

What constitutes a local cluster

A field study of Santa Catalina, Panama

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LTH | FACULTY OF ENGINEERING | LUND UNIVERSITY

20/5660

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Printed by Media-Tryck, Lund 2020  NORDIC SWAN ECOLABEL 3041 0903

LUND UNIVERSITY
Faculty of Engineering
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2020



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Acknowledgements

This project was conducted during the spring of 2019 and marks the end of the five-year long Industrial Engineering & Management program at the Faculty of Engineering at Lund University. This has provided us with an opportunity to apply and combine knowledge from various parts of our education and has given us valuable insight into what affects the business environment of a rural destination in a developing country. Furthermore, this study has widened our understanding of new cultures and the importance of ambitious and lion-hearted individuals in driving change.

We would like to thank our extraordinary supervisor Ulf Silbersky, providing us with crisp and invaluable guidance throughout the entire duration of the study.

We would also like to express our gratitude towards the people of Santa Catalina and the Veraguas province for their hospitality and guidance. Special thanks goes out to Janeth Gonzales and Marina Franco Abrego for providing logistical support and travel arrangements and Edwin El Paisa for immersing us in the Santa Catalina business environment. Moreover, we would like to express our gratefulness towards our family and loved ones for supporting us throughout this journey. Thank you.

Abstract

Title

What Constitutes a local cluster - a field study of Santa Catalina, Panama

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Background

Several academics, geographical economists and policy makers have sought to investigate the interplay between business clusters and tourism development. This dynamic is significant in emerging nations and less developed rural areas where tourism emergence may affect economic growth, society and environment. Many tourism related cluster studies have focused on the applicability of Porter's diamond model and comparing tourism destination competitiveness based on the components. While previous studies tend to investigate well established tourism destinations, few have targeted less established destinations investigating the existence of a cluster and its dynamics.

Purpose

The purpose of this study is to identify the relation between tourism destination development and spontaneous cluster formation.

Methodology

The initiation of the study of this project consisted of a literature review in order to explore the study's topic. The literature review resulted in a theoretical framework used

for analyzing empirical findings. Empirical findings were gathered through qualitative interviews in Santa Catalina with actors relevant for the study's topic. Using the aggregated insights from the qualitative empirical data gathering, the Santa Catalina business environment could then be analyzed based on the theoretical frameworks.

Conclusions

Santa Catalina could be viewed as a cluster by categorizing the main actors using an adjusted approach from Hallencreutz et al (2004) to be suitable for a local tourism cluster. The local tourism cluster of Santa Catalina is characterized by a competitive advantage arising from the interplay between shared entrepreneurial goals and values, ease of doing business and the entrepreneurs' utilization of Coiba National Park. Moreover, a "locational development entrepreneur" and foreign entrepreneurs' function as global pipelines connecting the local buzz of Santa Catalina to actors outside of the cluster.

Keywords

Cluster Theory, Tourism Cluster, Cluster Emergence, Local Buzz, Global Pipelines, Locational Development.

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Introduction

This chapter focuses on what led up to the initiation of this study as an introduction to the report. Background information regarding the authors and place of the study is presented along with a description of the academic focus, the purpose of the study, research questions to be answered and the chosen delimitations. At the end of the chapter, an outline of the study is presented along with a brief description of the different chapters.

Background

Several academics, geographical economists and policy makers have sought to investigate tourism development in less developed rural areas, arguing it could play a significant role for the economic and social growth of a region (Dimitrovski et al. 2012). Accordingly, many tourism development studies have been based on, and adapted from, Porter's (1990) concept of business clusters to investigating key components and dynamics for regional competitiveness and growth. Clusters can be created *spontaneously* from the co-presence of key factors or their creation can be *policy driven*, triggered by the strong commitment of governmental actors (Chiaroni & Chiesa 2006). Likewise, Kim and Wicks (2010) separate clusters in tourism using the presence or absence of transnational companies (TNCs) who can facilitate cooperation and lead the development. While previous studies have a tendency to investigate well established tourism destinations, smaller policy driven clusters, or destinations hosting TNCs, few have targeted less established destinations exploring the process and key factors for spontaneous cluster formation.

The idea of conducting this study emerged from the combined previous experiences of the authors, when discussing sustainable development of developing nations. One of the authors mentioned the rural village of Santa Catalina, Panama as an interesting location regarding the subject. Having previously visited Santa Catalina for three weeks during 2015, the author had perceived the location to be authentic and unexploited, despite an attractive climate and possibilities for touristic activities. The other author had already, through his interest in surfing, heard mentioning of Santa Catalina as an unexploited surf destination in Central America offering high quality

surfing. With shared academic backgrounds in business and entrepreneurship, this sparked curiosity in finding out more about the real story behind the rumours using existing theories of locational development and competitiveness taught at university. Cluster theory and Network theory have both been used to describe regional competitiveness and industrial dynamics, but what were the triggering factors, how did they arise, and what was the process behind the forming of Santa Catalina as a seemingly competitive tourist destination?

The rural village of Santa Catalina, Panama is located on the pacific coast in the municipality of Soná, which in turn is located in the province of Veraguas. Santa Catalina has around 300 inhabitants, additionally there is an expat community of around 50 people who have settled in the village running businesses focused around the tourism industry. The nearby Coiba Island is a national park (and a UNESCO World Heritage Site) and is the home of many threatened species as well as a place to discover new previously unknown species, of both marine and terrestrial animals. Travel Guide Book publisher Lonely Planet mentions Santa Catalina as one of the best surf spots in Central America, writing; *“Among Central America's top surf spots, Santa Catalina has right and left breaks comparable to Oahu's Sunset Beach on a good day. Enjoy it while it's still somewhat remote, undeveloped and home to some seriously wicked surf.”* (Lonely Planet 2019).

For the sake of understanding the context of where the study has taken place, let us first orient ourselves and travel to the rural village of Santa Catalina, Panamá.



Figure 1 Continental map

Starting from a global map zooming into Latin America where a piece of land separates the Atlantic Ocean from the Pacific Ocean and Middle America borders South America we discover the land called Panamá.



Map data ©2020 Sweden Terms Send feedback 50 km

Figure 2 Map of Panama

Here we start to spot Santa Catalina within the region of Veraguas, Panamá. Outside the coast we see Coiba Island.

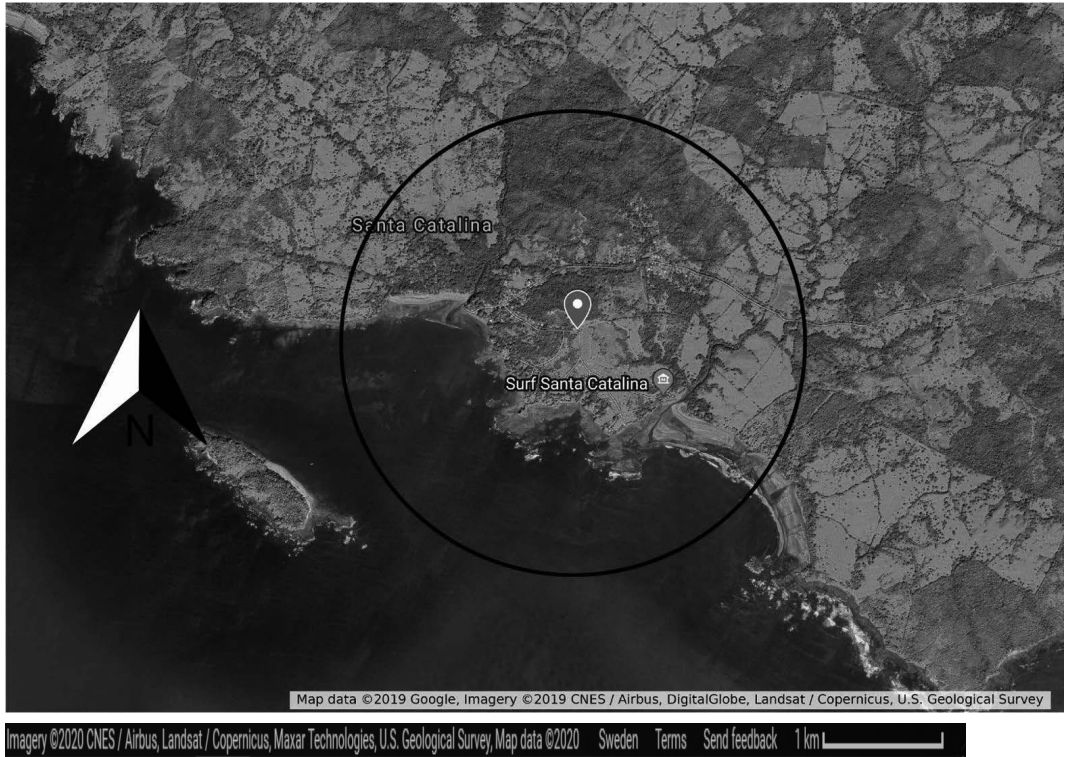


Figure 3 Santa Catalina and surrounding areas

Zooming further to let us view Santa Catalina within a 2km radius of town centre.



Figure 4 The Village of Santa Catalina

Finally, we get a view of actors offering accommodation or attractions in Santa Catalina. (Sanchez 2017)

Purpose

The purpose of this study is to identify the relation between tourism destination development and spontaneous cluster formation.

Delimitations

In line with the explorative approach, the study will focus on the location of Santa Catalina (with a 2km radius from village centre) and will not have a comparative approach, comparing Santa Catalina with other locations or clusters. Likewise, this study will focus on investigating the current business environment in Santa Catalina and its past growth rather than speculating on how the location might develop in the future.

Research Questions

To explore how Santa Catalina developed into a popular tourist destination and what key factors drove the development, the research questions were divided into two areas: *destination development* and *cluster formation*.

Destination Development

RQ1 - How did Santa Catalina develop over time as a tourist destination?

RQ2 - What were the key events behind the development?

Cluster Formation

RQ3 - Who are the main actors and what are their competencies?

RQ4 - What are the relations between the main actors and what are the dynamics of the cluster?

RQ5 - What are the key events, pre-existing conditions and triggering factors for cluster formation in Santa Catalina?

Disposition of Report

Introduction - *This chapter focuses on what led up to the initiation of this study as an introduction to the report. Background information regarding the authors and place of the study is presented along with a description of the academic focus, the purpose of the study, research questions to be answered and the chosen delimitations. At the end*

of the chapter, an outline of the study is presented along with a brief description of the different chapters.

Methodology - *This chapter specifies the methodology used in this study. The section covers how the study was conducted, as well as providing motivations for the methodological decisions made. The section is concluded with a reflection to nuance difficult methodological decisions with possible benefits as well as possible limitations.*

Theoretical Foundation - *This chapter describes theoretical models and conceptual frameworks used as a foundation for conducting field research. It is initiated with background to the chosen theory of localization. It further clarifies how a Cluster in this thesis is defined and continues by describing cluster theory in further detail. This leads into an investigation of the concept of Tourism Clusters and later different network-based concepts used to explore and define the relations of the central actors of a location. Finally, a summary of how the theories will be utilized in this study is presented.*

Empirical findings - *This chapter presents data gathered empirically throughout the study. The data is presented in three parts where the first one is aimed at describing the emergence of Santa Catalina as a tourist destination and the second part categorizing actors and describing dynamics of the business environment using cluster theory. The third part will present further actors and dynamics outside of the scope of, or not fitting in the definitions of, any of the aforementioned frameworks.*

Analysis - *This chapter analyzes and explores empirical findings with the help of existing theoretical frameworks, initially analyzing the main actors of the cluster and their relations, followed by an investigation of the dynamics behind the spontaneous cluster formation.*

Discussion - *This chapter discusses learnings from trying to connect existing different theoretical and conceptual frameworks with what was observed in this study.*

Conclusions - *This chapter presents the findings of the conducted study by answering the posed research questions posed and complementing this by discussing future research possibilities.*

Methodology

This chapter specifies the methodology used in this study. The section covers how the study was conducted, as well as providing motivations for the methodological decisions made. The section is concluded with a reflection to nuance difficult methodological decisions with possible benefits as well as possible limitations.

Santa Catalina in the Veraguas Province of Panamá was selected as a destination for conducting a 6-week field study as it is a suitable destination within a small geographical area in a developing country. Moreover, one of the authors have visited the location before this study, thus being able to utilize acquired pre-knowledge of Santa Catalina.

The nascent state of prior theory and research on business environment of locations similar to Santa Catalina led to an exploratory case study approach, consisting of an initial literature review, qualitative data gathering and data processing/analysis, in order to identify patterns and contribute with a suggestive theory (Höst, Regnell & Runesson 2006)(Edmundson & McManus 2007). Moreover, since an exploratory approach aims to develop a theory with support of collected data, as opposed to a confirmatory procedure, the former was chosen as the suitable approach. Another characteristic of the exploratory research approach is its compatibility for studies where little or no scientific knowledge exists about the situation to be researched. As stated above, no prior research has been done on locations similar to Santa Catalina. (Stebbins 2001) To account for uncertainty in the nascent field a flexible approach was used. (Höst et al. 2006). The case study approach is suitable for investigating “a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin 2002). A case study is typically divided into five different phases; Research design, preparation of data collection, data collection, data analysis and composing the research report (Yin 2002). The aforementioned description of case study research distinguishes the methodology from other types of research approaches, such as experiments or surveys. Therefore, due to the lack of previous studies around Santa Catalina, a case study approach was chosen for examining the location.

The goal of the initial literature review was to create a theoretical foundation for collecting empirical data and analyze findings. The literature review was conducted by searching for relevant theories using keywords related to the problem formulation in databases. Initial searches on general keywords led to brief knowledge gathering, to be able to make more narrow searches based on the terminology and contents of the initial results. This, accompanied by further exploring sources of found literature, led to the construction of a theoretical foundation. Keywords, and variants thereof, used for searching relevant literature were:

- Localization Theory + Industries
- Growth Theory + Industries
- Cluster Theory
- Business Cluster
- Regional Cluster
- Local Cluster
- Networks + Cluster
- Social networks + cluster
- Tourism Cluster
- Cluster Growth
- Cluster Emergence
- Cluster Formation
- Cluster Formation + Tourism
- Spontaneous Cluster Formation
- Spontaneous Cluster + Tourism
- Case Study + Cluster
- Case Study + Tourism Cluster

Based on the explorative nature of the study and the characteristics of the interviewees, the interviews were conducted in a general interview guide approach in an informal and conversational manner (Al-Nateem 2012)(Edmundson & McManus, 2007)(Höst et al. 2006). By allowing most of the questions asked to flow from the immediate context while using the interview guide to assure relevant topics were covered both methods combine to allow interviewees elaborate on personal stories relevant to the topics in a spontaneous manner (Höst et al. 2006).

The interviews were conducted with one interviewer asking questions, assuring that a relevant discussion is maintained, and another interviewer taking notes, summarizing answers based on the topics of the interview guide as well as collecting interesting quotations. To assure accurate answers, interviews were conducted in Spanish or English aiming at having the interview on the interviewees' native language (Welch & Piekkari 2006).

No recording devices were used, and interview questions were not sent to the interviewee beforehand, in line with the informal setting, to enable for interviewees to spontaneously and freely discuss personal and sensitive information from the interviewee, especially related to topics such as strategy and competition. Interviews were conducted at a location spontaneously agreed upon with the interviewee, taking into consideration the characteristics of the interviewees and the informal approach. (Al-Yateem 2012)

Qualitative data was gathered through conducting N = 22 in-depth interviews. Purposive sampling was used to generate a representative range of local stakeholders based on the theoretical frameworks (Höst et al. 2006). The interviews were conducted during a 6-week period (March–May), with an average interview time of approximately 30 minutes (See Appendix for interviewee list). Non-responses was avoided by rescheduling interviews and by using an informal interview approach (Al-Yateem 2012)(Höst et al. 2006).

