Liu, 2009; Dominique & Fuquan, 2012)

Innovation is not limited to technology innovation, but also includes entrepreneurial capacity to take innovative ideas to market by transforming them to usable products or services, which has been agreed to be a vital part of innovation capacity.

Contemporary returning entrepreneurs emerge in this product-to-market commercialization process in China.



### Linkage between Customers and Business Opportunity (Con't)

Wu, Guo and Shi (2013), Stampfl, Prugl and Osterloh's study (2013), Vanhonacker, Zweig, and Chung's study (2007), Quan and Sanderson (2013)

Identify the opportunities of gaining benefit from three different customer knowledge: knowledge about customer, knowledge from customer and knowledge for customer.

Business management (including operation management, management of team and investor partnership) is another critical factor to make business model scalable.



### Linkage between Customers and Business Opportunity (Con't)

(Treacy, M & Wiersema, F, 1993)

Deliver superior customer value via <u>operational excellence</u> (i.e., reliable products or services at competitive prices, operations lean and efficient), <u>customer intimacy</u> (i.e., continually tailor and shape products and services to fit an increasingly fine definition of the customer), or <u>product leadership</u> (i.e., strive to produce a continuous stream of state-of-the-art products and services).

### Niche Market/Product Through Customer Value

Parrish, Cassill, and Oxenham (2006)

"From the product perspective, a company must offer a product uniquely different from the competition, which appeals to a select segment of the market. This can be done by offering an innovative, technologically advanced product or a 'value' product." (p703)



## Using the Balanced Scorecard as a Strategic Management System

"As companies around the world transform themselves for competition that is based on information, their ability to exploit intangible assets has become far more decisive than their ability to invest in and manage physical assets" (p38).

To transform to be competitive, four processes are recommended: 1) translating the vision and strategies (clarifying the vision, gaining consensus); 2) communicating and linking (selling goals, linking rewards to performance measures); 3) feedback and learning (articulating the shared vision); 4) business planning (setting targets, aligning strategic initiatives, allocating resources, establishing milestones).



### Evolving from Low-cost Manufacturing to Innovative-led Growth

Haour and Jolly (2014)

"China's economy is climbing up the value curve, transitioning from the low-cost manufacturing of basic products to the assembly of high-tech products, and more recently to innovation-led growth" (p2).

For example, the number of patent applications has grown by 20 percent per year there. China has made amazing innovative technology progress in many areas, such as automobile, supercomputing, space and military applications, and life-sciences. R&D investments in China reached 700 billion yuan in 2010.

It's still debatable whether and to what degree the Chinese companies are innovative. We like to explore a case of returnee firm here to examine its innovativeness, especially that returnee firms are emerging sources of innovation in China.



### **Objective of Our Case Study:**

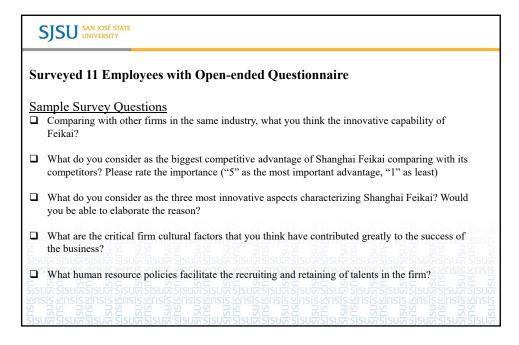
We present a case on how a returnee entrepreneur succeeds in the Chinese high technology chemical material supply product market. Also, we want to investigate the unique innovative strategies or factors that have made this particular case successful in China's emerging context as to enrich the academic discussion on returnee innovative entrepreneurship in emerging countries.

### Method:

Business case study – Interview + Survey Primary data + secondary data

Three interviews were conducted with Jinshan Zhang, Founder A survey was conducted to 11 employees from the company twice for result verification.







#### **Milestones:**

In 2002, the founder started his company with \$100M including his friends' investment shares in Shanghai, China. Later, he moved his manufacture to another province in China at lower cost.

