

# Developing a Digital Marketplace for the Sendero Pacífico Communities

Peter Conroy, Thomas Dziechciarz, Lauren Hardy, and Karla Navarro



# Developing a Digital Marketplace for the Sendero Pacífico Communities

An Interactive Qualifying Project Report  
submitted to the Faculty of  
WORCESTER POLYTECHNIC INSTITUTE  
in partial fulfillment of the requirements for the  
degree of Bachelor of Science

by  
Peter Conroy  
Thomas Dziechciarz  
Lauren Hardy  
Karla Navarro

Date:  
17 March 2021

Monteverde Project Center

Report Submitted to:

Nathaniel Scrimshaw  
World Trails Network

Professors Sarah Strauss and Melissa Belz  
Worcester Polytechnic Institute



*This report represents work of WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its web site without editorial or peer review. For more information about the projects program at WPI, see <http://www.wpi.edu/Academics/Projects>.*

# Abstract

Rural communities within the region of Monteverde, Costa Rica, and along the long-distance hiking trail the Sendero Pacífico lack an equal distribution of tourism. We worked alongside the World Trails Network to encourage the communities' socio-economic development by evaluating e-commerce platforms and analyzing the logistical feasibility of placing locally made products onto the national and U.S. markets. We interviewed community representatives and local producers to learn of the best options to develop a phased-in digital marketplace. We created an informational manual highlighting a step-by-step approach with details about product regulations, shipping options, and e-commerce platforms for the communities to become engaged in the world of digital commerce.

# Developing a Digital Marketplace for Costa Rican Communities along the Sendero Pacífico



## ➤ *An Executive Summary*

Peter Conroy, Thomas Dziechciarz, Lauren Hardy, Karla Navarro

### Introduction

With its many beneficial services and rewards, trail tourism in Costa Rica is a widely valued economic activity. The Sendero Pacífico (Pacific Slope Trail) is a long-distance hiking trail located in the Bellbird Biological Corridor, stretching from the town of Monteverde to the Gulf of Nicoya (Figure A). The trail links many communities that have the opportunity to share their unique services and handmade crafts with tourists and the broader audience of conservation enthusiasts. The communities include: Monteverde, San Luis, San Antonio, Guacimal, Santa Rosa, La Colina, and Costa de Pájaros. Although all the communities reside along the same trail, the economic benefits from trail tourism are unequally distributed. Specifically, Monteverde is a major ecotourism destination which receives the most financial benefits and tourist attention. Few tourists travel down the trail to the coast and mostly stay within the Monteverde and San Luis area. In addition, the COVID-19 pandemic exacerbated the lack of tourism along the Sendero Pacífico.

The World Trails Network (WTN) is a non-profit organization working to address this problem and is helping to foster a shared identity for the economic and social benefits of all the communities.



**Figure A.** A map of the Sendero Pacífico through the communities



## Project Goal and Objectives

The goal of this project was to strengthen the socio-economic development of the communities along the Sendero Pacífico by creating a phased-in approach for the future development and sustainability of a digital marketplace. We achieved this goal by conducting interviews with community Ambassadors, evaluating e-commerce platforms, and analyzing the production and export feasibility for local products to meet new markets.

## Methods

We conducted semi-structured interviews with the Ambassadors, an unofficial group consisting of one member per community who were widely respected and exhibited interest in fulfilling the project goal. The Ambassadors described the general state of their community, including tourism traffic, Internet usage and availability, and possible products for the marketplace. We conducted a comparative analysis of existing and build-your-own e-commerce platforms, identified relevant government policies for potential products by consulting Costa Rican and U.S. sites, and reviewed available national and international shipping services. We also spoke with local producers who supported the above-stated methods. From the information collected, we developed a cohesive, step-by-step informational guide for the Ambassadors and the WTN to follow in the implementation of this new marketplace.

## Findings

Through Ambassador interviews, we learned that there are differences in what each community offers, including Internet reliability, local products (Figure B and C), and established businesses. Many local producers along the trail sell their products



**Figure B.** Wooden art from Guacimal



**Figure C.** Mobiles from Costa de Pájaros

to tourists, grow produce for consumption, or trade among neighbors. However, a few producers in the Monteverde area sell their products online to national and international destinations. The Ambassadors indicated that some communities lack strong Internet connection and others solely use a mobile phone for limited communication. All the Ambassadors indicated that for most people, shopping online is not a normal activity which indicated that residents have little to no knowledge of how products should be maintained and marketed to an outside audience. Although they are not familiar with the maintenance of an e-commerce platform, the Ambassadors believed that establishing an online presence is an important next step for the area.