To ensure the quality of the empirical investigation and allow for revision of interview technique, three shorter initial interviews with local stakeholders were conducted. This assured validity of the interview guide, established consistency in interview technique and nuanced the authors' first impression the location, providing a foundation for further elaboration on relevant patterns from the data acquired. (Corbetta 2003)

Information gathered from interviews was processed and content was exploratory and iteratively analyzed using a deductive editing approach based on the topics of the interview guide and theoretical framework. (Höst, et al. 2006)(Edmundson & McManus 2007)

Reflection

Informal Interviews

The nascent field of study mention little about how to create a setting enabling interviewees to freely and spontaneously elaborate on potentially sensitive issues. Because of the small size of the destination and the different culture that might exist in Panama as a developing country, regarding scepticism towards researchers, the choice was made to explore alternative approaches in other fields. Research on interviewing sensitive topics within the nursing field has suggested that an informal interview approach with note taking is a preferred method to audio recording if audio recording could be considered to affect the quality of data (Al-Yateem 2012). Even though audio recording provides availability to re-listen to interviews in case of doubt during data analysis, it was decided that the altering effect of data gathered during interviews would outweigh the benefits provided by this method.

Cluster boundaries

Clusters does not often have clear-cut boundaries, which can make it difficult to reliably establish cluster membership and developing a sampling frame (Martin & Sunley 2003). As a consequence, it is considered wise to adopt a case-study method and limit observations to in-depth analyses of one cluster (Eisenhardt 1989, Yin 2002). The use of a case study facilitates understanding of social characteristics, which is difficult to understand from secondary data sources.

Non-probabilistic sampling

A non-probabilistic sample of interviewees was used to assuring the contribution of important actors. However, the sampling might not be perfectly representative of the population and caution needs to be taken considering generalizing our findings to other clusters.

Theoretical Foundation

This chapter describes theoretical models and conceptual frameworks used as a foundation for conducting field research. It is initiated with background to the chosen theory of localization. It further clarifies how a Cluster in thesis is defined and continues by describing cluster theory in further detail. This leads into an investigation in the concept of Tourism Clusters and later different network-based concepts used to explore and define the relations of the central actors of a location. Finally, a summary of how the theories will be utilized in this study is presented.

Localization, Growth and Competitiveness with Cluster Theory

Why Cluster Theory?

Early research of geographical concentration and localization of specialized industries have been conducted since the late nineteenth century. In the work *Principles of Economics*, Marshall (1890) highlights several characteristics of local concentrations of specialized industries (agglomerations), such as: growth of supporting industries, availability of skilled labor and low transaction- and transportation costs. Further concepts didn't gain recognition until the 1990s, when Michael Porter developed the concept of clusters, originally to describe international competitiveness between nations. Porter's theory of the competitiveness of nations and the concept of clusters has since then been regarded as one of the most influential theories of local development and growth (Isserman 1998). In his work *Competitive Advantage of Nations*, Porter (1990) suggests a diamond model to describe dynamics of a nation's industries. Porter finds that the dynamics of the diamond model is intensified if specialized industries are geographically concentrated and suggests that the diamond model is the driving force for cluster development, not only in nations but also in regions or cities. Chiaroni and Chiesa (2006) suggest that cluster formation can mainly be sorted into *spontaneous cluster formation* and *policy driven cluster formation*. Spontaneous clusters emerge and grow from the combination of specific conditions, without the direct involvement of public actors. Conditions allowing for spontaneous cluster formation include easy for entrepreneurs to start businesses, natural information transfer mechanisms, a strong entrepreneurial culture, innovative funding mechanisms and uncomplicated legal frameworks. The triggers for policy-driven

clusters are direct intervention from policy makers to enable the development of a base of specialized firms. The aim is to improve the factors mentioned above, to increase the entrepreneurial “attitude” and favour the generation of new companies. Cluster development from this point of view has become popular in policy makers’ toolboxes, often focusing on complex projects including larger corporations in technology intensive industries in combination with public organisations such as universities and hospitals. (Desrochers & Sautet 2004). The complexity of these policies often require a governmentally backed organisation centrally in the cluster, managing services and funds for new companies (Chiaroni & Chiesa 2006). Desrochers and Sautet (2004) suggest this might restrain spontaneously evolved diversity, prevent the spontaneous creation of inter-industry linkages and hamper the creation of new ideas and businesses.

What is a Cluster?

Hallencreutz, Lundeqvist and Malmberg (2004) add that actors in a cluster create more combined value than they otherwise would have made individually. Martin and Sunley (2003) highlight the lack of clear definitions of a cluster, relating to the geographical and industrial boundaries of the cluster and to relationship and connection strength. They believe Porter’s understanding of what constitutes ‘proximate’ is highly elastic as it can range from a single city or region to a country or a group of neighboring countries (Martin & Sunley 2003). Furthermore, Martin and Sunley (2003) highlights the problem of the level of industrial aggregation when defining a cluster, meaning a car industrial cluster could also be regarded as part of a vehicle industrial cluster. The critique towards the cluster concept is summarized stating: “The existence of clusters, appears then, in part at least, to be in the eye of the beholder – or should we say, creator.”(Martin & Sunley, 2003 p16). To address this, we have chosen to adapt Isaksen and Hauge’s (2002, p.14) more narrow definition of a cluster: “*a concentration of 'interdependent' firms within the same or adjacent industrial sectors in a small geographic area*”. Still not entirely specific on defining to what extent a geographic area is small or what is considered adjacent industrial sectors, we argue this definition is more analytically useful by distinguishing firms as the main agents of a cluster.

A Locational View on a Cluster

Hallencreuz, Lundeqvist and Malmberg (2004) further elaborate upon the cluster definition by highlighting six principal components of a cluster. Components are derived from Porter (1990) and adapted to view firms as the main agents in the cluster. By analyzing the Swedish music industry using cluster theory, Hallencreutz et al (2004) successfully identify and map out a cluster using this approach. Their six principal components of main actors are defined as the following:

- Core Products, which are defined as producers of the final product within the value-chain of the cluster.
- Specialized Input Goods or Services, defined as firms offering goods or services specifically developed for the production of the core product.
- Production Technology, defined as providers of tools and equipment needed for the core product.
- Strategic Knowledge-Based Services, defined as firms providing services that directly or indirectly support the development of the cluster.
- Related Industries, defined as firms not producing core products or being closely interwoven to the other actors but still indirectly affect the development of the cluster.
- Customers, such as individuals or companies with a demand for the core product.

While Hallencreuz Lundeqvist and Malmberg (2004) examine clusters based on firms as the main components of the cluster. A more suitable approach for analyzing the components of a tourist destination would be focus the analysis around the destination itself with tourist attractions and customer experiences as main components, rather than the firms themselves. Therefore, customers are considered central actors in the tourism cluster.

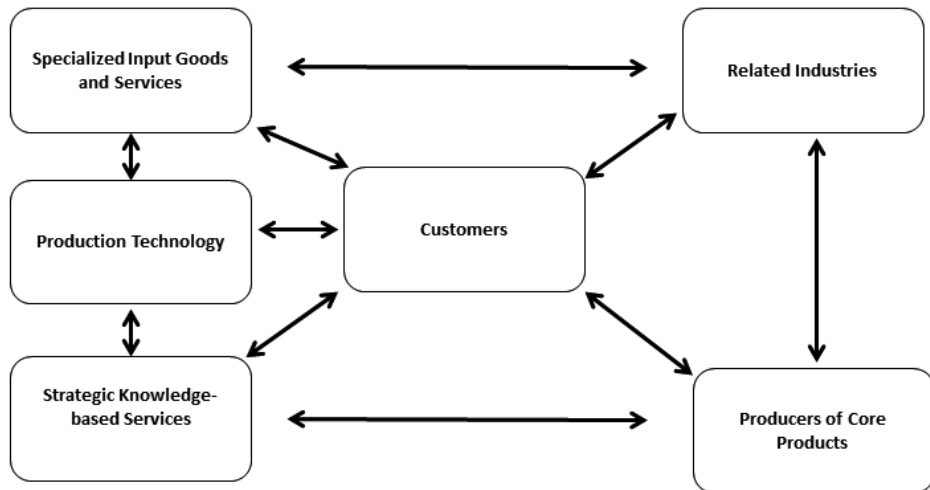


Figure 5 Six Components of a cluster

The figure above shows six Components of a Cluster illustrating the customer-centric locational view of a cluster. Moreover, all components of the cluster are interlinked with each other, as indicated by the arrows. Note that names of components have been shortened to save space but that components **still refer to actors** (firms or individuals) and not actual goods or services.

Porter's Diamond

The cluster concept has been used to explain industrial dynamics and Porter's related theories help explain which factors contribute to competitiveness in national and regional development. Porter's diamond model is widely used for the study of economic geography. The diamond model (Porter 1990) suggests actors in a cluster together with other factors constitute four elements that, individually and through their interactions, contribute to locational competitive advantage: Factor conditions, firm strategy, structure and rivalry, demand conditions, and related and supporting industries.

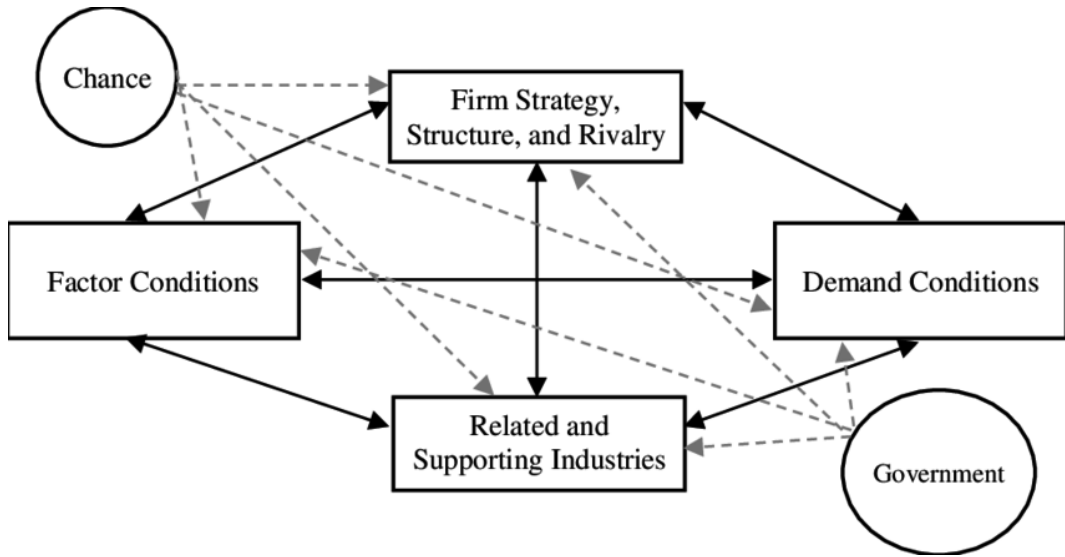


Figure 6 Porters diamond

Porter's Diamond shown in the figure above: The source of locational competitiveness. Note that elements **refer to conditions** (not actors) affecting the competitiveness of the cluster. Arrows indicating interconnectedness.

Factor Conditions

The mix of factors of production employed differs among industries and locations. Porter (1990) names five types; Human resources, Physical Resources, Knowledge resources, Capital resources and Infrastructure. Clustered firms gain competitive advantage if they efficiently and effectively deploy low-cost or uniquely high-quality factors relevant to competition in their specific industry. Further, Porter (1990) makes the distinction between basic factors and advanced factors, suggesting basic factors like natural resources are passively inherited or easily attained. Advanced factors like advanced technological knowledge is created by firms, often making them scarcer and more significant in creating a competitive advantage. Based on this, Hallencreutz et al (2004) suggest sustainable competitive advantages are created by firms, not given by environment. Many locations possess relevant factor conditions, yet few manage to develop and combine capabilities tailored to fit the factor mix essential for the specific industry. In short, competitive advantage arises from how firms respond to, and utilize, factor conditions.

Demand Conditions

The demand conditions of the home market can be analyzed based on Local buyer needs, Size- and growth patterns, and Internalization of home demand. Porter (1990) argues that the nature and quality of the home demand is more important than the size of the demand. In the case of tourist destinations, the need and demand originating from tourists are not necessarily identical to home demand from local buyers.

Related and Supporting Industries

Porter (1990) suggests that the presence of internationally competitive suppliers may confer competitive advantages on firms in many other industries through efficient, early, and sometimes even preferential access to the most cost-effective inputs and services. Similarly, the presence of successful related industries may provide opportunities for information flow and technological interchange. He argues sharing or coordinating activities in the value chain (e.g. technology development, manufacturing, marketing, distribution or service) or involving complementary products is easier due to geographical and cultural proximity. Competitive advantage emerges not from mere accessibility but from the efficiency of utilization of close working relationships between industries, often depending on the rest of the diamond.

Firm Strategy, Structure and Rivalry

The last element in Porter's (1990) diamond model is related to strategy, structure and rivalry of local firms. Local management culture might promote different types of firm structures. The local management culture can nurture internationally successful firms in industries where the locally promoted firm structure is suitable for the particular industry.

Company goals are dependent on individual circumstances. The level of development of capital markets affects the ownership structure of companies, which in turn affect company goals. Goals of individuals also affect a firm's performance. Goals of individuals are based on various factors such as the reward system of employees, relationship between manager and employee and individual attitude towards risk taking. Local prestige also has an effect on successfulness of industries.

Local rivalry is a driving force for companies to innovate and improve. The pressure from local competition on price or technology stimulates local firms to develop capabilities useful for competing outside the local market and reduces the dependence on local basic factor conditions. Moreover, the level of local rivalry and competitions depends on the formation of new businesses.

Dynamics, Government and Chance

Porter (1990) argues that each element of the diamond model tends to be dependent on other components. For example, home demand conditions stimulate investment aimed toward development of factor conditions. Another example would be that favorable factor conditions could be transferable to related and supporting industries. Components of the diamond model reinforcing each other make the whole system more important than the individual parts. A competitive advantage based on solely one or two elements is possible in industries based on natural resources, involving little sophisticated technology or skills (Porter, 1990). Thus, advantage in every component is not a prerequisite for competitive advantage but can prove unsustainable if the conditions shift rapidly. In some versions of the diamond, Porter (1990) includes Chance and Government as supporting factors to the original four elements. Porter (1990) highlights the importance of chance regarding shifts in competitive advantage outside the control of firms. Pure inventions, wars and natural disasters influence the system to reshape industry structure. Porter (1990) emphasizes that entrepreneurship is at the heart of competitive advantage and explains these acts are often seen as largely random. Government, at all levels, can influence each of the determinants and affect competitive advantage by the use of policies, regulation and investments. Porter (1998) often includes Chance and Government as extra factors in his diamond model, although not elements in themselves he regards them as part of the dynamics.