2002 started with \$100 M funding

2004 completed first wave of product development and started sales

2007-2008, reached ¥100,000, 000 revenue;

Data source: 2014 annual report

2010, big economic downturn in the west/but local market penetration moved fast

2011, employees grew to 100

2013, reached ¥300,000,000 revenue

2014, reached ¥400, 000, 000 revenue, went public (IPO) at ¥60/share, employees grew to be 400 Growth rate: 30%/annually (very beginning: 50% growth rate)

RMB (million)	2014	2013	2012
Revenue	402	323	261
Net Profit	90	65	~50

# The returnee entrepreneur and opportunity identification

Born in China, the founder came to the U.S. in 1988 studying for Ph.D. program majored in optical modular materials. He then worked for a well-known S&P 500 company for several years across different company locations, mostly in its R&D division. In 2000, he left this large company and joined another smaller company in Silicon Valley making product of optic fibro. During this time, he heard that China was lack of materials of optic fiber related supply materials, such as coating materials.



### Findings from the Survey and Interviews:

Most surveyed consider that "Shanghai Feikai is among the few best firms in terms of technology capability in the industry".

The possible reasons include:

- Gained great customer value through product leadership with consistent state-ofart product and super strong post-sales services that competitors can hardly catch up
- Achieved customer intimacy through agile product request change management and adaptation to dynamic market change and product characteristics change that has been very challenging to many competitors
- Maintained operational excellence by innovative technical solutions in addition to lean teams (the only strategy that competitors may use), such as
  - Backward integration as completely handled all primary material processing innovatively
  - Robust product management with balance between quality and cost innovatively



### Findings from the survey and interviews (Con't):

- Smart niche market strategies:
  - Targeted smartly at a good niche market at right timing when China was largely initiating telecom revolution while local telecom giants might not pay attention to this niche market
  - This niche market product are largely needed
  - Can significantly reduce the cable manufacturing cost if FeiChem's low-price but good quality product is selected (from RMB 240/1KG to RMB 50-60/1KG, half or further less expensive than the same exported products)
  - Product designs require high technology skills, so it is not low-entry niche products which have limited many competitors



### Findings from the survey and interviews (Con't):

- Unique product-to-market strategies:
  - Focused on non-government sales for a considerable period of time to avoid lengthy deal process and achieved quick IOR, e.g., achieved first wave of product sales in 2 years
  - JIT along highly customized product design and premium post-sales support services
  - Quick response to dynamic upper chain manufacturing process change, e.g., cables were manufactured at 1000 M/per minute, but now has evolved to be at 2500 M / per minute
  - Quickly becomes largest market share in this type of highly demanded product



### Findings from the survey and interviews (Con't):

- Top leader's intangible assets that perfectly ensured four processes (Kaplan, R. & Norton, D., 1996) to be in place:
  - Translating visions and strategies by gaining internal consensus (e.g., consistency in leadership due to consistent funding source which helped consistent visions and strategies for consistent internal consensus)
  - Communicating vision by successfully selling company goals to internal employees and linking rewards to performance measures (e.g., very low employee turn-over rate)
  - Feedback and learning (e.g., articulating the shared vision through very flat organization system, and CEO joined team meetings regularly)
  - Business planning (e.g., clear target customers and required products, allocating right resources and resources empowerment, and regular milestone status checking)



### **Findings Summary:**

- Customer relationship advantage: Knowledge and expertise on customers such as customer development and customer service is considered the most important competitive advantage of Shanghai Feikai.
- Low-cost advantage: Feikai is able to provide good quality materials and
  chemical solutions to customers at lower cost than other leading world class
  suppliers. This is achieved by effectively managing and balancing a costeffective supply chain with in-house manufacturing capabilities.
- Favorable human resource policies to recruit and retain talents: health-care benefits; performance-based bonuses; competitive pay structure; promotion opportunities for young; open door policy with management from top down



### Recap of Innovative Aspects Characterizing Shanghai Feikai:

- Low-cost driven R&D.
  - Input great efforts and resources for the development of core raw materials as backward integration, so reduced overall product costs dramatically compared to use imported semi-raw materials
  - Kept R&D team and also manufacturing team very lean
- Customer-oriented & agile product change management
  - Collected customer demand through sales team and service team understand what they need exactly
  - Agile product requirement change management due to quick market demand change
- Largest market share + International horizon
  - Recognized as world-class technology in the field in China as the largest market share in this area
  - Built supply chain relationship with 60% of domestic companies, and also with international corporations such as 3-M and Cornie



### **Future Research Plan**

Further research having more returnee entrepreneur cases as comparison for indepth insights are greatly needed to further explore innovative business strategies in manufacturing industries in the emerging market, particularly areas such as material science supplies.