Based on our research into the regulations around the shipping and sale of **products** both nationally and to the United States, we determined many products of plant and animal origin to be unfeasible for sale on the digital marketplace due to the lack of surplus to sell abroad, seasonal availability, product weight, shipping time, and a multitude of required health and export permits. On the other hand, community products such as handmade soap (Figure D), coffee, honey, silver jewelry, macrame, cosmetics, and artwork are feasible to be placed on the e-commerce platform.



**Figure D.** Handmade soap from Santa Rosa

These products ranged in the necessary permits and regulations, but we learned the process of obtaining these can occur in an efficient and straightforward manner. Since the products will be sold to U.S. buyers, the U.S. Customs and Border Protection may impose additional fees onto the buyer which could affect the selling efficacy of the products.

By conducting research on **shipping services** available in the Sendero Pacífico region and talking to local producers, we found

that Correos de Costa Rica (national postal system) and DHL are the two main services in the Monteverde area. Both services offer national and international shipping at comparable costs. Correos is mostly commonly used among residents as the service operates on a daily basis with efficiency. DHL only picks up packages in Monteverde once a week, although many producers reviewed the service DHL offers positively, especially for international shipment. Sending packages abroad is much more expensive than national shipping. International shipping involves a significant amount of documentation. Each package must go through the customs clearance process at the destination country. We learned that DHL offers assistance in this process which alleviates the producer from undergoing additional steps themselves. In addition, the export support service called PROCOMER steps businesses through the process to be able to sell to international markets.

In conducting research on various **e-commerce platforms** that are available in both Costa Rica and the U.S., we found two types: existing and build-your-own. Existing platforms allow the seller to post products almost immediately after setting up an account and contain an established consumer base. Build-your-own platforms differ from existing platforms in the aspect that they allow the seller to design an entire webpage for just their products. Not only can the seller sell their products, but they can add in pictures, videos, and text to personalize the site.

We used the information from interviews as well as product regulations, shipping services, and e-commerce platforms to create an **informational manual** for the communities and the WTN. Within the manual, we outline a phased-in approach to help the Ambassadors create a digital platform and be prepared to ship both nationally and internationally. This plan begins with the establishment of a common ground that the Ambassadors are

capable of starting with and works its way up to selling internationally from the communities' own website. Following the phased-in approach, we include a chapter on the regulations of products as well as the steps we took to find the information. We included this aspect in the event that a new product becomes evident for sale. The next chapter describes the national and international services that Correos de Costa Rica and DHL offer. A short section is dedicated to tips on packaging products. Lastly, we compare the best options for the platform and share their details for the communities to make a unified and informed decision.

## Recommendations & Conclusion

Based on our research, we made a multitude of recommendations ranging from platform administration to shipping services. We concluded that Shopify was the platform that would best fit the needs and wants of the community members. Shopify will allow them to create their own personalized website to display their products and share what their community means to them through personal stories, images, and videos (Figure E). The Ambassadors could also link and share their Shopify webpage onto their Facebook page, which would help the region reach a broader audience. After looking into different shipping carriers, we recommend Correos de Costa Rica for shipping nationally and DHL for shipping internationally. We also recommended that the producers contact PROCOMER for more information about selling and shipping internationally. PROCOMER is an export support service that helps small and medium businesses with obtaining proper permits and certifications when shipping internationally.

Although we formed recommendations, we understand that the decisions need to be made by the communities. For this reason, the manual contains synthesized and tabulated data on the researched

products, platforms, and shipping so the communities would have all the information necessary to choose their best options. We hope that this in-depth manual and our project report serve as important tools for the WTN and the Sendero Pacífico communities in the future implementation of a digital marketplace.



Figure E. A view of the Sendero Pacífico from Monteverde to the Coast.



[Team Photo]

# Acknowledgements

As a team we would like to extend our full gratitude to those who assisted us throughout our project. This project could not have been completed without unwavering support and assistance from our sponsor Nathaniel Scrimshaw from the World Trails Network. We would also like to thank our project advisors Melissa Belz and Sarah Strauss for their guidance and collaboration throughout the term to ensure that our project was successful. The team would like to thank Carol Stimmel for her help in the proposal stages of our project. In addition, we would like to send a special thank you to the Ambassadors from the communities along the Sendero Pacífico who ensured constant communication with regards to the communities, despite our lack of being able to travel. Without their dedication, this project would not have been feasible. Thank you to Centro Panamericano de Idiomas (CPI) for increasing our knowledge in the language and culture of Costa Rica. Finally, we would like to thank everyone who we interviewed or spoke with that provided us with necessary and useful information to be accounted for in our project.