Cluster Emergence

While Porter's diamond model (1990) describes the dynamics and driving forces behind cluster development, other research on cluster emergence has mainly taken two different perspectives, arbitrary or deterministic. Boschma (1997) suggests clusters tend to develop in a particular location by a seemingly arbitrary process. In this view, the accidental combination of personal initiatives and arbitrary (local and

non-local) incentives trigger the establishment of new firms that mark the start of the cluster building process. Simmie and Martin (2010) contrast this by claiming that the emergence of a cluster may not only be due to chance but also stimulated or enabled by pre-existing resources, competences and experiences inherited from previous economic activity. Isaksen (2016) combines these perspectives in an analytical framework for cluster emergence, emphasizing that it is the interaction between arbitrary triggering factors and deterministic pre-existing conditions that ultimately lays the foundation for cluster emergence. Pre-existing conditions are defined as *factors that are present before the localized cluster emerges and function as supporting prerequisites* and triggering factors are defined as *specific events that trigger the emergence*, often requiring social action by knowledgeable pioneering individuals, companies or governments that are able to utilise favourable pre-existing conditions. (Isaksen 2016)(Simmie & Martin 2010) Based on this framework, the key triggering factor for cluster emergence is the establishment of new firms and the vital pre-existing condition is that the necessary knowledge and competence to start the new firms are available in a region.

These components are then divided on three geographical levels; micro, meso and macro level (Isaksen 2016). This is done to be able to analyze the pre-existing conditions and triggering factors within different levels of detail. In this thesis, the micro level is defined as the local village of Santa Catalina with a 2 km radius from the town center. The Meso level is defined as the regional province of Veraguas and the Macro level is defined as national and international environment.

Levels	Pre-existing conditions	Triggering factors
Micro	Latent entrepreneurs that create and/or mobilise key knowledge	Establishment of one or more pioneer firms by local or 'external' entrepreneurs
Meso	Existing relevant knowledge in the region and absorptive capacity for extra-regional knowledge	Actors that combine existing pieces of knowledge and/or commercialise analytical knowledge
Macro	Availability of new technological knowledge	Changes in national or international institutional frameworks

Figure 7 Pre-existing conditions and triggering factors in micro, meso and macro levels according to Isaksen (2016)

Tourism Clusters

Cluster theory has been widely adopted by policy makers to address development in many different industries and geographical areas. Monfort (2000) pioneered academic cluster research within the field of tourism, building on Porter's theory, Monfort (2000)

elaborated further on the cluster concept, defining a tourism cluster as a “a complex group of different elements, including services carried out by tourism companies or business; richness provided by tourist holiday experiences; multidimensional gathering of interrelated companies and industries; communication and transportation infrastructures; complementary activities supporting services; and natural resources and institutional policies”. (Monfort 2000 p.46). Fundeanu (2017) simplifies this by stating that a tourism cluster is *a geographic concentration of companies and institutions interconnected through tourism activities*. Cunha and Cunha (2005) suggest that in a tourism cluster, complementary local actors interacting around the tourism product leads to collaborative activities and that simultaneously the inter-related companies also show interdependence leading to competition, spurring innovation. Ultimately, this improves the tourism product and lays the foundation for the competitiveness of the tourism cluster.

In later research, when analyzing productivity in clusters, Porter (2000) elaborates further on the dynamics of actors, finding complementarities vital for productivity in a cluster. When highlighting three main types of complementarities, Porter(2000) touches upon vital dynamics relevant for a tourism cluster:

For a tourism cluster, **complementary products for the buyer** is crucial for the visitors' experience. The experience of a tourist destination is not only dependent on the main attractions of the destination. Complementary products and services such as restaurants and gift shops will affect the visitor's overall experience of the destination. Clustering of businesses facilitates coordination of products and services and stimulates improvement which in turn improves overall quality.

Marketing complementarities are another vital part of productivity within a cluster. Co-location of businesses provides efficiencies in joint marketing activities within a cluster. While not only enhancing marketing performance of individual firms, the reputation and attractiveness of the whole location can be improved, which is highly relevant for tourism destinations. Clustering of firms also reduces the perceived risk for a potential buyer, since the buyer have the availability to visit several firms in one single visit.

Complementarities also arise due the **alignment of activities among cluster actors**. Co-location of firms facilitates linkages with suppliers and distribution channels. Cluster productivity can also be improved when certain cluster actors develop standards in a coordinated manner.

Furthermore, Kim & Wicks (2010) modifies the elements of Porter's model to indicate competitive advantages specifically in tourism. Emphasizing on the interconnections and networks among actors, this approach focuses on small and medium sized enterprises not necessarily involved in the same economic sector. Based on Porter's description of productivity in a cluster, Kim & Wicks (2010) decide to add *complementaries* as a component of the diamond, replacing *relating and supporting industries*. Complementaries are explained as factors that contribute value to core resources and includes food services and transportation. They argue, for tourism clusters, firms producing complementary products or services are more prominent than other related industries. Similarly, *Destination Management* is added on behalf of *Firm, Structure and Rivalry*, reasoning the role of cooperation surpasses the importance of rivalry. They argue Destination Management Organizations (DMOs) can enhance the appeal of the core resources and strengthen the quality of complementaries through cooperation in service, resources, information and marketing of the destination. DMOs can ensure a seamless interface among all elements of the total travel experience, for example the convenience of intermodal transfers (Crouch & Richie 1999). Effective information sharing provides managers with information for better understanding visitor needs, and for more effective product development. Crouch and Richie (1999) continue to argue that sustainable competitiveness of a destination is achieved by effective maintenance of essential resources subjected to damage by tourism.

Kim & Wicks (2010) argue that transnational companies (TNC) may be vital to a tourism cluster in some parts of the world, since they can be a force of economic integration. Especially tourist destinations in emerging economies where the TNCs might help "reap the economies of scale or scope, diversify geographical risk and better exploit the gains of common governance of related value-added activities". Simultaneously the transnational companies can facilitate connections between the host country and the international tourism market. In short, TNCs can help facilitate

cooperation and lead the development of the cluster. Without TNCs they explain, the local actors will instead have to organize these activities spontaneously, which they argue is less likely to occur since it instead might require a local driving “locomotive” actor with the knowledge and motivation to lead the development.

Moreover, Kim and Wicks (2010) argue that cluster theory historically fails to show how networks and interconnectedness improve the potential for successful clusters. They state that actors in a cluster should cooperate in order to maximize individual profits as well as creating benefits for the cluster region. Cooperation can occur through different organizations such as local governments, travel associations or DMOs. Kim & Wicks (2010) continue describing the relationship between cluster actors being characterized by co-opetition, referring to a relationship where a competitor of a cluster actor can be a collaborator with the same actor within other areas. TNCs with luxury hotels might both compete with, and complement, Small and Medium-size lodging enterprises such as bed and breakfast establishments, while actors such as food stalls or activity providers mostly complement the full tourist experience. Kim and Wicks argue (2010) this type of co-opetition is beneficial for the tourism cluster region. For example, local businesses competing with transnational companies (TNCs) can collaborate on technology and marketing for the tourism destination, which in turn can contribute to additional knowledge spill over for all actors.

Relations of central actors through networks

In a cluster, networks can be explained as concrete patterns of relationships among entities in the cluster. Within a cluster, different types of networks can coexist, affect one another and determine the development of the cluster; Personal and business relations of entrepreneurs can determine the locations of firms, personal relations are positively associated with the emergence of, and underpins (Perkmann & Walsh 2007), formal business relations between firms, while the number of personal- and business connections a firm has a positive effect on its production of knowledge (Romero 2016)

Proximity

Moodysson and Jonsson (2007) argue that accessibility (physical distance combined with infrastructure to include time and cost dimensions) is more relevant to actors in a cluster today rather than bare absolute distance. They favor using functional and relational proximity for defining and exploring investigating networks. In their analysis they define functional proximity as the ability of the actors to arrange face-to-face meetings in the duration of one working day. Relational proximity develops the notion of cultural proximity to include cognitive, organizational, social, and institutional proximity, creating a non-tangible dimension based on affinity and similarity. This non-tangible dimension is mediated by values, beliefs, norms, repetitive interaction and models of reality supported by culture.

Local Buzz and Global Pipelines

To avoid the risk of becoming too narrowly focused, and unable to shift toward novel ideas, clusters need to maintain linkages with external actors (Bathelt, Malmberg, & Maskell 2004). Therefore, Bathelt et al (2004) suggest successful clusters are those that are characterized by a dense local network (buzz) and are also involved in creating and maintaining global pipelines to external actors.

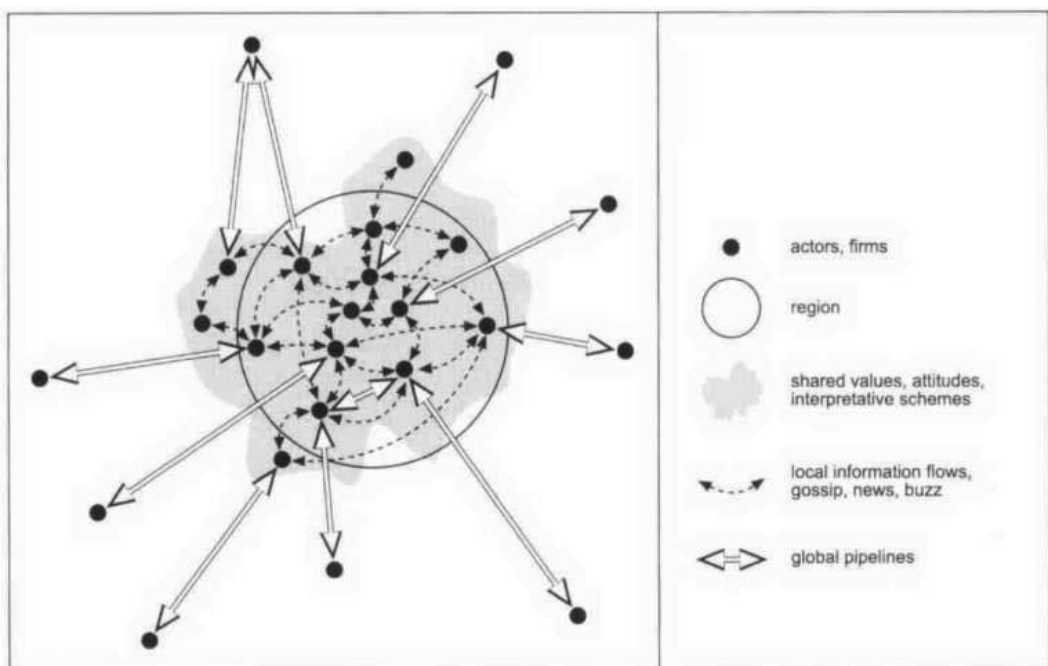


Figure 8 Local buzz and global pipelines

Bathelt et al (2004) define local buzz as the knowledge flow regarding local learning processes which build on knowledge embedded in local network actors and that the local buzz is relevant information created by face-to-face meetings, enabled by co-location of firms. The local buzz occurs more or less accidentally, and local actors do not need any extensive investments in order to participate in the knowledge flow. High quality local buzz also involves local actors in complementary industries. Global pipelines are defined as knowledge flows connecting the local network with its surroundings. Contrary to local buzz, global pipelines provide a knowledge flow in a more structured manner as information is shared selectively with an external partner. High quality of knowledge flow involves a balance between local buzz and global pipelines. (Bathelt et al. 2004)

Network Openness and Strength

Eisingerich et. al. (2010) use social network theory for modelling cluster performance, analyzing the relation between Network Strength, Network Openness and Environmental Uncertainty. Network strength is defined by the level of trust between actors, as a function of the frequency, intensity and stability of the interaction among network actors. Network openness is a function of diversity among actors, willingness to accept new actors and level of connections with actors outside of the cluster. Environmental uncertainty is composed of market turbulence, competitive intensity and the rate of technological change. Eisingerich et. al. (2010) find that both network openness and strength affect the cluster performance. However, the positive impact due to network openness increases as environmental uncertainty increases. The opposite is true for network strength. The positive implications of network strength decrease as environmental uncertainty increases.

Coopetition

Bengtsson and Kock (2000) argue that an advantageous relationship among competitors is based on coopetition. A relationship based on coopetition is characterized by cooperation in certain activities and competition in other activities. Based on an explorative case study of industries in Sweden and Finland, Bengtsson & Kock (2000) find that the characteristic of a relationship between competitors will vary depending on the proximity of the activity to the customer. For example, activities related to R&D could be done in a cooperative way, while activities related to launching the product could be characterized by competition.

Theoretical Framework

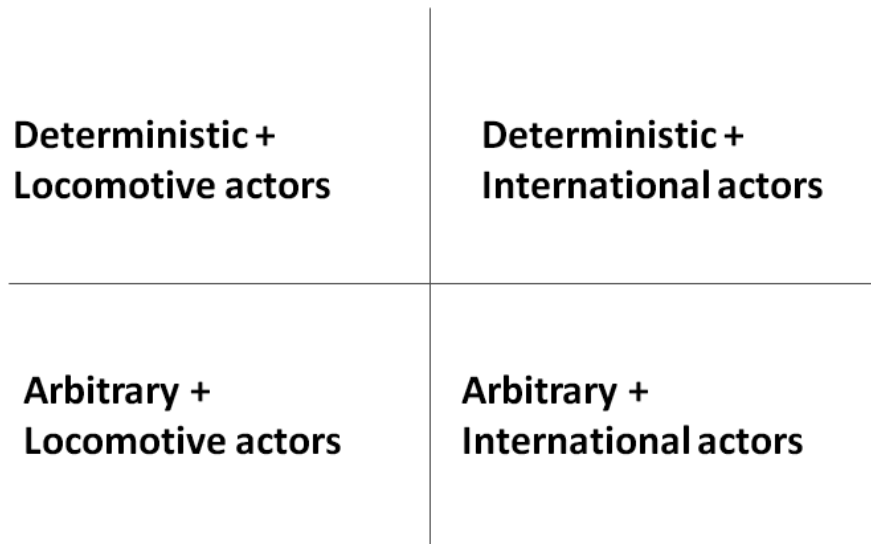


Figure 9 - Showing different conditions for cluster emergence

As shown in figure 9 cluster emergence can be divided into four different categories based on one hand whether the process is deterministic or arbitrary, on the other hand if the central actors are Transnational Companies or local locomotive actors. Each set of conditions for this process presents unique attributes. Where the cluster emergence process is characterized by being deterministic and involving locomotive actors, policies and political decisions tend to be the driving force. Deterministic processes involving transnational actors are also driven by political decisions and policies combined with growth ambitions from TNCs. An arbitrary cluster emergence process involving transnational actors is driven by TNCs investigating and identifying business opportunities at the given location. Lastly, scientific knowledge on what drives an arbitrary process involving local locomotive actors is relatively unexplored and the focus of this study.

In this thesis a cluster is defined as: *"a concentration of 'interdependent' firms within the same or adjacent industrial sectors in a small geographic area"* (Isaksen & Hauge, 2002 p.14). Complementing this, a tourism cluster is defined as: *"a geographic concentration of companies and institutions interconnected through tourism activities"* (Fundeanu 2017). Moodysson and Jonsson (2007) argue accessibility and affinity are

more relevant as measures of proximity to actors today than bare absolute distance. Naturally, Santa Catalina will be regarded as said small geographical area. Hallencreuz et al (2004) further elaborate on the cluster definition by highlighting six components of a cluster. This framework will be used for investigating and mapping out the possible cluster. Porter's (1990) diamond model has been developed for determining competitiveness of a geographical location. The diamond model will be used for describing and analyzing the possible local competitive advantage in Santa Catalina and its dynamics. Isaksen's (2016) model for cluster emergence determines factors contributing to cluster formation. In this study, Isaksen's model will be used for analyzing factors, contributing to the possible development of a tourism cluster. Porter (2000) elaborates further on the dynamics of actors, highlighting three types of complementarities vital for productivity in a cluster, relevant for the tourism industry. Further highlighting the importance of Complementaries, Kim & Wicks (2010) revises Porter's Diamond model to explain competitive advantages specifically in tourism, including Destination Management and Complementaries as vital elements. These additions will be taken into consideration when analyzing the possible cluster's locational competitive advantage and its dynamics. Furthermore, emphasis is put on the interconnections and interdependence among actors, which will be explored further by analyzing Coopetition, local buzz & global pipelines, network openness & strength.