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## References

- Bruzzell, R. (1983). Is Vertical Integration Profitable? Harvard Business Review, January Issue. Accessed from online. https://hbr.org/1983/01/is-vertical-integration-profitable
- Clinton, S. R., & Morris, R. (2008). A Case Series Of Today's Vertical Integration. Journal of Business Case Studies, 4 (7), 47-52.
- Dai, O. & Liu, X. (2009). Returnee entrepreneurs and firm performance in Chinese high-technology industries. *International Business Review*. 18(4), p373-386.
- Dominique, J. & Fuquan, Z. (2012). Chinese S&T parks: the emergence of a new model. The Journal of Business Strategy. 33(5). 4-13.
- Filatotchev, I., Liu, X., Lu, J., Wright, M. (2011). Knowledge spillovers through human mobility across national borders: Evidence from Zhongguancun Science Park in China. <u>Research Policy</u>. 40 (3), 453-462.
- Haour, G. & Jolly, D. (2014). China: the next innovation hot spot for the world. *Journal of Business Strategy*, 35(1), 2-8.
- Kaplan, R. & Norton, D. (1996). Using the balanced scorecard as a strategic management system. Harvard Business Review, 37-48
- Kenney, M., Breznitz, D. & Murphree, M. (2013). Coming back home after the sun rises: Returnee entrepreneurs and growth of high tech industries. <u>Research Policy</u>. 42(2), 391-407.
- Lin, X. (2010). The Diaspora Solution to Innovation Capacity Development: Immigrant Entrepreneurs in the Contemporary World. Wiley InterScience. (www.interscience.wiley.com).

# References (Con't)

- Parrish, E. D, Cassill, N. L., & Oxenham, W. (2006). Niche market strategy for a mature Marketplace. Marketing Intelligence & Planning, 24(7), 694-707
- Quan, X. & Sanderson, J. (2013). A Case Study on the Chinese Way of Innovation. IEEE. 978-1-4799-0339.
- Schanz, C., et al. (). 'Low Cost-High Tech' Innovations for China: Why Setting up a Separate R&D Unit is not Always the Best Approach. R&D Management 41 (3), 307-317.
- Stampfl, G., Prügl, R. & Osterloh, V. (2013). An Explorative model of business model scalability. *International Journal of Product Development*. 18(3), 226-248.
- Stuckey, J. & White, D. (1993). When and when not to vertically integrate. Insights & Publications by McKinsey. http://www.mckinsey.com/insights/strategy/when\_and\_when\_not\_to\_vertically\_integrate
- Trimi, S. & Berbegal-Mirabent, J. (2012). Business model innovation in entrepreneurship. *International Entrepreneurship Management Journal*. 8, 449–465.
- Treacy, M. & Wiersema, F. (1993). Customer Intimacy and other value disciplines. Harvard Business Review https://hbr.org/1993/01/customer-intimacy-and-other-value-disciplines
- Vanhonacker, W., Zweig, D., & Chung, S. (2007). A descriptive study of the marketing practices of Chinese private entrepreneurs. Asia Pacific Journal of Marketing and Logistics. 19(2), 182-198.
- Wu, J.; Guo, B., Shi, Y. (2013). Customer knowledge management and ITenabled business model innovation: A conceptual framework and a case study from China European Management Journal. 31(4), p359-372. 14p.
- Zweig, D., Chung, S., & Vanhonacker, W. (2006). Rewards of Technology: Explaining China's Reverse Migration. Journal of International Migration and Integration. 7 (4), 449-471.