# Table of Contents

<b>Abstract</b>	<b>ii</b>
<b>Executive Summary</b>	<b>iii</b>
<b>Acknowledgements</b>	<b>viii</b>
<b>Table of Contents</b>	<b>viii</b>
<b>Table of Figures</b>	<b>x</b>
<b>Table of Tables</b>	<b>xii</b>
<b>Authorship</b>	<b>xiii</b>
<b>1. Introduction</b>	<b>1</b>
<b>2. Background</b>	<b>4</b>
2.1 Rural Tourism & Trails	4
2.1.1 The Importance of Rural Tourism	5
2.1.2 Connections Between Rural Communities	5
2.1.3 Economic Growth Through Trail Tourism	7
2.2 Digital Commerce & Small Businesses	8
2.2.1 The Role of Digital Commerce for Small Businesses	8
2.2.2 Export Challenges	10
2.3 Our Project with the Sendero Pacífico	11
<b>3. Methodology</b>	<b>12</b>
Objective 1. Gain Familiarity with the Communities along the Sendero Pacífico through Community Ambassadors	13
Objective 2. Analyze Regulations of Potential Products to Determine Their Export Feasibility	14
Objective 3. Evaluate the Applicability and Usability of E-Commerce Platforms	16
Objective 4. Provide the WTN and the Ambassadors with a Phased-in Approach to Implement a Digital Marketplace	18
<b>4. Findings and Analysis</b>	<b>20</b>
4.1 Communities Along the Sendero Pacífico	20
4.2 Product Information and Logistics	30
4.2.1 Permits and Other Documentation for Determined Products	31

4.2.2 National and International Shipping Options	33
4.3 E-Commerce Platform Options	36
4.3.1 Existing E-Commerce Platforms	37
4.3.2 Build Your Own E-Commerce Platforms	38
<b>5. Recommendations and Conclusion</b>	<b>40</b>
5.1 E-Commerce Platform Recommendations	40
5.1.1 Recommended E-Commerce Platform	41
5.1.2 Platform Marketing and Design	41
5.2 Shipping Service Recommendations	42
5.3 Recommendations for Obtaining Product Documents	43
5.4 Verdes Integration	43
5.5 Conclusion	44
<b>References</b>	<b>45</b>
<b>Appendix A</b>	<b>49</b>
<i>Ambassador Semi-Structured Interview Protocol</i>	49
<b>Appendix B</b>	<b>51</b>
<i>Producer Semi-Structured Interview Protocol</i>	51
<b>Appendix C</b>	<b>53</b>
<i>Key Findings from Ambassador Interviews</i>	53
<b>Appendix D</b>	<b>54</b>
<i>Detailed Product Regulation Descriptions</i>	54
<b>Appendix E</b>	<b>57</b>
<i>Key Themes from Producer Interviews</i>	57
<b>Appendix F</b>	<b>58</b>
<i>Comparative Table Checklist of Digital Platforms</i>	58
<b>Appendix G</b>	<b>60</b>
<i>Informational Manual</i>	60

# Table of Figures

Figure 1: A map of the Sendero Pacífico (Pacific Slope Trail) .....	2
Figure 2: The rural tourism concept.....	4
Figure 3: Relationships among objectives.....	12
Figure 4: Considerations when evaluating e-commerce platforms.....	17
Figure 5: The view of the Sendero Pacífico from Monteverde to the Coast.....	20
Figure 6: Panoramic view from San Luis of the Monteverde rainforests to Gulf of Nicoya.....	23
Figure 7: The San Antonio Ridge at sunset.....	24
Figure 8: The Guacimal river.....	25
Figure 9: A waterfall in Santa Rosa.....	26
Figure 10: Island Boat Tours in Costa de Pájaros.....	28
Figure 11: Handmade soap from Santa Rosa.....	31
Figure 12: Handmade mobiles from Costa de Pájaros .....	32
Figure 13: Wooden art from Guacimal.....	32
Figure 14: Shipping services available in the Sendero Pacífico region.....	34