Empirical Findings

This chapter presents data gathered empirically throughout the study. The data is presented in three parts where the first one is aimed at describing the emergence of Santa Catalina as a tourist destination and the second part categorizing actors and describing dynamics of the business environment using cluster theory. The third part will present further actors and dynamics outside of the scope of, or not fitting in the definitions of, any of the aforementioned frameworks.

Here, Empirical findings from the six-week on-site study in Santa Catalina, Panama, will be presented. During the 22 interviews, many interesting stories and topics were covered and when deciding on how to present the findings, the following needed to be considered:

- A. Content needs to be able to be easily explored and analyzed to answer the Research Questions.
- B. Criticism regarding the definition of a cluster needs to be considered.

“The existence of clusters, appears then, in part at least, to be in the eye of the beholder – or should we say, creator.” (Martin & Sunley, 2003 p16 Journal of Economic Geography).

With regards to criticism mentioned in the theoretical foundation on how to define a cluster, the core products of the potential cluster must be defined in a concise manner. This will be done by presenting the emergence of Santa Catalina as a tourist destination in a chronological manner. Following this, the approach of Hallencreutz et al (2004) was deemed appropriate for presenting and investigating data, as it defines six principal components (of actors) in a cluster. Subsequently, Porter’s (1990) Diamond model is used for identifying and describing dynamics behind a locational competitive advantage. It was considered more appropriate to jointly present relevant topics brought up during interviews in order to minimize the risk of missing important data on the basis of it not fitting perfectly into any specific framework.

Emergence of Santa Catalina as a Tourist Destination

Information presented below relates to RQ1 - How did Santa Catalina develop over time as a tourist destination and RQ 2 - What were the key events behind the development?

	Surfers Find Wave	First Hotel	Catiland Aquire Land	Coiba Island Opens	Opening of Hotel Santa Catalina	Catiland Starts Selling Land
Industry						
Restaurant						
Construction						
Restaurant						
Hostel + DMO						
Legal						
Fruit Shop						
Hostel						
Restaurant						
Fruit Truck						
Food Truck						
Diving						
Restaurant						
Hotel						
Restaurant						
Surf Instructor						
Diving						
Grocery Store						
Bus Company						
Diving						
Hostel						
Restaurant						
Real Estate Development						

Figure 10 Illustrating which key moments were vital to the development of Santa Catalina according to respondents

The following key moments for the emergence of Santa Catalina as a tourist destination were highlighted by various respondents. This was puzzled together in the following chronological narrative that aims to highlight the essence of each key moment.

1970 - Surfers find wave and acquire land.

The areas surrounding Santa Catalina have historically consisted of pasture land for cattle combined with land not exploited for any economic activity. The history of the emergence of Santa Catalina as a tourist destination began when four Panamanian surfers discovered surf break La Punta by chance during a hunting trip and decided to acquire the surrounding land and keep the spot a secret. The path to the break was

blocked by a locked gate and the only keys were owned by the four surfers, meaning the only way to get access to the spot was through them. Rumours within the Panamanian surf community spread across the Americas and some lucky surfers managed to acquaint themselves with one of the four surfers to get a chance to surf the wave. This story, about the four original surfers, is still widely told by local surfers and business owners in Santa Catalina today. “Mr. Ricardo”, one of the four surfers, opened the first hostel in Santa Catalina, right by the wave La Punta. The following years, friends of the four surfers from the surf community in Panama started acquiring their own small lot of land, close to La Punta, for a small sum and subsequently an additional surf hostel was opened.

Late 1990s - Catiland acquire coastal land.

As Panama was recovering from an armed conflict during 1989-1990, public safety and political situation in the region improved greatly according to respondents. Travelling and living in Panama became easier, bringing surfers from other countries in the Americas to Santa Catalina. A handful more surfers moved to Santa Catalina and started small businesses like hostels and restaurants, in order to pursue a lifestyle based on surfing.

As political stability improved throughout the 1990s, Panama also became more attractive for foreign investments according to respondents. In the late 1990s, American art dealer Daniel Wolf (under the company name of Catiland) investigated and acquired a vast amount of coastal property at the Pacific Coast of Veraguas. *“He basically went by helicopter and just pointed at land he wanted to buy”* (Respondent 7) and *“most locals sold their property for small sums or even a television”* (Respondent 11). However, most landowners between the surf breaks La Punta and Estero beach in Santa Catalina decided not to sell. Apart from this, the majority of land was now owned by Catiland, driving up property prices. As of 2019 Catiland is still the largest landowner in Santa Catalina.

2004 - Opening of Coiba National Park

During the 1900s Coiba Island functioned as a prison for political prisoners. Stories about the prison island surrounded by sharks, used by the country’s dictators to torture their opponents circulated, making it “taboo” to visit Coiba Island. In 2004 the Coiba

Island prison was closed and opportunities for visiting the island arose. Following this, Coiba Island was designated as a UNESCO World Heritage Site due to its history and biological diversity. Consequently, divers from around the world decided to visit Santa Catalina in order to reach Coiba Island, with two of the early dive enthusiasts establishing dive centers. Panama lacked certified dive instructors, which enabled these international dive instructors to work within the diving sector without competing with Panamanians for employment, something that Panamanian labor laws otherwise would prohibit. Around the same time, a German couple opened a small hotel/ranch focused on horseback riding. Through internet blogs and travel websites this started putting Santa Catalina on the map for European (German speaking) tourists. The following years Colombian entrepreneurs arrived to Santa Catalina establishing dive centers as a way to escape political instability in Colombia.

2010 - Opening of Hotel Santa Catalina.

Starting with a land dispute regarding a piece of land right in front of La Punta, a Panama City surfer and lawyer decided to help support a fellow surfer and friend in the juridical process. After settling the case, the lawyer became actively involved in co-founding a hotel targeting families. The lawyer, hereafter referred to as local development entrepreneur (LDE) became involved in launching several local development projects, such as the creation of the Chamber of Tourism (DMO). Attracted by the ease of setting up business in Panama and lack of enforced burdensome regulations combined with the political stability (relative to other Central or South American countries), restaurant and accommodation businesses were set up by entrepreneurs. Many of these come from other countries, such as Colombia, Italy and Venezuela.

2016 - Catiland starts selling land.

Property firm Catiland started selling lots of land. The local development entrepreneur (LDE) started acquiring land both in Santa Catalina village center and close to one of the beaches, planning to develop buildings for commercial use and long-term rentals. During the following years and up until today, other local business owners began to join the development plans and invest in the projects. The influx of entrepreneurs from Europe and South America continued.

Looking ahead, the LDE anticipates an increase in families visiting Santa Catalina for experiencing diving in Coiba National Park. Other business owners have followed the lead of the LDE are joining the development plans in order to meet the presumed increasing demand for comfortable accommodation, believing in the LDE's capabilities. *"He is the man with the plan, he gets things done"* (Respondent 11)

Santa Catalina Business Environment

By using the approach of Hallencreuz et al (2004) and viewing firms as the main agents of a cluster, the structure and industrial dynamics can later be elaborated on and analyzed through Porter's (1990) Diamond framework. Main actors will be identified using the six principal components of an industrial cluster as described by Hallencreutz et al (2004), to narrow down the definition of the potential cluster.

Identified main actors will be considered the foundation of the potential cluster when exploring how/whether a cluster model could be used as a basis to describe a potential competitive advantage.

Actors

Actors will be categorized using the definitions from Hallencreuz et al (2004).

- Core Products, which are defined as producers of the final product within the value-chain of the cluster.
- Specialized Input Goods or Services, defined as firms offering goods or services specifically developed for the production of the core product.
- Production Technology, defined as providers of tools and equipment needed for the core product.
- Strategic Knowledge-Based Services, defined as firms providing services that directly or indirectly support the development of the cluster.
- Related Industries, defined as firms not producing core products or being closely interwoven to the other actors but still indirectly affect the development of the cluster.
- Customers, such as individuals or companies with a demand for the core product.

Core products

In Santa Catalina the core products offered by the industrial system consist of attractions and accommodations. Accommodations are offered in different ranges of price and quality through hostels, hotels and cabin rental businesses. Attractions in Santa Catalina could be categorized into main attractions and secondary attractions based upon their importance to the customers. The main attractions include surf experiences at various spots (primarily La Punta) and diving/snorkeling opportunities at Coiba National Park. Diving is mainly offered by dive centers while surfing is mainly offered by hostels and hotels. Several of these are owned by foreigners, including all dive centers. Secondary attractions include yoga, stand up paddle tours, hiking, language school, bird watching and whale watching. These secondary attractions are offered by independent actors.

Customers

Customers of core products in Santa Catalina consist of individuals and groups visiting main attractions and accommodations. Essentially, providers of core products segment customers three different ways; budget, travel objective and origin. Backpackers are low budget travelers with low expectations on comfort and service while families are defined as the opposite. Surfers visit Santa Catalina mainly because of surfing opportunities while divers visit because of diving opportunities. International customers need more guidance and often demand service in different languages while domestic are more independent.

Since Santa Catalina offer surfing possibilities for beginners, intermediates and professional surfers on various experience levels arrive to Santa Catalina. Divers arriving to Santa Catalina also demand diving experiences on various levels. Some customers arrive to Santa Catalina with the objective of obtaining a diving license, while others seek a more professional diving experience.

Backpackers usually travel Panamá on a standard route involving Bocas Del Toro, Boquete, Santa Catalina and Panama City. Therefore, the main reason for

backpackers arriving to Santa Catalina is the fact that Santa Catalina itself is a part of the established backpacker route.

Customer segments tend to overlap, for example, both surfers and backpackers are usually on a low budget while the opposite is true for divers and families. Similarly, backpackers tend to be international while families tend to be domestic. Simultaneously most families tend to see diving as a main attraction and surfing as a bonus.

Specialized input goods and services

Specialized input services are necessary for the main attractions of surfing and diving. In Santa Catalina, local surf instructors with knowledge of local conditions supply hostels and hotels with surfing lessons and guidance for both beginners and professional surfers, in exchange for accommodation and food. However, dive instructors do not operate independently, being an integral part of dive schools. Local fishermen with knowledge of the maritime conditions have turned tour operators, meeting the demand from dive schools, after the opening of Coiba National Park. Tour operators work independently although each tour operator is closely affiliated to a specific attraction provider.

Production technology

Tools and equipment necessary for the main attractions include surfboards and diving equipment. One small surf shop exists in Santa Catalina selling surfboards to backpackers. All surf-oriented businesses acquire their surf related equipment outside of Santa Catalina. No production or distribution of diving equipment is available in Santa Catalina.

Strategic knowledge-based services

In Santa Catalina strategic knowledge-based service providers enable and direct the development of the industrial system. The local attorney office support entrepreneurs in firm creation as well as property and land acquisition. A destination management organization (DMO), known as Santa Catalina Chamber of Tourism, has been created by several actors led by the LDE, with the objective to coordinate destination branding, lobbying activities, procurement of supplies and environmental management. Most

respondents stated the LDE as one of the main actors in organizing these kinds of activities and strategic services, for example waste management. Opinions were mixed on whether the DMO was providing real benefits for the businesses and community of Santa Catalina as a whole or was just beneficial for few actors. Most business owners did not mention the existence of the DMO and some stated that the DMO was irrelevant for the business community, arguing it had no authority among business owners. While not a knowledge-intensive service, transport enables customers to visit Santa Catalina and experience its main attractions. One local private shuttle company offers direct routes between Santa Catalina and other major cities and tourist destinations. Some accommodation firms, mainly hotels, also offer similar private shuttle services. Other transport businesses serving Santa Catalina such as taxi and semi-public bus companies exist in Municipal capital Soná.

Related industries

Related industries in Santa Catalina consist of businesses able to affect the development of the cluster without being directly linked to the core product. A related industry in Santa Catalina affecting the development, without being interwoven in the tourism system is the construction industry. Many local independent construction workers are contracted by land developers and property owners. In Santa Catalina several related industries are closely interwoven in the tourism industry system. However, these will be described under the section “Other Interwoven Industries” later in this chapter.

Porter’s Diamond

Porter’s (1990) Diamond model is used for identifying and describing dynamics behind a potential locational competitive advantage, based on the main actors described in the previous section. Elements of the Santa Catalina business environment will be categorized and described using the definitions from Porter (1990).

Factor Conditions

Every single respondent emphasized the importance of the tropical climate and existing surfing and diving opportunities as the most important factors for attracting customers. Even most business owners themselves mentioned their personal interest

in either surfing or diving as the main reason for setting up business in Santa Catalina, considering the business to be a tool for enabling practicing these activities on a daily basis. The local surf conditions were described by one respondent as: *“For experienced surfers you have one of the top three, if not the best, surf break in Central America La Punta, as well as many reef breaks around Coiba [Island] and Cebaco [Island]. At the same time, you have Estero Beach and Punta Roca for beginners and intermediate surfers, and when the waves at those spots are too big, the local Santa Catalina Beach provides good conditions.”* (R22) Accommodation firms direct customers to the suitable spots, taking daily surf conditions into consideration. Local surfers and entrepreneurs targeting surf customers exchange information with each other and other business owners through daily spontaneous conversations.

Respondents stressed the importance of maintaining Coiba National Park for the attractiveness of Santa Catalina as a tourist destination and many were worried climate change could have a negative impact on this. Moreover, meteorological and biological seasonal variations in surfing and diving attractions complement each other. Surfing season peaks when diving experiences low-season, and vice versa.

The remote location and relaxed atmosphere were considered important for customers and entrepreneurs interested in surfing, being somewhat indifferent to lack of infrastructure. Examples of substandard infrastructure in Santa Catalina include unreliable water and electricity supply and mobile internet reception and scarce public transport. Some interviewees reported difficulties with running businesses due to lack of water supply and the inconvenience of taking three hours of public transport to regional capital Santiago for buying supplies. Firms have been adapting their customer offerings and branding as a result of substandard infrastructure. Examples of these adaptations include branding of an accommodation as remote and eco-friendly and offering activities such as yoga classes. Many locals fear that over exploiting the resources of Santa Catalina will have negative consequences to the local tourism industry as well as for the people living in Santa Catalina, referring to tourist destination Bocas del Toro as a place where focus has been on short term economic growth rather than sustainable tourism.

“We [locals] don’t want Santa Catalina to become a party destination like Bocas del Toro, with all the disorder and bad people”. (R7)

Restaurant businesses emphasized the importance of local fishermen for fresh seafood supplies. The business owners appreciate the low labor costs though lack of skilled labor (especially English speaking), has brought some difficulties within the restaurant and accommodation sector targeting families (international) as customers. Many businesses prefer employing locals due to functional and relational proximity rather than regional more skilled labor even though work ethic among local employees have been highlighted as a difficulty for some business owners. Some business owners prefer employing local villagers and educating them, instead of procuring skilled regional labor.

Due to the monopolistic situation of land ownership, acquiring land in Santa Catalina has been costly. However, since the large landowner Catiland recently has started selling lots of land, accessibility to properties has increased. This opportunity is utilized by local entrepreneurs expanding their business and non-local entrepreneurs establishing new businesses in Santa Catalina.

Demand Conditions

According to the respondents, no home demand for Core products exists. The home demand for relating industries, such as restaurants and grocery stores exist but shows no sophistication or anticipatory tendencies. The size is not specifically large or small and does not show a certain growth pattern. Moreover, no local multinational buyers of the products exist.

