# Chapter 9

# ICT Opportunities Unlimited: The International Dimension in Opportunity Development

# **Ingrid Wakkee**

VU University Amsterdam, The Netherlands

# Peter van der Sijde

VU University Amsterdam, The Netherlands

## **ABSTRACT**

Previous studies suggest that the majority of global startups have no choice but to operate across borders from day one (e.g., Oviatt and McDougall, 1994) to pursue their opportunities. Yet, few studies have explored how the opportunities for such firms come into existence and drive the emergence of global startups. In this chapter, we describe the process by which such opportunities originate, starting with a universal and fluid idea and moving into an opportunity that is at first moldable but that becomes increasingly coagulated. In addition, we describe how global startups make use of ICT to embed into a global network during this process.

#### INTRODUCTION

In the last two decades, research on international entrepreneurship focused on recently founded firms and their international activities (e.g., Zahra and George, 2002). A wealth of evidence presented in the literature suggests that the majority of startups or international new ventures have no choice but to operate across borders from day one (e.g., Oviatt and McDougall, 1994) to pursue their opportunities. A major theme in international entrepreneurship according to Dimitratos and Jones (2005) is inter-

DOI: 10.4018/978-1-60566-998-4.ch009

national opportunity perception. Yet, to date, few scholars looked beyond the process of inception (Madsen and Servais, 1997; Wakkee, 2004; Kirwan, Van der Sijde, and Groen, 2007) and examined the process opportunity development underlying these (global) ventures. Our contribution will look into the process by which an opportunity scenario unfolds in the context of global startups. We will link theoretical insights on opportunity recognition (see, e.g., Bhave, 1994; Ardichvili, Cardozo, and Ray, 2003; Schwartz and Teach, 2000; Sigrist, 1999) to theoretical insights on international entrepreneurship (Oviatt and McDougall, 2005) and of ICT-supported communication. We will utilize insights

## Box 1. Summary of the cases used in this chapter

TMP / C2V (Elders and Walsh, 1999; Ridder, Van der Sijde, Kirwan, and Elders, 2006): The company started in 1992 as a spin-off of the MESA+ Laboratory of the University of Twente as the Foundation Twente Microproducts. In 1998, it was transformed into a limited company, and the university transferred its intellectual property in the company over to the company. In 2000, it merged with the company BBV, which was established in 1991 in the area of integrated optics and was integrated into Kymata UK. In 2001, Kymata was purchased by Alcatel, and it became the MEMS division of Alcatel. In 2002, there was a management buyout. C2V is, as mentioned on its website, a leading supplier of Microsystems-based solutions from concept to volume (hence the name) production.

Laser ACT (Bant & Meijer, 1999): Laser ACT is the brainchild of three (small) industrial companies (ILT Industrial Laser Applications, DEMAR Laser, and ECO Engineering) and the research group Precision Engineering of the University of Twente. It specializes in laser cutting, welding, cladding, and hardening. It acts as an R&D partner for, primarily, regional industry.

Lemniscates (Van der Sijde, Bliek, and Groen, 2003): A company based on a patent developed by a veterinarian doctor who works the international equestrian circuit. He developed a cure (officially, a medical device class III) for horses with leg problems that are unable to race.

**Motion Inc** (Wakkee, Groen, and Heerink, 2007): The company was established in 1999 by three students. As running enthusiasts, they were interested in measuring the distance they ran while training, and a technology for doing this was developed: a runners' watch for sports shoes. The company's objective was to sell 14,000 units in 5-years time. As it turned out, it was not successful, but they discovered that the technology was more generic and could be used in other applications. Over a short period, they explored the technology's application in sports, rehabilitation, and finally in "general motion technology" for bio-medical and military applications.

from cases previously published in the global start-up literature to illustrate and conceptualize how entrepreneurs virtually embed themselves (Morse, Fowler, and Lawrence, 2007) and use IT to interact with international contacts throughout this process.

This chapter is structured as follows. First, we present a brief discussion of the global start-up concept as it evolved in the literature over the past two decades. Second, we present a review of contemporary insights on the opportunity recognition process. From this review, we will argue that ideas, which are the basis of any opportunity recognition process, are both "universal" and "fluid," meaning that they can lead to a variety of opportunities to be exploited. Opportunities, in turn, start out as being "moldable," but they become increasingly "coagulated" as the venture in which they will be exploited begins to take shape. The actual exploitation process is beyond the scope of this paper and will not be discussed. Using evidence from previously published cases, we describe the process, starting with an idea via the business opportunity to the opportunity scenario (see Box 1 for an overview). We especially pay attention to the international dimension (markets and resources). Third, we explore how global startups use ICT to support the process from a universal and fluid idea towards becoming a coagulated opportunity. We end this chapter with a future research agenda and a conclusion. See Box 1.

# BACKGROUND: GLOBAL START-UPS IN THE LITERATURE

The term *global start-up* was introduced, but not defined, by two authors (Mamis, 1989; Ray, 1989; 1995). The first author-Mamis-described a French firm (Technomed) involved in international exchange relationships before the first product flowed from the production lines; the company sold its products in more than 28 countries within three years of its first sale both through exports and wholly owned subsidiaries. The second author published a series of four case studies in which he used the term *global start-up*. From these articles, a tentative definition emerged: The original ideas on which the enterprise are built are discovered abroad, and/or the resources, partners, and markets needed to exploit the opportunities cannot be found domestically, i.e., they were globally dispersed.

The article of Mamis (1989) and a series of related events led Patricia McDougall and Ben Oviatt to begin their research into global start-ups

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/ict-opportunities-unlimited/40621

## **Related Content**

# Research on International Business and the COVID-19 Pandemic: A Review of the Managerial and Policy Implications

Aytug Sozuer (2023). *Analyzing International Business Operations in the Post-Pandemic Era (pp. 78-92).* www.irma-international.org/chapter/research-on-international-business-and-the-covid-19-pandemic/316359

# The Impact of Corporate Social Responsibility Performance on Competitive Advantage and Business Success: A Case of Vietnamese Enterprises

Khuong Ngoc Maiand An Khoa Truong Nguyen (2021). *International Journal of Asian Business and Information Management (pp. 1-15).* 

www.irma-international.org/article/the-impact-of-corporate-social-responsibility-performance-on-competitive-advantage-and-business-success/294095

# Financial Reporting of Intellectual Capital and Company's Performance in Indian Information Technology Industry

Karam Paland Sushila Soriya (2013). Business, Technology, and Knowledge Management in Asia: Trends and Innovations (pp. 1-17).

www.irma-international.org/chapter/financial-reporting-intellectual-capital-company/72578

### International Joint Venture in Thailand: What Factors Matter

(2021). International Journal of Asian Business and Information Management (pp. 0-0). www.irma-international.org/article//277235

### Institutionalizing Social Responsibility Through Workplace Green Behavior

Sulaiman Olusegun Atiku (2019). Contemporary Multicultural Orientations and Practices for Global Leadership (pp. 183-199).

 $\underline{www.irma-international.org/chapter/institutionalizing-social-responsibility-through-workplace-green-behavior/215475}$