# Table of Tables

Table 1: Government websites searched for product rules and regulations.....	15
Table 2: Product Restrictions Comparison.....	30



# Authorship

Authors: Peter Conroy (PC), Thomas Dziechciarz (TD), Lauren Hardy (LH), Karla Navarro (KN)

<b>Section</b>	<b>Primary Author(s)</b>	<b>Primary Editor(s)</b>	<b>Secondary Editor(s)*</b>
Executive Summary	PC	TD	All
1.0 Introduction	TD, LH	PC, KN	All
2.0 Background	TD	LH	All
2.1 Rural Tourism and Trails	TD	LH	All
2.1.1 The Importance of Rural Tourism	TD	KN	All
2.1.2 Connections Between Rural Communities	PC	TD	All
2.1.3 Economic Growth Through Trail Tourism	PC	KN	All
2.2 Digital Commerce and Small Businesses	KN	TD	All
2.2.1 The Role of Digital Commerce for Small Businesses	LH, KN	PC	All
2.2.2 Export Challenges	KN	TD	All
2.3 Our Project with the Sendero Pacifico	TD	PC	All
3.0 Methodology	TD	KN	All
Objective 1. Gain Familiarity of Communities Along the Sendero Pacífico through Ambassadors	TD	LH	All
Objective 2. Analyze Regulations of Potential Products to Determine Their Export Feasibility	KN	TD	All
Objective 3. Evaluate the Applicability and Usability of E-Commerce Platforms	LH	PC	All
Objective 4. Provide the WTN and the Ambassadors with a Phased-in Approach to Implement a Digital Marketplace	PC	KN	All
4.0 Findings and Analysis	TD	KN	All
4.1 Communities Along the Sendero Pacifico	LH, KN	TD	All

4.1.1 Ambassadors' Thoughts on an Online Marketplace	LH	PC	All
4.1.2 Community Products Removed from Consideration	PC	TD	All
4.2 Product Information and Logistics	TD	LH	All
4.2.1 Permits and Other Documentations for Determined Products	TD, KN	PC	All
4.2.2 National and International Shipping Options	TD, KN	PC	All
4.3 E-Commerce Platform Options	LH	KN	All
4.3.1 Existing E-Commerce Platforms	LH, PC	TD	All
4.3.2 Building E-Commerce Platforms	LH	PC	All
5.0 Recommendations and Conclusion	PC	TD	All
5.1 E-Commerce Platform Recommendations	LH, KN	LH	All
5.1.1 Recommended E-Commerce Platform	LH, KN	PC	All
5.1.2 Platform Marketing and Design	KN	TD	All
5.2 Shipping Service Recommendations	KN	LH	All
5.3 Recommendations for Obtaining Product Documents	PC	KN	All
5.4 Verdes Integration	KN	TD	All
5.5 Conclusion	PC	LH	All
Appendix A: Ambassador Semi-Structured Interview Protocol	TD	LH/KN	All
Appendix B: Producer Semi-Structured Interview Protocol	KN	TD	All
Appendix C: Key Findings from Ambassador Interviews	TD	LH, KN	All
Appendix D: Detailed Product Regulation Descriptions	TD	KN	All
Appendix E: Key Themes from Producer Interviews	PC	TD	All

Appendix F: Comparative Table Checklist of Existing Digital Platforms	LH	PC	All
Appendix G: Informational Manual	All	All	All

**\*all final edits were conducted as a team**

# 1. Introduction

Purchasing mementos and other locally made products is a great way to end the trip of a lifetime and give back to the community. People who take part in rural tourism have such an opportunity. Rural tourism is a type of tourism located in rural areas that operates with a different scale, character, and function (Ayazlar & Ayazlar, 2015). People escape from their daily routines to distant, beautiful areas. Rural tourism enthusiasts tend to seek new and different experiences rather than mundane mass tourism activities (Ayazlar & Ayazlar, 2015). Rural tourism is valued for its help in improving a nation's economic and societal standing (Briedenhann & Wickens, 2004). The industry can include trails that provide job creation and increased revenue in rural communities (American Trails, 2020). Tourists not only contribute to the local economy when buying products or lodging but also help strengthen the bond between communities along a trail (Ayazlar & Ayazlar, 2015).