Related and Supporting Industries

Local suppliers, such as construction firms and tour operators exist but are not considered internationally competitive. Apart from the aforementioned Surf Shop, no local suppliers of equipment for attractions (such as surfboards or diving equipment) exist, firms have solved this by sourcing nationally. Restaurants are considered important complementary businesses and are often integrated by, or affiliated to, accommodation firms. The affiliations often exist between firms that are functionally and relationally close to each other, for example located closely or targeting the same customer segments.

Firm Strategy, Structure and Rivalry

The majority of businesses in Santa Catalina are owned by families or individuals. Moreover, a handful accommodation businesses are owned by groups of individuals and administered by an on-site manager. Family/individually owned businesses aim at providing a more intimate accommodation experience suitable for backpackers while group owned accommodation businesses aim at offering a higher quality service targeting families seeking comfort. Family/individually owned businesses are run with the objective to pursue personal interests such as surfing or diving, not necessary maximizing economic profit. *"I like surfing, chilling, and jamming, and here I can do that every day"* (R14). Most entrepreneurs starting businesses in Santa Catalina share this, irrespective of being local or expat. *"I fell in love with the waves and decided to change my life and just live here to surf and chill"* (R12). Consequently, business owners do not possess any particular exit strategy for their business and are thus committed on a long-term basis. A calm everyday life is preferred over hectic development projects. This preference leads to a risk aversion towards expansion opportunities within the majority of business owners. This shared view shapes the ambience of Santa Catalina. Moreover, informal relationships between employer and employee, characterized by shared values and common interests, further help creating the aforementioned ambience.

Santa Catalina is characterized by intense rivalry providers of core products. *"It's each one for themselves"* (R11). Most accommodation providers improve comfort standards and integrate complementary services (warm water, bicycles) in their offering, while some accommodation services lower prices instead. Accommodation businesses often offer cooking opportunities (kitchen) or integrated restaurant services, which puts intense pressure on independent restaurants. Attraction providers have developed cooperative relationships with accommodation providers to attract customers through offering special deals. The rivalry is further intensified by new businesses constantly being established in various industries in Santa Catalina. Newly established businesses are generally well received by incumbent actors as long as they do not provide substandard quality of service lowering the reputation of Santa Catalina. *"One hostel was committing fraud towards customers so everyone kind of ganged up on him and now he's selling"* (R22). Local business owners had an

especially welcoming attitude towards entrepreneurs escaping miserable conditions in neighbouring countries such as Venezuela. *“We have gone through hard times ourselves so we are happy they can start something new here”* (R2). A couple of actors have developed their business by starting new accommodations at similar locations in Panama, targeting customers interested in surfing. Within the diving industry, businesses cooperate on price levels, while competing on service quality.

Dynamics

No advanced production technology is needed for the core products, which is why skills of entrepreneurs that set up business in Santa Catalina are important for the utilization of Factor Conditions (such as surf and dive opportunities). This could be acts of chance, however, many entrepreneurs believe the shared goals (not focusing on maximizing economic profit) and characteristics (passion for surfing or diving and wanting to live a more relaxed lifestyle) made them decide to start up business in Santa Catalina.

Chance has been a factor influencing Santa Catalinas development trajectory. For example, the large number of German tourists in Santa Catalina was explained by business owners as the result of a popular German children’s book romanticizing Panama. Furthermore, the aforementioned decision by landowner Catiland to sell lots of land has seemingly been taken on a random occasion, not attributed to any specific external factors.

According to respondents, it is extremely easy to set up a business in Panama, either as a foreigner or Panamanian, compared to other countries *“Panama is the number one country to set up a business for foreigners”* (R12). Some health regulations exist regarding restaurant businesses; however, they are often not enforced for small businesses. The same is true for tax laws. Small business owners responded that lax enforcement of regulation and tax law were well suited with their personal goals and objectives. *“I moved here and started my business to be more free from politicians and regulations”* (R12) For larger business, tax laws and health regulations are strictly enforced. Overall, confidence in politicians and the government is low. According to business owners, heavy lobbying and relationship building is needed to secure support from government and government agencies.

All foreign business owners in Santa Catalina stated that foreigners can easily obtain residency permits. Working permits are easily obtained as long as it is not considered to cause competition with the local labor force. Examples of these types of working permits are certified dive instructors and hotel managers, while permits regarding restaurant workers could pose some difficulties. However, permits could be obtained through informal contacts and bribes with government officials according to respondents.

In order to maintain Coiba National park, the government imposes an entrance fee of \$20. However, many respondents claim, tour operators responsible for collecting this fee tend to embezzle these funds.

Government is enforcing regulations on construction so that no buildings over three floors can be constructed. This is mentioned as the reason for stalling of a development project of luxury villas by landowner Catiland, "*keeping Santa Catalina relaxed instead of growing into a playground for millionaires*" (R11). Other environmental regulations regarding construction and land use are enforced and environmental permits could be managed through the local law office.

Local business owners considered the standard of the local public school to be low, and some European previous business owners have even sold their businesses and moved to bigger cities because of this. Even the regional public universities were considered to be of low quality (compared to other national universities) and many students do not learn how to speak English even if they are studying tourism. The business owners employ tourism (and marine biology) students as interns, offering practical education (how to run a business, diving license courses etc.) and accommodation as payment.

All respondents shared the view that they did not get significant support from government regarding developing basic services such as waste management and infrastructure services. The lack of presence from government, combined with the goals and strategies of independent business owners' firms have led to cooperative initiatives, aiming to solve these problems. Regarding cooperating on waste

management: *“I pay a guy a monthly salary to collect garbage on the beach, the first months I paid him myself but after seeing the results, other business owners have joined the initiative and now we are planning to cooperate on a recycling site as well”*(R22). Many similar projects have also been initialized by the same actor (LDE) and managed by the Chamber of Tourism (DMO). Recently, as a strategy to increase the flow of tourists to Santa Catalina, an attempt to convince the national flight monopoly to open Santiago Airport for commercial flights have been initiated. This includes bundled package solutions, offering accommodation, transport, attractions and food involving several different actors in each sector. *“The tap is still just barely open and if we can just guarantee to fill the airline seats, the tap will be fully open, not only to Santa Catalina but other regional tourist destinations as well”* (R22).

Since the vast land area have been owned by one single firm, Catiland, ability to acquire affordable land has been limited according to respondents. Therefore, the decision by Catiland to start selling lots of land has brought an end to the historically monopolistic land ownership situation. This has led to local firms expanding their businesses by acquiring land.

Other Important Actors and Factors

The business environment of Santa Catalina is characterized by actors and factors outside the scope of, or not fitting in the definitions of, any specific previously described framework.

Other Interwoven Industries

The definition of Related Industries given by Hallencreutz et al (2004); “firms not producing core products or being closely interwoven to the other actors but still indirectly affect the development of the cluster”, leaves out actors closely interwoven and affecting of the cluster development.

According to respondents, restaurants, grocery stores and bars are vital to the Santa Catalina tourism industry and are closely interwoven in the tourism industry system. Three small-sized grocery stores provide a limited range of food and hygiene supplies for both tourists and local inhabitants (including workers and business owners).

Around 20 restaurants exist in Santa Catalina offering a wide range of cuisines at varying prices, targeting tourists. The majority of restaurants are directly linked to or part of an accommodation business. In some cases, this is a result of restaurant owners expanding their business to secure a more reliable income. In other cases, it is due to entrepreneurs starting an accommodation with an integrated restaurant, or because of interpersonal relationships between owners of a restaurant and an accommodation business. Some restaurants still operate independently, often targeting tourists as well as local inhabitants. Two bars operating in Santa Catalina also serve as event venues for occasional local festivities, for example Easter Celebration, an event aimed at both tourists and local inhabitants. Stores aimed especially at tourists include a surf equipment shop and a souvenir shop, both offering clothes suitable for surfing and swimming. Finally, one small fruit shop offered fresh fruit and smoothies for tourists and local inhabitants, as well as offering deliveries to restaurants.

Supporting Organizations

The majority of business owners responded that various kinds of supporting organizations based outside of Santa Catalina as important for shaping the environment of the actors in the system. Since these organizations are located outside the geographical boundaries of the cluster, they are not considered to be actors within the cluster. However, since they directly affect the business environment of Santa Catalina according to respondents, they are described in this section. As the influence of government policies already have been partly mentioned, this section will complement the role of government by describing actors more specifically connected to the actors in Santa Catalina.

The National Ministry of Tourism provide economic support to varying projects, depending on the political views of the incumbent administration, with the current administration focused on ecotourism. Though the focus on ecotourism was seen as positive, many respondents stated having low confidence in government agencies, due to frequent corruption scandals. The Municipal governance (in Soná) has an impact on the local entrepreneurial environment by managing transport-, water-,

waste-, internet-, and electricity infrastructure as well as redistributing resources to shape local development.

Universities based in Panama City and Santiago offers programs specialized in tourism and marine biology. Some students from these programs work in Santa Catalina comparable to doing an internship. However, the demand for these services, in terms of quantity and requested language skills, greatly exceeds the available supply.

As previously mentioned, respondents were aware of the importance of lobbying and interpersonal relations are for assuring influence. However, few considered that they had the resources to engage in these activities. Some actors conduct lobbying activities through the LDE.

Analysis

This chapter analyzes and explores empirical findings with the help of existing theoretical frameworks, initially analyzing the main actors of the cluster and their relations, followed by an investigation of the dynamics behind the spontaneous cluster formation.

Here, empirical findings from the six-week on-site study in Santa Catalina, Panama, will be analyzed in order to answer the research questions.

RQ1 - How did Santa Catalina develop over time as a tourist destination?

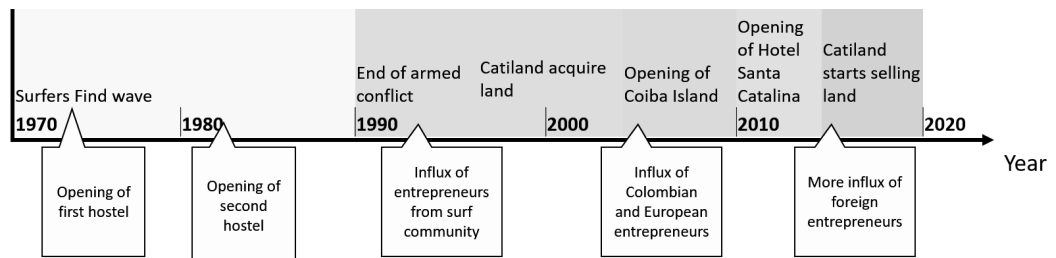


Figure 11 Timeline over development

Important eras divided by key events highlighted with text and noticeable effects added in white boxes.

The development of Santa Catalina as a tourist destination can be traced back to the early 1970s when surfers discovered the surfable wave. This discovery led to some surfers acquiring land and then opened basic accommodation businesses.

The situation remained relatively unchanged until 1990, when the armed conflict in Panama ended. This brought more entrepreneurs from the surfing community to establish their businesses. Moreover, following the end of the armed conflict, investment firm Catiland started acquiring land in Santa Catalina.

In 2004, the Coiba Island opened, offering possibilities for diving experiences. The opening of the island brought an influx of foreign entrepreneurs from diving communities.

In 2010 the LDE opened Hotel Santa Catalina, targeting families and luxury tourists. The LDE also undertook various coordinating activities such as waste management in the village and other development projects.

Recent developments began in 2016 when Catiland started selling land. This brought a new influx of foreign entrepreneurs, both from diving and surfing communities, establishing various businesses.

RQ2 - What were the key events behind the development?

Since the early 1970s there has been a set of events determining the development of Santa Catalina. These events have had a profound, and often irreversible effect on the direction of the development.

- The **discovery of the wave by surfers**, implied that Santa Catalina from that moment on was considered as a surfing location.
- The **end of the armed conflict** in 1990 brought the influx of foreign entrepreneurs.
- This influx stagnated in 1996 as investment firm **Catiland started acquiring land**.
- The **opening of Coiba Island** in 2004 implied that Santa Catalina now also was a destination for divers and not only surfers.
- In 2010 as the LDE decided to **open Hotel Santa Catalina**, the destination now got its first collaborative initiatives and a visionary entrepreneur coordinating these developments.
- In 2016 **Catiland started selling land**, making affordable land more accessible in Santa Catalina.

RQ3 - Who are the Main Actors and What are their Competencies?

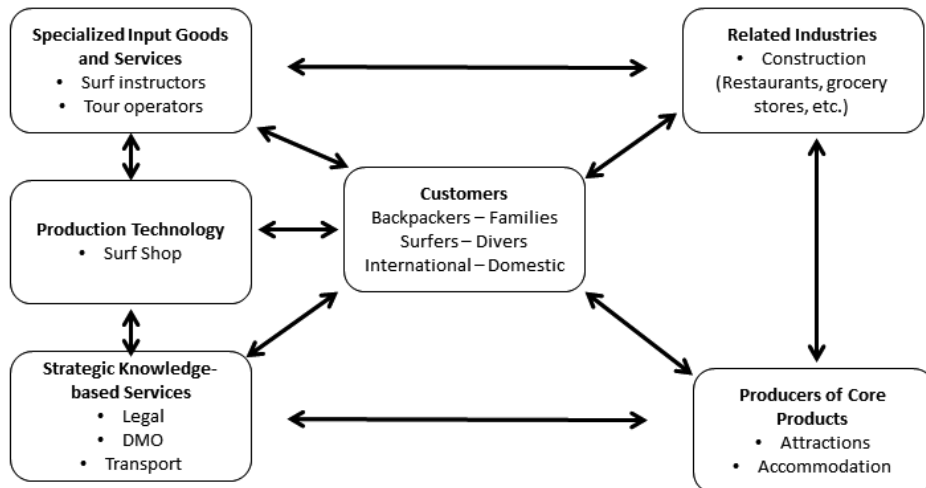


Figure 12 The identified actors using the Hallencreutz et al approach (2004) Arrows indicate transactions and flow of information

The identified actors using the approach from Hallencreutz et al (2004) are the following:

- Customers from different segments, such as Backpackers, Families, Surfers, Divers, International and Domestic are located in the center of the cluster as being the driver for other economic activities in the cluster.
- Providers of Attractions and Accommodations provide the final product within the value-chain of the cluster.
- Surf Instructors and Tour Operators offer services specifically developed for the production of the core product.
- One Surf Shop offers equipment needed for the core product.
- One legal firm, one DMO and one private Transport business provide services that directly or indirectly support the development of the cluster.
- Independent Construction Contractors are not producing core products and are not closely interwoven to the other actors but still indirectly affect the development of the cluster

With the help of the framework all the main actors in an industrial cluster can be identified in Santa Catalina. However, some of the identified actors might not be relevant for the business environment of Santa Catalina and some other important actors do not fit well into the framework.

Customers

Customers of core products in Santa Catalina consist of individuals and groups visiting main attractions and accommodations. Essentially, providers of core products segment customers three different ways; budget, travel objective and origin.

Since the tourist experience is based on traveling, customers of core products in Santa Catalina cannot be regarded as home demand. International customers are by definition not local and the local demand for tourist attractions is low, since most locals are providing parts of the tourist experience themselves. Moreover, different segments tend to find different products and experiences as core and others as complementaries. For example, most families tend to see diving as a core and surfing as a nice complementary. This is key for the competitiveness of Santa Catalina as a tourist destination.

Producers of Core Products

Providers of Attractions and Accommodations provide the final product within the value-chain of the cluster. Accommodations are offered in different ranges of price and quality while Attractions in Santa Catalina could be categorized into main attractions and secondary attractions based upon their importance to the customers. Main attractions such as surfing or diving are offered mainly by accommodations while the secondary attractions are offered by independent actors. This allows for a flexibility in the cluster where main attractions can be complemented by different secondary attractions changing easily with new customer needs.