With its many beneficial services and rewards, trail tourism in Costa Rica is a widely valued economic activity. The Sendero Pacífico (Pacific Slope Trail) is a long-distance hiking trail located in the Bellbird Biological Corridor, stretching from the town of Monteverde to the Gulf of Nicoya (Figure 1). The trail links many communities that have the opportunity to share their unique services and handmade crafts with tourists and the broader audience of conservation enthusiasts. Many communities depend on a flow of tourists, however, the economic benefits from the trekking industry are unequally distributed across trail communities, such as the ones along the Sendero Pacífico, because of a lack of a consumer base at certain trail locations (Kunaeva, 2012). Since March 2020, the restrictions due to the Coronavirus pandemic amplified the lack of economic support for the Sendero Pacífico communities because it closed down the tourism industry. In turn, local artisans and vendors struggle to sell their products or establish new businesses. To combat this problem, the World Trails Network (WTN) aided in revitalizing the communities along the Sendero Pacífico.





**Figure 1.** A map of the Sendero Pacífico (Pacific Slope Trail) (WTN, 2020)

The WTN is a non-profit organization of global leaders who encourage the development, enhancement, and promotion of the trails for the benefit of local communities and tourists (WTN, 2020). The World Trails Network-Hub for the Americas (WTN-Americas) embodies a goal to link trails in critical habitat and human communities in Costa Rica's Bellbird Biological Corridor. The Sendero Pacífico not only represents a trail for trekkers but also encourages connection and community engagement for those who live along it. WTN aims to foster this shared identity for the economic and social benefits of all the communities.

The sale of local products from the many unique artisans and vendors along the Sendero Pacífico helps dissipate the observable regional divisions in commerce opportunities. Communities in the upper corridor, including Monteverde, San Luis, and San Antonio, enjoy large economic benefits from high tourist traffic. On the other hand, communities in the lower corridor, including Santa Rosa, La Colina, and Costa de Pájaros, are disconnected and mostly

rely on agriculture for continued subsistence (Sick, 2008). To support the trail network in becoming a rich hub for community engagement, WTN asked the project team to help strengthen meaningful interactions along the Sendero Pacífico.

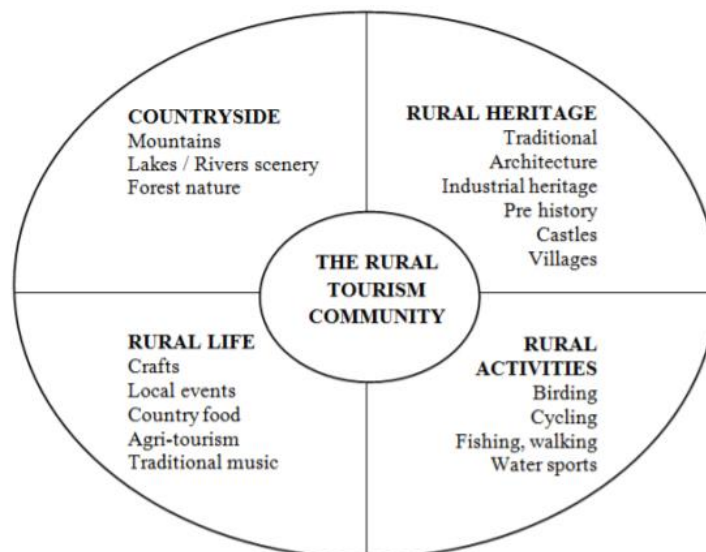
The goal of this project was to create a phased-in approach to assist the communities in the future development and sustainability of an online marketplace. Sharing locally produced products with a global audience presented an opportunity to stimulate the region's economy and community relationships. We achieved the project goal using various objectives. The Background chapter emphasizes the benefits of rural tourism along trails and how rural businesses can take advantage of e-commerce. The Methodology chapter follows, outlining the project's objectives and its processes. The report concludes with findings on the determined steps to start an online platform and recommendations on the best approach to operate a fully established online marketplace. The communities have an opportunity to strengthen the socio-economic development of the Sendero Pacífico region by garnering national and international attention through a phased-in online presence.

## 2. Background

In this chapter, we begin with a literature review of rural tourism and its relationship to communities adjacent to trails. We focus on the economic benefits and commerce opportunities that trail tourism brings. Then, we examine the difficulties small, rural businesses face when embracing digital commerce. We discuss the regulations to consider with exporting Costa Rican products. Finally, we narrow into our project goal of encouraging community development through the establishment of an online marketplace for the Sendero Pacífico region.

### 2.1 Rural Tourism & Trails

Remote locations that are removed from busy, overpopulated centers have a unique attractiveness for rural tourism. Tourists seek a fulfilling experience through a different form of tourism, while tending to their health and well-being (Ayazlar & Ayazlar, 2015). In rural villages and small towns, tourists engage in activities such as walking and bird watching, as well as experiencing artisanal crafts and traditional food (Figure 2) (Ayazlar & Ayazlar, 2015). Local families develop rural tourism at their own pace, ideally sustaining the area's traditions and character (Egbali, Nosrat, and Alipour 2011).



**Figure 2.** The rural tourism concept (Ayazlar & Ayazlar, 2015)

### *2.1.1 The Importance of Rural Tourism*

As urban areas increase in population and economic activity, rural areas experience the opposite situation (Ayazlar & Ayazlar, 2015). To tackle this problem, rural areas turn to tourism as an alternative development strategy (Ayazlar & Ayazlar, 2015). Residents value rural tourism for its income generation, job creation, and conservation of natural landscapes, which can all strengthen an area's socio-economic development (Corina, 2018; Iorio & Corsale, 2010). Egbali, Nosrat, and Alipour (2011) suggest that residents can show visitors the local wildlife and other natural resources as a means to revive their culture and boost self-confidence. Both Scheyvens (1999) and Grieves et al. (2014) agree that giving communities the steering wheel to decide what tourism looks like for their community promotes community empowerment along with community cohesion. Individuals and families become inclined to voice their opinions to work together in building a successful tourism venture. If the aspects of rural tourism are utilized in an appropriate manner and cultural values are respected, communities will preserve their rural heritage (Egbali, Nosrat, & Alipour, 2011).

One must be cautious with the multitude of benefits that rural tourism advertises, as pressure and competition always pose a threat. Evidence shows that inflated prices in tourist areas or the construction of tourism facilities may cause a deterioration in living conditions for residents (Egbali, Nosrat, & Alipour, 2011). Iorio and Corsale (2010) suggest that success in this industry comes with the cost of increased labor provided by family members. If families are not invested in tourism growth, the achievement of rural economic diversification is hampered. Iorio and Corsale (2010), as well as Saxena and Ilbery (2008), propose integrating rural tourism into the broader national and regional tourism industry, linking social networks for the development and upkeep of economic, social, cultural, natural, and human resources in localities.

### *2.1.2 Connections Between Rural Communities*

Having a linkage between communities can encourage the development of rural tourism. Dalakoglou & Harvey (2012) express that roads, a type of pathway, traverse towns and communities across the globe, connecting dissimilar cultures while helping to create and shape the very image of the localities they pass through. A pathway brings rural communities closer together both physically and socially, despite living distantly from each other. Multiple pathways



within a single area can link with each other and start to build networks among community members and tourists. Tourists visit communities via pathways and thus have the chance to experience cultural activities, nature attractions, and any other specialized events shared by residents (Ayazlar & Ayazlar, 2015). Meaningful ties between residents and tourists help establish a sense of pride and socio-economic development for the rural communities (Saxena & Ilbery, 2008).

Tourism can build social connections among residents. For example, tourists visit local businesses and consequently strengthen them (American Trails, 2020). Other residents can become inspired by the economic growth and establish more businesses. Residents become more engaged with each other because they seek to attract tourists for the socio-economic benefits of the whole community (Bratton, 2012). The sharing of information between residents builds a social network among diverse sub-communities (Bratton, 2012).

Trails are one form of building social networks among separate yet neighboring areas. They serve as more than a pathway for recreation and for physically connecting different points of interest. Evidence shows that trails make it easier for community members to interact with and support one another, whether that may be exchanging goods or conducting community projects (Saxena & Ilbery, 2008). Others, such as the American Trails organization, argue that trails can bind a community's customs and traditions ("Why Trails?", 2020). Trails have spiritual and cultural value for surrounding communities, encouraging interconnections between groups of people (Dalakoglou & Harvey, 2012).

For example, the Appalachian trail runs through dozens of towns from Maine to Georgia. As the world's longest hiking-only footpath, more than three million people visit the trail every year to meet new people, deepen old friendships, and experience a different way of life (Identity statement, 2021; Bratton, 2012). Another example is the Camino de Costa Rica (Costa Rican Trail) that runs 280 km across the country from the Atlantic to the Pacific through many rural communities (Mar a Mar, n.d.). With the help of through-hikers, the small rural towns have an opportunity to develop businesses and, in turn, sustain their cultural distinctions. Not only are trails used as spaces for physical connections, but they grant opportunities to share dynamic and distinct cultures (Deyo et al., 2014).