Restaurant business cannot be considered providers of core products, since tourists often spontaneously visit these, in contrast to attractions and accommodations, which are often booked before arriving in Santa Catalina. Restaurant businesses are still an important part of the experience of the customers of accommodation businesses and tight relations often arise between them. Since they are closely interwoven with other

main actors and affect the development of the business environment, they should be considered important actors for the system. However, since they are too interwoven to be considered related industries and simultaneously are not providing any core product, they do not fit into any specific category. Restaurants, grocery stores and other tourist shops are affecting the dynamics of Santa Catalina, by being closely interwoven with other actors. Porter (2000) would refer to as Buyer Complementaries, since they add to the overall experience of the customer. Actors providing these Buyer Complementaries should therefore also be considered main actors of the Santa Catalina cluster.

Strategic Knowledge-Based Services

One local attorney, one DMO and one private transport business provide services that directly or indirectly support the development of the cluster. However, almost every respondent stated the LDE as one of the main actors in organizing activities to support the development of the cluster while many business owners did not mention the existence of the DMO or stated that the DMO was irrelevant for the business community. This indicates that the function of facilitating and leading the development is done by a locomotive actor.

The majority of business owners stated various kinds of governmental supporting organizations based outside of Santa Catalina as important for shaping the environment of the actors in the system. These organizations are located outside the geographical boundaries of the cluster and cannot therefore be considered actors within the cluster. However, their role in influencing pre-conditions of the destination such as ease of doing business cannot be understated.

Related Industries

Related industries in Santa Catalina holds little relevance, since there are few businesses able to affect the development of the cluster without being directly linked to the core product. Independent construction workers but are not mentioned as main actors or relevant actors by any respondents.

Specialized Input Goods and Services

Surf/dive Instructors and Tour Operators offer services specifically developed for the production of the core product. They are often closely affiliated with providers of core products and have a lot of contact with customers, which makes them important components of the cluster.

Production Technology

The category Production Technology holds little relevance in Santa Catalina, as producers of Core Products do not acquire Production Technology locally in the cluster. Instead the only actor providing production technology (surf shop) mainly targeted tourists directly. That would mean it will affect the visitor's overall experience of the destination and can therefore instead be regarded as a provider of complementary products for customers in the Santa Catalina tourist industry system. Moreover, due to the lack of technological complexity in core products offered in Santa Catalina, providers of production technology are not seen as relevant.

RQ4 - What are the Relations Between the Main Actors and What Are the Dynamics of the Cluster?

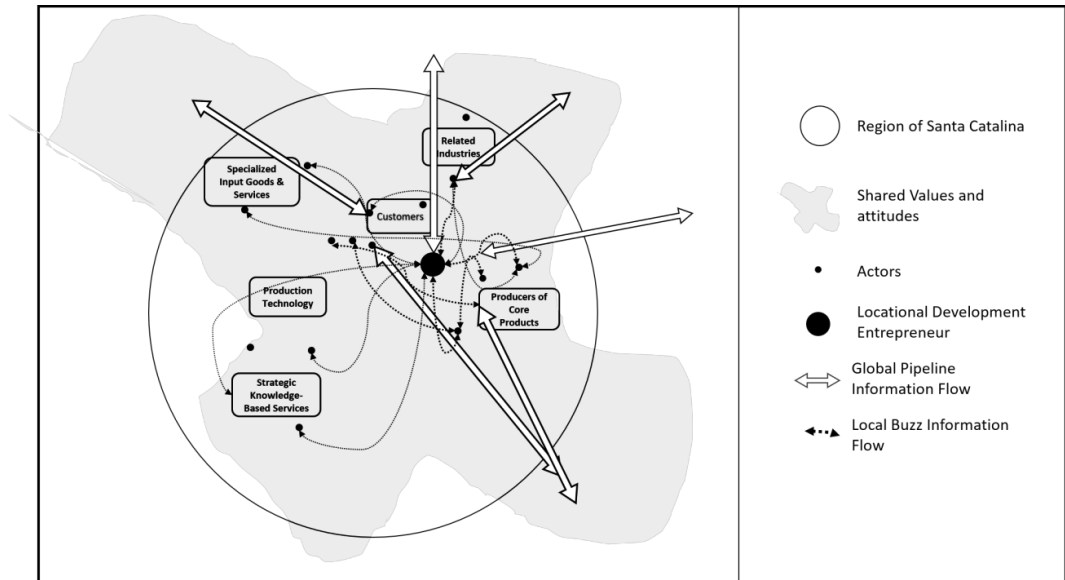


Figure 13 Conceptual map (based on relational proximity more than functional) with Identified actors from the Hallencreutz et al approach (2004), put in context of Local Buzz and Global Pipelines (Bathelt et al, 2004)

LDE is highlighted using a larger dot, to illustrate role as locomotive actor. Global Pipelines of information flow arise mainly from Customers and Foreign Entrepreneurs (often as producers of core products or buyer complementaries such as restaurants). Lastly, actors considered *Buyer Complementaries* are represented by the dots in between the two boxes *Related Industries* and *Producers of Core Products*.

Shared values as a basis for information transfer and cooperation

Relations between actors in Santa Catalina have arisen from conditions allowing for spontaneous cluster formation. The tight-knit surf community with shared values created natural transfer mechanisms of information and ambitions among the earliest entrepreneurs in Santa Catalina. Even if operations are carried out independently by the *producers of the core products* in a competing manner, cooperation with *Buyer Complementaries* occurs and tends to be based on shared values and relational proximity.

The Santa Catalina business community is generally open for new actors to settle in the region as long as they will not provide sub-standard quality of service. Another reason for potential rejection by the Santa Catalina business community would be aiming to develop Santa Catalina as a party-destination, as this ambition clashed with the goals and values of the community. This situation implies that the business community is characterized by relative openness under certain conditions, and strong shared values among existing members.

LDE Providing a Pipeline to Supporting Organizations

Additional actors existing outside of the boundaries of, but still affecting the Santa Catalina business environment, are not considered by the Hallencreutz et al (2004) framework. Linkages to these actors (Educational Institutions, The Municipality and The Ministry of Tourism) influence what projects get support, where resources are distributed, and what labor is locally and regionally available. Confidence in government agencies is low and few actors in Santa Catalina have direct linkages to them but since the LDE is the only entrepreneur with drive, resources, contacts and ambition to influence outside actors, much of the knowledge is transferred through the LDE. This is similar to what Bathelt et al (2004) describe as a Global Pipeline, since it connects the local network with its surroundings in a more structured manner, as information is shared selectively with an external partner. The individual entrepreneurial drive of LDE influences development of the local business environment, by integrating knowledge from outside and coordinating initiatives inside the cluster, as well as influencing actors outside of Santa Catalina. The importance of this pipeline is dependent on its interplay with the local network, which is highlighted and analyzed in Table 1.

Network Characteristics /Empirical findings	Openness & Strength	Coopetition	Proximity
Emergence	Surfers not selling land to Catiland but being open to other surfers and friends. High diversity among actors	LDE key in uniting actors in development projects	Surfers share ambition to settle down and pursue lifestyle. Settled at beach and surfed daily.

	regarding nationality. Both Surfers and Divers Opening of Coiba National Park. Internet.		
Actors	Frequent interaction between instructors (and tour operators) and attraction providers.	DMO not relevant for cooperation. LDE instead pushing many strategic projects regarding development.	Some integration between accommodation and restaurants
Diamond	Locals do not want Santa Catalina to become party destination. New businesses well received as long as they provide good quality service. Daily interactions between surf community and local entrepreneurs.	Everyone for themselves in general. Dive Centers cooperate on price levels. Intense pressure on independent restaurants. Cooperative initiatives led by LDE, through the DMO, due to lack of gov interventions.	Some integration between accommodation and restaurants, often based on shared values or functional proximity. Shared reasons and goals for setting up businesses. Shared goals lead to cooperative initiatives.
Other A & F	Low confidence in Government agencies.	Cooperation between some actors in lobbying activities.	Some integration between accommodation and restaurants, often based on shared values or functional proximity.

Table 1 Summarizing gathered empirical findings relevant to different topics from the theoretical foundation.

Relevant information from local buzz is created by daily face-to-face meetings enabled by functional proximity of firms while Integration of complementary businesses allow for “high quality local buzz” (Bethelt et al 2004). Relational proximity of shared values (“each one for themselves”), interests (surfing and diving) and goals (pursue lifestyle) among entrepreneurs allow for an openness toward new actors coming from outside of the cluster. Cooperation is not often used to describe the business environment of Santa Catalina and when it is mentioned, projects initiated by the LDE are often what is referred to. The lack of government initiatives and lax regulatory pressure places the LDE as the sole key player in the coopetition among actors in Santa Catalina. Projects aimed at strategic development are coordinated through the LDE. The DMO

itself does not seem to be of much importance for actors, which is contrasted to Kim and Wicks (2010) theory about tourism clusters. In Santa Catalina the DMO only serves as the medium from which the LDE can operate to influence local, regional, and national actors. Most actors know that the LDE is an influential actor and due to the openness between the actors, most strategic knowledge gets distributed quickly in what can be called local buzz. The interplay between the dense local buzz in Santa Catalina and the pipeline toward supporting actors outside resemble what Bathelt et al (2004) argue contribute to a successful cluster.

Foreign Entrepreneurs as Global Pipelines

Further important pipelines can be identified when looking at flows of people as a channel for knowledge transfer. While many individual entrepreneurs might not have power to influence outside actors, migrating entrepreneurs provide a flow of knowledge and people into Santa Catalina from the outside world by bringing skills, workers, and new entrepreneurs from their respective home countries. As described earlier, many Foreign entrepreneurs (FEs) settling in Santa Catalina and setting up business is one important component in creating a competitive advantage of the location. FEs have heavily impacted the emergence of Santa Catalina as a tourist destination, and continue to do so, being key in integrating outside knowledge and providing connections between the tourism cluster and the host country of the entrepreneur. This function of driving economic development through the integration of knowledge and providing connections to actors outside of the cluster is similar to the function of what Kim and Wicks (2010) refer to as TNCs. This is however, where the similarities end, since TNCs can almost be seen as carrying pipelines within themselves, since they are located in, and share information between locations in many different countries. The FEs on the other hand, consider Santa Catalina their new home country and therefore cannot be considered transnational companies. Moreover, the most important pipeline of information sharing occurs either through the actual flow of entrepreneurs migrating. However, this is only true for the entrepreneurs who share values and ambitions with the cluster and decide to settle in Santa Catalina. The entrepreneur behind Catiland (property investment firm) constitute what Kim and Wicks (2010) refer to as foreign direct investment and does not have a strong connection to the local network and does not facilitate integration between Santa Catalina and the host country (USA). The main contribution from Catiland, using the view of Kim and Wicks (2010) would be the initial transfer of capital in small sums in

the late 1990s, leaving out the importance of dedicated entrepreneurs creating further value from that capital.

RQ5 - What are the key events, pre-existing conditions and triggering factors for cluster formation in Santa Catalina?

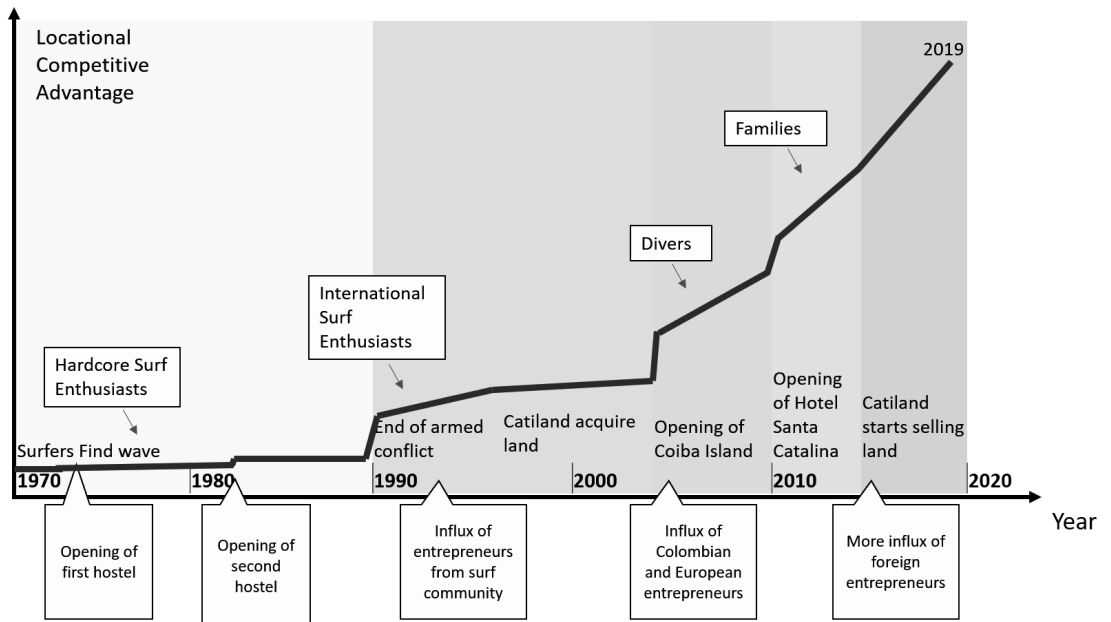


Figure 14 Conceptual graph showing the development of the locational competitive advantage of Santa Catalina over time. Y-axis indicating locational competitive advantage relative to today based on analysis below. Boxes in graph highlighting new customer segments

As described in the figure above, the locational competitive advantage has arisen with a varying growth-rate since the early 1970. In the time period of 1970 - 2019 various key moments have boosted the locational competitive advantage, resulting in a non-linear growth since the early 1970s as observed in the figure above. Instead of having a continuous growth since the 1970s, the growth of Santa Catalina competitive advantage is heavily characterized by sudden steps. These increases have been enabled by pre-existing conditions present at the various key triggering moments.

The formation of Santa Catalina's locational competitive advantage has arisen in various stages since the early 1970. The earliest factor condition contributing to the location's competitiveness is the wave found by surfers in the early 1970. This factor condition alone attracted surfer enthusiasts whose sole demand was to find high-quality waves. Throughout the 1970, the competitive advantage of Santa Catalina increased slowly as a few accommodation options were established. However, access to the location was still difficult due to poor infrastructure, political instability and

awareness about the location was mainly spread through word-of-mouth, local-buzz within the community. This resulted in only reaching enthusiasts within the surfing community with this level of locational competitive advantage.

1970

Level	Pre-existing condition	Triggering Factor
Micro	<ul style="list-style-type: none"> • Surfable wave - Factor condition 	<ul style="list-style-type: none"> • Surfers find wave - Chance

Year	Customer segments attracted
1970	New Domestic/Surfer/backpacker

The locational competitive advantage of Santa Catalina was considerably increased in 1990 when the Panamanian armed conflict came to an end, a situation brought on by chance and government actions. The sole factor condition of a surfable wave was now complemented by other factor conditions such as improved infrastructure and considerably improved conditions for investments and businesses in Panama. These new set of conditions brought an influx of entrepreneurs, mainly from the surfing community, establishing accommodation and restaurant businesses. Santa Catalina would therefore from that moment on possess related and supporting industries building up the competitive advantage. Since the entrepreneurs shared several goals and values, the business culture in Santa Catalina were characterized as being a close-knitted community with a common culture. These circumstances hindered entrepreneurs who were perceived as bringing an unwanted image and culture to Santa Catalina. As a result of this set of conditions, the locational competitive advantage of Santa Catalina increased considerably. The increased competitiveness now attracted surfers and adventurers from outside of the hard-core enthusiast communities.

1990

Level	Pre-existing condition	Triggering Factor
Micro	<ul style="list-style-type: none"> • Close-knitted 	

	business community - Firm strategy structure and rivalry	
Macro		<ul style="list-style-type: none"> • End of armed conflict - Chance & Government

Year	Customer segments attracted
1970	Domestic/Surfer/backpacker
1990	New International/Surfer/backpacker

The increasing level of locational competitive advantage brought by newly established entrepreneurs came to stagnation in the late/mid 1990s. As US-based investment firm Catiland acquired vast land masses around Santa Catalina, access to affordable land was now more limited. Locational competitive advantage remained relatively unchanged as no new influx of entrepreneurs nor development of already established business occurred. Following the land acquisitions by Catiland, Santa Catalina now lacked the factor condition of accessible affordable land.

In 2004 the locational competitive advantage of Santa Catalina was boosted by another factor condition - the opening of Coiba Island National park. From having been regarded as a location mainly for surfers, Santa Catalina could now offer highly competitive diving experiences. The opening of Coiba National Park allowed for entrepreneurs to establish dive centres, which triggered the development of Santa Catalina as a tourist destination for more than just highly passionate surfers. Local surfers served as latent entrepreneurs that created and mobilized knowledge surrounding the surfing conditions and to complement the new businesses, as well as sharing and leveraging knowledge of the existing customer segment. Local fishermen could utilize their knowledge of local maritime conditions to become tour operators serving the new dive centres. The influx of European and Colombian entrepreneurs within the diving sector utilized connections, acting as global pipelines, to their home countries for marketing purposes and knowledge acquisition. These connections

resulted in attracting both new customers and entrepreneurs to Santa Catalina. Despite bringing a considerable increase to Santa Catalina's locational competitive advantages remained attractive exclusively to backpacking tourists seeking high class surfing and/or diving experiences.

2004

Level	Pre-existing condition	Triggering Factor
Micro	<ul style="list-style-type: none"> ● Local fishermen with knowledge of local maritime conditions - Related and supporting industries ● Local Surfers mobilizing knowledge of local conditions - factor condition ● Surfers owning accommodation and restaurant businesses - Firm strategy structure and rivalry 	<ul style="list-style-type: none"> ● Establishment of dive shops by external entrepreneurs - Firm structure strategy & rivalry ● Influx of foreign entrepreneurs - Government & Firm structure strategy & rivalry
Meso	<ul style="list-style-type: none"> ● Easy for divers to establish business in Santa Catalina (buy land, working visa for divers, ease of business start-up) - Government ● Openness to new actors facilitate absorptive capacity - Firm Structure strategy and rivalry 	
Macro	<ul style="list-style-type: none"> ● Internet - Factor Condition ● Political stability - Government 	<ul style="list-style-type: none"> ● Coiba Island Open for public + UNESCO - Government

Year	Customer segments attracted
1970	Domestic/Surfer/backpacker
1990	International/Surfer/backpacker
2004	New Domestic/Diving/Backpacking
2004	New International/Diving/Backpacking
2004	New International/Surfing+Diving/Backpacking

Further developments to Santa Catalinas competitive advantage was made in 2010 when the LDE decided to develop his businesses reaching out to new customer segments, families and luxury tourists. The LDE understood that the pre-2010 locational competitiveness of Santa Catalina was not enough to attract these new customer segments. These improvements to the locational competitiveness, empowered by the LDE, consisted of factor conditions such as family-friendly accommodation, improved infrastructure, improved waste management systems. Since the LDE belongs to the surfing community and share the common values and goals of the Santa Catalina business environment, the locomotive power of LDE's cooperational initiatives is substantial and has had considerable effect on Santa Catalinas locational competitive advantage.

2010

Level	Pre-existing condition	Triggering Factor
Micro	<ul style="list-style-type: none"> • Possibilities for surfing and diving - Factor condition • Ongoing influx of entrepreneurs to Santa Catalina - Firm Structure strategy and rivalry 	<ul style="list-style-type: none"> • LDE starts several initiatives aiming at making the location more attractive for families and luxury tourists - Firm structure strategy and rivalry

Year	Customer segments attracted
1970	Domestic/Surfer/backpacker
1990	International/Surfer/backpacker
2004	Domestic/Diving/Backpacking
2004	International/Diving/Backpacking
2004	International/Surfing+Diving/Backpacking
2010	New Domestic/Diving/Families
2010	New International/Diving/Families
2010	New Domestic/Surfing/Families
2010	New International/Surfing/Families
2010	New International/Surfing+Diving/Families

Further development of Santa Catalina's locational competitive advantage was hindered by limited access to affordable land due to Catiland's unwillingness to sell land. This situation changed in 2016, when Catiland started selling land. The factor condition of access to affordable land has since 2016 been the driving condition for further growth of Santa Catalinas locational competitive advantage since it has allowed for establishment of new businesses and/or expansion of current businesses. As a consequence of new customer segments targeted by the LDE, Santa Catalina has experienced a growth of new businesses targeting families and luxury tourists.

2016

Level	Pre-existing condition	Triggering Factor
Micro	<ul style="list-style-type: none"> Restricted access to affordable land - Factor condition 	<ul style="list-style-type: none"> Catiland start selling land - Factor condition + Chance

Year	Customer segments attracted
1970	Domestic/Surfer/backpacker
1990	International/Surfer/backpacker
2004	Domestic/Diving/Backpacking
2004	International/Diving/Backpacking
2004	International/Surfing+Diving/Backpacking
2010	Domestic/Diving/Families
2010	International/Diving/Families
2010	Domestic/Surfing/Families
2010	International/Surfing/Families
2010	International/Surfing+Diving/Families
2016	New Increased penetration in current segments

Discussion

This chapter discusses learnings from trying to connect existing different theoretical and conceptual frameworks with what was observed in this study. Focusing first on method and frameworks, later discussing interesting findings from the analysis.

Method and Frameworks

Methodology

The decision to conduct informal interviews proved to be a satisfactory way to gather data. Several interviewees felt comfortable to talk freely about topics which they might have avoided in a more formal setting. The overall environment in the village of Santa Catalina does not naturally promote more formal interviews as this would have brought on scepticism towards the interviewers. Several interviewees brought up topics not previously foreseen, but highly relevant for the study, further contributing to the validating or assuring results and data gathered from other interviews.

The methodology used in this research requires a geographical definition of a cluster. In the case of Santa Catalina, the local geography was clearly centred around the beaches and the village's main road. The local settlements and businesses in Santa Catalina do not extend further than the beaches and the main road, which therefore made defining the cluster geographically easier.

The non-probabilistic sampling of interviewees proved to be a successful method to reach relevant actors within Santa Catalina. The main reason for this is that the number of entrepreneurs and other local actors is relatively limited. Using this method, relevant actors from different sectors were reached for interviewing.

As chosen methodology was used to successfully reach and gather data from relevant actors within Santa Catalina, similar methodology could be used for studying similar locations with respect to geography, population and core economic activities.

Furthermore, the usage of interviews as a single form of data source gave rise to the challenge of validating gathered data. Additional sources of data such data of

demographics and economic activities gathered by authorities would have been helpful for validating data gathered from the interview. However, such official data gathered by authorities is not available in the case of Santa Catalina. Therefore, the main form of validating data from one interview was to compare with data gathered from other interviews. Moreover, validation of the qualitative data gathered from interviews could have been strengthened by quantitative data from i.e. government agencies, if such accessible data would have existed.

Appropriate utilization of framework by Hallencreutz et al (2004)

In short, main actors of an industrial cluster can be identified using the approach of Hallencreutz et al (2004), which means it could be investigated from the point of view of an industrial cluster. However, this approach might leave out many important aspects of the Santa Catalina business environment and does not seem to fit perfectly for a small destination not based on high technology goods and services, such as a local tourism cluster. Providers of Complementary products for the buyer seem to be more relevant to consider than related industries, since they are highly interwoven in the tourism system. Providers of production technology does not seem to be particularly important due to the low technology nature of the tourism industry in Santa Catalina. Lastly, actors existing outside of the cluster but still highly affect its development does not have a natural place in the framework.

The fact that some components of the Hallencreutz needed adjustments when applied to the Santa Catalina business environment imply the Hallencreutz approach might be more suitable for other types of clusters, such as industrial clusters on a regional or national level. For example, the category of Production Technology could be viewed as more relevant in an industrial cluster, rather than a tourism cluster. Moreover, due to the relatively small (2km) geographical boundary of the Santa Catalina tourism cluster, some actors affecting the clusters will naturally be located outside of it. In local clusters, these actors need to be addressed somehow when analyzing the business environment. Finally, suppliers of complementary products prove to be an important part of the business environment of Santa Catalina and are left out of the Hallencreutz et al (2004) approach. Since Porter (2000) as well as Kim and Wicks (2010) mention the importance of complementaries in a cluster, the actors providing these complementaries should sought to be addressed in order to properly define the cluster.

Importance of DMO and TNC?

While the theoretical framework provided by Kim and Wicks (2010) emphasizes the importance of DMO and TNC as important actors in a tourism cluster, the empirical findings in this project do not support this. The function of the DMO as described by Kim and Wicks of coordinating activities and managing communication with actors outside of the cluster, is not primarily handled by the DMO in Santa Catalina. Rather, the LDE functions as an actor carrying out those activities in Santa Catalina. Furthermore, the DMO was seen as a divisive force by some actors in Santa Catalina. Instead, the ambition and drive of dedicated entrepreneurs enable and manage coordination of activities and influence actors outside of Santa Catalina. Furthermore, the role of TNCs showed to be irrelevant in Santa Catalina as FEs are the main actors in driving economic development through the integration of knowledge and providing connections with actors outside of the cluster. When analyzing a spontaneous local cluster it seems to be helpful to focus on the individual entrepreneurs, rather than the organizational structure that they happen to exist within.

Flows of people as Global Pipelines

Bathelt et al (2004) focus mainly on knowledge transfer when analyzing local buzz and global pipelines, which is a useful approach for describing some characteristics of the Santa Catalina cluster. For example, flows of information can be useful for explaining the role of many ongoing cluster activities at the location. However, it might not be sufficient in explaining individual entrepreneurial behaviour and decision making, for example why entrepreneurs decide to establish businesses in Santa Catalina. Therefore, focusing solely on the flow of knowledge when analyzing global pipelines and local buzz in Santa Catalina might not be sufficient for capturing the main interplay between them. For example, one key component of the competitive advantage in Santa Catalina arise from the ability to attract entrepreneurs and while information is easily transferred, people tend to be more difficult to move. This makes the competitive advantage of Santa Catalina more difficult to imitate, therefore, focusing also on flows of people might provide additional insights and be helpful when analyzing clusters.

The development of locational competitive advantage

Looking at the development of the locational competitive advantage over time in Santa Catalina we find three distinct step-shaped increases (end of armed conflict, opening of Coiba Island, opening of Hotel Santa Catalina). We also see a trend that the rate of increase (slope) generally seems to become steeper and steeper. Looking deeper into the reasons on why the competitive advantage has developed this way we find two important focus areas. The role of Government & the accumulated interplay of factors.

Looking at the step-shaped increases we find that the first two important resulted from triggering factors regarding politics. By the ending of the armed conflict, the business environment in Panamá and Santa Catalina drastically became less exposed to political risk and thereby more attractive for local & foreign entrepreneurs. The opening of Coiba Island was a similarly significant event since it opened up for an entire new type of tourism customers & entrepreneurs. From using the Island as a prison, it was now up to entrepreneurs to find ways of creating value from the new factor condition of the exotic island. Our interpretation of this is that there has been earlier demand for diving but since the resource was made unavailable by government this demand was not met until the Island opened. Actions by the government that limit resources to rural areas can therefore act as a wet blanket hindering spontaneous cluster formation.

The other important effect of government is on the rate of increase of the locational competitive advantage. We find an important pre-existing condition for spontaneous cluster formation is the ease of setting up business. The ease of setting up business as a foreigner in Panama combined with lax enforcement of health regulations and tax laws were driving forces for entrepreneurs in Santa Catalina when deciding to set up business. The business-friendly environment for small firms combined with entrepreneurial skills among foreign divers have enabled advantageous utilization of Coiba Island as a resource. Moreover, since Panama historically have lacked certificated divers, foreign divers easily obtained working permits, facilitating the growth of the diving sector in Santa Catalina. The easier it is to set up business, the more probable it is that entrepreneurs will find ways to utilize the factor conditions present at the location.

However, a deeper suggestion is regarding the actions Government might spend resources on. In the case of spontaneous cluster formation, the best action is often to limit political risk and influence to instead enable risk takers to focus on creating businesses.

Competitive advantage resulting from interplay of factors accumulated from additional reach of new segments of customers and entrepreneurs

Observing figure 14 and the corresponding analysis of RQ5, it can be concluded that the growth rate of competitive advantage has been fluctuating over the studied period. The growth rate is heavily influenced by an interplay of factors in Santa Catalina. These factors have continuously been accumulated by reaching new segments of customers and entrepreneurs. More specifically it can be observed that some individuals from various customer segments established themselves as entrepreneurs in Santa Catalina, contributing to the growth rate of the competitive advantage. In the following section, the interplay and accumulation of these factors are further discussed.

Customers are attracted to Santa Catalina to experience surfing La Punta or diving at UNESCO World Heritage Site Coiba National Park in a relaxed and tropical atmosphere. Seasonal fluctuations in surf and dive conditions are naturally synchronized to complement each other so that when there is a low season for diving it is high season for surfing and vice versa. This increases stability in demand for accommodation businesses and diversify the offerings of the location. This was only made possible in 2004 and onwards when Coiba island was accessible for tourism and entrepreneurs utilized this by creating diving related businesses.

Even though both surfing and diving is offered in Santa Catalina, entrepreneurs experience an increasing demand from divers, who request higher quality services and are willing to pay a premium for it. The LDE has been leading the way for meeting this demand, by initiating development projects and waste management schemes. As a result of this many locals and business owners have increased their awareness of

the negative impacts of environmental issues, and since they plan on staying in Santa Catalina (no exit strategy) this means they want to avoid over-exploitation the resources of Santa Catalina. This interplay and subsequent development have further contributed to the growth rate of the competitive advantage. The increased competitive advantage of Santa Catalina has brought the opportunity to reach new customer segments, such as families.

Even though Coiba Island has been a driving force in attracting customers, both La Punta and Coiba Island has been key in attracting entrepreneurs. The majority of business owners within the diving sector initially arrived to Santa Catalina for recreational diving at Coiba Island, with the corresponding situation being true for surfers and La Punta. Most business owners share diving or surfing as a personal interest, to the degree that many business owners mentioned their personal interest in either surfing or diving as the main reason for setting up business in Santa Catalina. Furthermore, the relaxed atmosphere many business owners mention seem to be important for attracting new entrepreneurs and this relational proximity of entrepreneurs sharing many values and goals makes integration easy, further contributing to the growth rate of the competitive advantage.

Moreover, the interplay between accumulated factors does not only contribute to the growth rate of Santa Catalinas competitive advantage. For example, the aforementioned development initiatives coordinated by the LDE, the opening of Hotel Santa Catalina and the sudden subsequent arrival customers from the family-segment implied a sharp step-changed increase in the competitive advantage of Santa Catalina.

Conclusion

In this chapter main findings from the investigation of the research questions are presented.

RQ1 - How did Santa Catalina develop over time as a tourist destination?