### *2.1.3 Economic Growth Through Trail Tourism*

Maintaining a strong socio-cultural connection through trail usage contributes to sustainable economic growth for rural communities (Bowker et al., 2007). Bowker et al. (2007) identify economic development for rural communities as a concern for residents and governments. Therefore, part of the solution is to incorporate trails into a community development plan. Trails help by acting as social centers for communities which grants local businesses an opportunity for trail-related tourist expenditures (Deyo et al., 2014; Bowker et al., 2007). Trail tourism introduces new money into local circulation, supports a number of jobs, and diversifies the local economy (Pollock et al., 2010). This additional economic activity increases wages and compensation of employees directly and indirectly associated with tourism (Bowker et al., 2007; Pollock et al., 2010).

Even though trail tourism has the ability to bring in increased economic benefits, these are not always distributed equally. Different parts of the same trail have different traffic and experiences. Variables such as number of visitors, amount of time visitors stay, group sizes, and travel distances lead to a variance in the quantity and quality of economic benefits the trail provides to local communities (Pollock et al., 2010). In more cases than not, rural communities may be able to offer more services as a means of commerce.

One of the best ways to generate additional revenue for communities facing inconsistency in economic activity is with value-added products. Community-wide adoption of value-added products can have the potential to increase commerce on a trail (Coltrain et al., 2000). Value-added products involve a physical alteration of the raw product (i.e. fruits into jams) and making products in a manner that enhances their value (i.e. organic products) (Value-Added Marketing, n.d.). The key here is “value added”—the difference between product price and production cost. The addition of value increases the consumer’s willingness to pay, and therefore boost revenue and profits of a company (Coltrain et al., 2000).

Rural communities have the opportunity to market their value-added products to visiting tourists, including those hiking a long-distance trail. For example, El Camino de Santiago is a pilgrimage trail in Spain where communities sell locally produced products (e.g. pendants, rings, smoked paprika, saffron, clothing) physically on the trail and online (Beebe Bahrami, personal communication, November 20, 2020). The products are designed to be small and lightweight for

making the trek but are also available online to increase the chances of purchases. If rural trail communities and their local businesses place value-added products on digital channels, they open the door to the advantages of online sales.

## **2.2 Digital Commerce & Small Businesses**

When considering opening a tourist-based business in a rural community, one must determine how they will maintain their business without a reliance on local tourism, and how modification is needed for times in which local tourism is lacking. Many businesses have been creative in how they expand their consumer base beyond the communities in which they reside, while still maintaining a local presence in order to succeed (Long, 2019). In recent years, both increased internet access and available selling platforms have provided the opportunity for many business owners to shift their businesses online where they can have both a broader audience and added convenience for their current customers.

### *2.2.1 The Role of Digital Commerce for Small Businesses*

Small businesses in rural areas face certain struggles. They tend to be far from suppliers which, in turn, makes accessing supplies difficult and increases their overall costs, leading to difficulties when competing with larger providers (Siemens, 2010). Many business owners suffer from a lack of experience when entering a new market and are forced to navigate new platforms with a lack of knowledge in the area (Long, 2019). Rural areas often do not have strong internet connection, resulting in longer fulfillment periods for orders (Siemens, 2010). Increasing Internet accessibility for businesses would increase costs, and therefore in some cases doing so is not feasible (Siemens, 2010). Even so, some business owners have taken a step to transition into online sales, as the payoff could outweigh the concerns and prove to be a transformative choice for small businesses.

Small enterprises that suffer from constraints on financial and managerial resources face difficulties in accessing larger markets (Wang et al., 2019). By adopting e-commerce, the “playing field” between small and large enterprises could be evened out, as it allows for easier communication with new customers and trading partners regardless of location (Wang et al., 2019, p.127). Information and Communication Technology (ICT) is a helpful tool that allows for small businesses to interact with the entirety of the digital world. Not only does this newfound

communication allow for international trade but also gives small businesses exposure, and can offer an alternative way to advertise for those who struggle to be noticed (Wang et al., 2019). There are elements of ICT in everyday routines, such as software and hardware, online transactions, and communication technology (*What Is ICT?*, n.d.). ICT can be integrated into small businesses to further their impact, especially in times when in-person shopping is limited. Although exposure to e-commerce could be beneficial, it is important to note that both face-to-face interactions (local) and online communication (virtual buzz) have their own relative strengths and weaknesses, and both have important roles in business models (Wang et al., 2019).