Empirical findings and the following analysis of these findings point to a locational development of Santa Catalina occurring in several distinguished eras. Rather than having a continuously linear development since the 1970, each era has implied a path for the development of Santa Catalina as a tourist destination. In the timeline below, the eras in which the development of Santa Catalina can be categorized are distinguished by a certain background colour:

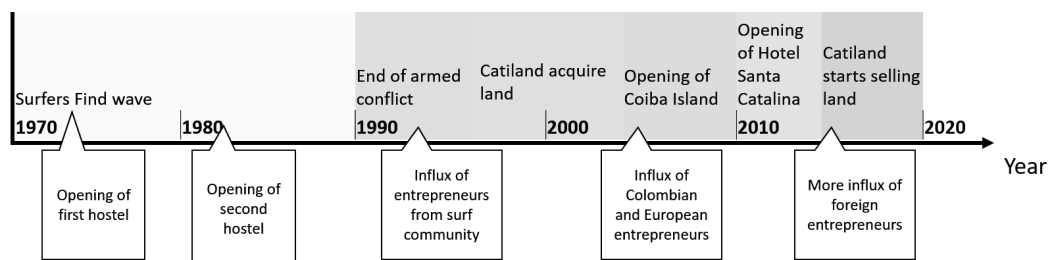


Figure 15 Timeline of development

RQ2 - What were the key events behind the development?

The study suggests that each era in the development of Santa Catalina is clearly initiated by certain key events. A strong unanimousness among empirical findings points to the conclusion that the following key-events can be considered as initiators of new eras in the development of Santa Catalina:

- Surfers finding wave
- End of armed conflict
- Catiland acquires land
- Opening of Coiba Island
- Opening of Hotel Santa Catalina
- Catiland starts selling land

RQ3 - Who are the Main Actors and What are their Competencies?

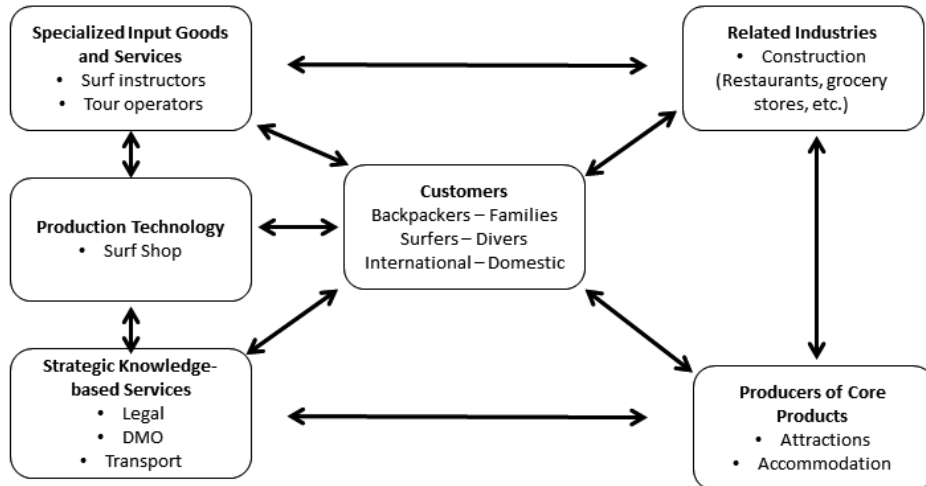


Figure 16 Main actors

Empirical findings and the corresponding analysis points to the categorization of main actors observed in the figure above using the Hallencreutz et al (2004) framework. Moreover, it can be concluded that main actors possess one or several competences related to the value chain of the cluster. The roles of the main actors and their competences are described in the list below:

- Customers from different segments, such as Backpackers, Families, Surfers, Divers, International and Domestic are located in the center of the cluster as being the driver for other economic activities in the cluster.
- Providers of Attractions and Accommodations provide the final product within the value-chain of the cluster.
- Surf Instructors and Tour Operators offer services specifically developed for the production of the core product.
- One Surf Shop offers equipment needed for the core product.
- One legal firm, one DMO and one private Transport business provide services that directly or indirectly support the development of the cluster.
- Independent Construction Contractors are not producing core products and are not closely interwoven to the other actors but still indirectly affect the development of the cluster

RQ4 - What are the Relations Between the Main Actors and What Are the Dynamics of the Cluster?

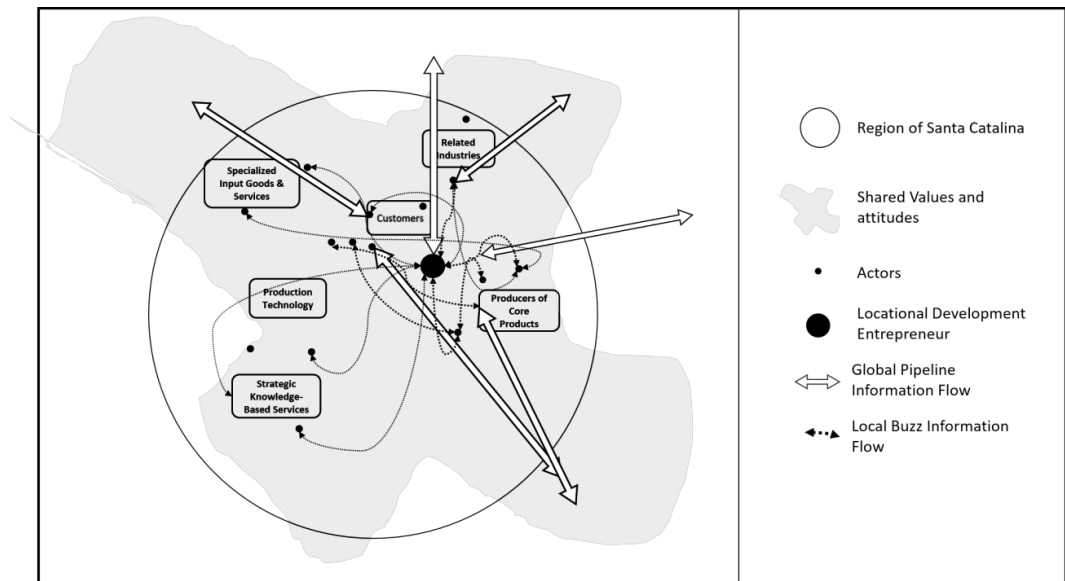


Figure 17 Conceptual map

Following the conducted analysis, mainly three topics are of special relevance for describing the relations between the main actors and the overall dynamics of the cluster. It can be concluded that these three characteristics are the following:

- **Shared values as a basis for information transfer and cooperation**

The tight-knit surf community with shared values has created natural transfer mechanisms of information and ambitions among the earliest entrepreneurs in Santa Catalina. This characteristic has been present since the establishment of Santa Catalina as a surfing destination and has been heavily influential on the development of the business environment and the destination a whole.

- **LDE Providing a Pipeline to Supporting Organizations**

The LDE acts as a locomotive for economic activities and initiatives in Santa Catalina. The vast majority of co-operations among actors in Santa Catalina is coordinated through the LDE. Moreover, the LDE stands out as an actor being well connected with the business environment outside of Santa Catalina, and tends to act as a pipeline between actors inside and outside of Santa Catalina.

- **Foreign Entrepreneurs as Global Pipelines**

Foreign entrepreneurs have heavily impacted the emergence of Santa Catalina as a tourist destination. They act as key players in integrating outside knowledge and

providing connections between Santa Catalina and the host country of the entrepreneur.

RQ5 - What are the key events, pre-existing conditions and triggering factors for cluster formation in Santa Catalina?

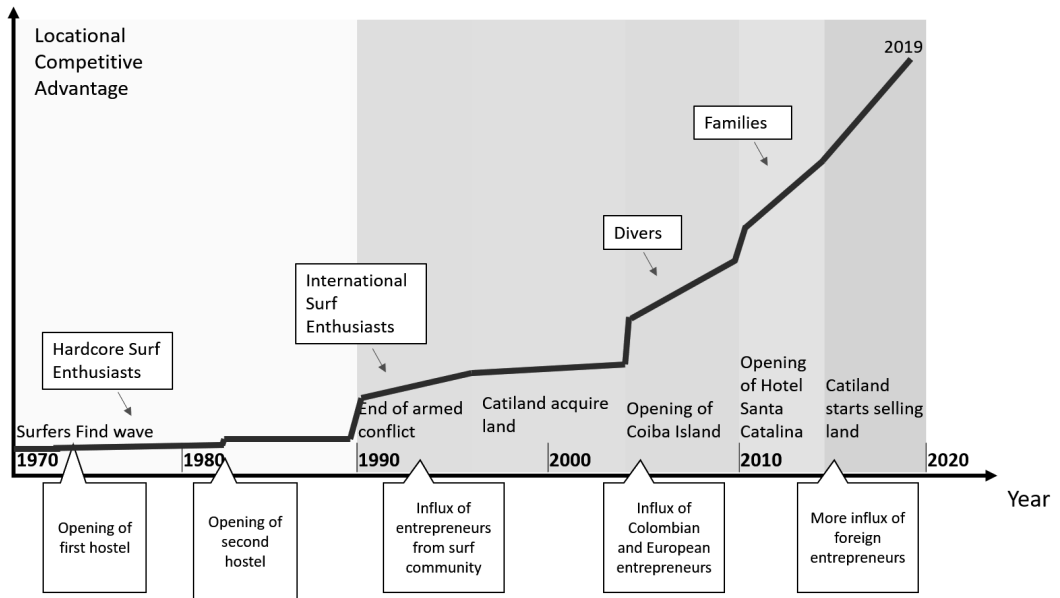


Figure 18 Development of locational competitive advantage in Santa Catalina

In the figure above it can be observed how different events are linked to reaching new customer segments and contributing to the overall competitive advantage of Santa Catalina. Following the study's analysis, it can be concluded that certain key events, conditions and triggering factors contribute to cluster formation in Santa Catalina. The table below summarizes pre-existing conditions and triggering factors on various levels since 1970, contributing to the competitive advantage of Santa Catalina.

Year	Level	Pre-existing Condition	Triggering Factor
1970	Micro	<ul style="list-style-type: none"> Surfable Wave - Factor Condition 	<ul style="list-style-type: none"> Surfers Find wave and opens hostel - Chance
1990	Micro	<ul style="list-style-type: none"> Close-Knitted Business Community - Firm Structure & Rivalry 	
1990	Macro		<ul style="list-style-type: none"> End of Armed Conflict-

			Chance & Government
2004	Micro	<ul style="list-style-type: none"> Local fishermen with knowledge of local maritime conditions - Related and supporting industries Local Surfers mobilizing knowledge of local conditions - factor condition Surfers owning accommodation and restaurant businesses - Firm strategy structure and rivalry 	<ul style="list-style-type: none"> Establishment of dive shops by external entrepreneurs - Firm structure strategy & rivalry Influx of foreign entrepreneurs - Government & Firm structure strategy & rivalry
2004	Meso	<ul style="list-style-type: none"> Easy for divers to establish business in Santa Catalina (buy land, working visa for divers, ease of business start-up) - Government Openness to new actors facilitate absorptive capacity - Firm Structure strategy and rivalry 	
2004	Macro	<ul style="list-style-type: none"> Internet - Factor Condition Political stability - Government 	<ul style="list-style-type: none"> Coiba Island Open for public + UNESCO - Government
2010	Micro	<ul style="list-style-type: none"> Possibilities for surfing and diving - Factor condition Ongoing influx of entrepreneurs to Santa Catalina - Firm Structure strategy and rivalry 	<ul style="list-style-type: none"> LDE starts several initiatives aiming at making the location more attractive for families and luxury tourists - Firm structure strategy and rivalry
2016	Micro	<ul style="list-style-type: none"> Restricted access to affordable land - Factor condition 	<ul style="list-style-type: none"> Catiland start selling land - Factor condition + Chance

Table 2 Pre-existing conditions and triggering factors on various levels since 1970

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Appendices

Interview Guide

Introduction Script:

Thank you for agreeing to speak with us today about business development in Santa Catalina. As already mentioned, we are two Swedish students working on our master thesis, with the purpose of exploring the business environment in Santa Catalina.

The interview should take around one hour. Please note that your answers are confidential and you will be guaranteed anonymity. We are only interested in your opinion, there are no right or wrong answers and you may also decline to answer any question. You are free to ask us any question during the interview. We will take notes during the interview if it is okay with you.

Before going into our main topics of the study we would like to ask you a few personal questions:

Could you tell us briefly about your business?

Could you tell us briefly about your personal background?

<p>Porter's Diamond <i>Components</i> Factor Conditions Demand Conditions Related and Supporting Industries Firm Strategy Structure and Rivalry</p> <p><i>Dynamics</i> Chance & Government</p>	<p>Could you tell us about the business environment in Santa Catalina?</p> <p>Could you describe your customers? How would you compare Santa Catalina to other similar locations? WHY? What made you consider starting your business here? What made you finalize the decision? When? What are your goals? What are the goals of the other businesses?</p>
<p>Cluster Emergence Pre-existing Conditions</p>	<p>What do you think were the reasons behind the growth of Santa Catalina?</p>

<p>Triggering factors Micro Macro Meso</p>	<p>Why? Who were the first actors within the tourism business in Santa Catalina? - Where did they come from? Could you describe Santa Catalina before the rise of tourism businesses?</p>
<p>Complementaries Complementary Products for the Buyer Marketing Complementaries Alignment of Activities</p>	<p>Does your business benefit from other businesses in Santa Catalina? How? Do other businesses benefit from your business? How?</p>
<p>Kim & Wicks Co-opetition Destination Management Organization Multinational Economic Activity</p>	<p>Who are your competitors? In what way? Firms in general? Who do you cooperate with? In what way? Why? Firms in general? Conflicts? Why? What is the role of the Chamber of Tourism? Who decides, how?</p>
<p>Network Characteristics Openness Strength - Trust Proximity Functional - Accessibility Relational - Affinity</p>	<p>What relation do you have with other actors? Why? What relationships are of most value to you? Why? How have new actors in Santa Catalina been received? Difference between local and non-local entrepreneurs? How do you make sure that your business partners are trustworthy?</p>
<p>Knowledge network Local Buzz and Global Pipelines</p>	<p>Relations outside of Santa Catalina? And who has? How did the relationships arise? Who solves problems? Who knows who solves problems?</p>

	<p>How frequently do you interact frequently with other actors in Santa Catalina?</p> <p>Who or what is your source of information?</p>
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When interviewers feel that all topics have been discussed and that the time set aside for the interview is up, they can ask the interviewee if he/she has anything to add. Interviewers must then thank the interviewee for participating.

List of Respondents

Name	Origin	Industry	In business since	Interview duration (minutes)
R1	Santiago, Veraguas	Restaurant	1997	30
R2	Santa Catalina, Veraguas	Construction	1982	30
R3	USA	Restaurant	2018	20
R4	Brasil	Hostel + DMO	1994	70
R5	Panamá City	Legal	2010	40
R6	David, Chiriqui	Fruit Shop	2016	20
R7	Santa Catalina, Veraguas	Hostel	1991	40
R8	Santa Catalina, Veraguas	Restaurant	1992	20
R9	David, Chiriqui	Fruit Truck	2014	20
R10	Colombia	Food Truck	2018	40
R11	Colombia	Diving	2007	40
R12	Italy	Restaurant	2009	30
R13	Santiago, Veraguas	Hotel	2018	20
R14	Santa Catalina, Veraguas	Restaurant	2006	30
R15	Santiago, Veraguas	Surf Instructor	2016	30
R16	France	Diving	2018	40
R17	Hicaco, Veraguas	Grocery Store	2011	30
R18	Soná, Veraguas	Bus Company	2009	20
R19	Austria	Diving	2004	30
R20	Venezuela	Hostel	2014	40
R21	Colombia	Restaurant	2017	30
R22	Panamá City	Real Estate Development	2004	70