ICT and e-business technologies offer businesses features and benefits for growth and improved competitiveness (Hassen & Svensson, 2014). In many cases, small businesses use websites nicknamed “brochureware” that only display basic information accessible via a business card. Brochureware webpages are not fully integrated websites with multiple pages or the ability to sell products (Hassen & Svensson, 2014). Some very small businesses may sometimes have neither the economic ability nor the human resources required in order to train their staff to use ICT effectively (Dagdilelis et al., 2003). These businesses do not have the capacity or resources to send personnel for training while others remain working.

One factor to consider is that some small businesses may be family-run, meaning that the average employee age varies and could include some who are not interested in learning and those who are too young for the responsibility (Dagdilelis et al., 2003). Keeping up with advances in hardware and software may be expensive. Additionally, Dagdilelis et al. (2003) argue the programs designed for small business use could lack necessary features, therefore investing in the necessary technology may not be financially sustainable.

With the increased presence of businesses online, there are many additional factors that small businesses need to address. When selling locally, it is not always necessary to take shipping, exportation taxes, or perishability into consideration. Businesses that choose to sell online have to adapt and find ways in which they can continue to sell their goods while following all necessary guidelines and protocols to ensure that the goods can be transported and will arrive the same as if they were purchased in a store.

### *2.2.2 Export Challenges*

To successfully run a marketplace, vendors must be able to sell and export products with ease, in compliance with any area rules or regulations. One common mistake made by small businesses is failing to estimate costs associated with shipment, whether that be international taxes or shipping prices (Burg, 2012). There are also many shipment service options that may be difficult to navigate, such as choosing the most cost effective option and ensuring that the product will arrive safe and sound (Burg, 2012). These obstacles often intimidate business owners or turn them away from wanting to ship orders. To ease the burden on entrepreneurs, some countries lay out the basics of what can and cannot be shipped.

In Costa Rica, for example, there is a comprehensive list of products that are not easily shipped or exported. This list includes items such as pharmaceuticals, drugs, cosmetics, medical devices, some chemical products (i.e. solvents), agricultural inputs, and precursor chemicals used to produce narcotic drugs must have import permits (valid for five years) and be registered with the Ministry of Health (“Costa Rica- Import Requirements and Documentation,” n.d.). In designing a marketplace targeting tourists, it can be assumed that any type of pharmaceutical or drug will not be a potential product. Costa Ricans essentially have limitless options in the products they could sell abroad.

In addition to the regulations in Costa Rica, there are different rules in countries to which vendors may export to, such as the U.S., the largest trade and investment partner for Costa Rica (“Costa Rica- Import Requirements and Documentation,” n.d.). The Central American Free Trade Agreement (CAFTA-DR), ratified in 2009, removed most of the tariffs on non-agricultural imports, with most other tariffs removed at the end of 2020. By eradicating tariffs, there is more willingness to trade between the countries involved. Additionally, there are no restrictions on capital flows in or out of Costa Rica, but companies are subject to local taxes (“Costa Rica- Import Requirements and Documentation,” n.d.). The free trade agreement strengthens the ability of vendors to buy and sell goods and services, thereby attracting more individuals to perform business duties. Rules and regulations that are easy to follow suppress the challenges of maintaining a marketplace. With many hurdles for shipment pushed aside, the rural communities along the Sendero Pacífico have a considerable opportunity to share their unique products with a global audience.

## **2.3 Our Project with the Sendero Pacífico**

The lack of rural tourism in the Sendero Pacífico communities in Costa Rica, partly due to the Coronavirus pandemic shutdown, inhibits tourist services and sales of local products along the trail. Implementing a digital marketplace for such products could supplement for the slow times and low numbers of tourists. Small and rural businesses could have a fresh opportunity for socio-economic development. The marketplace has a greater chance of establishment if community members organize themselves into a collective group. Without an overlying organization for the Sendero Pacífico region, some communities may thrive in this new commerce environment while others may continue to face difficulties. The World Trails Network (WTN) in Costa Rica may hold the necessary means to balance regional development by increasing collaboration amongst the trail communities to ease their uncertainties about future market success.

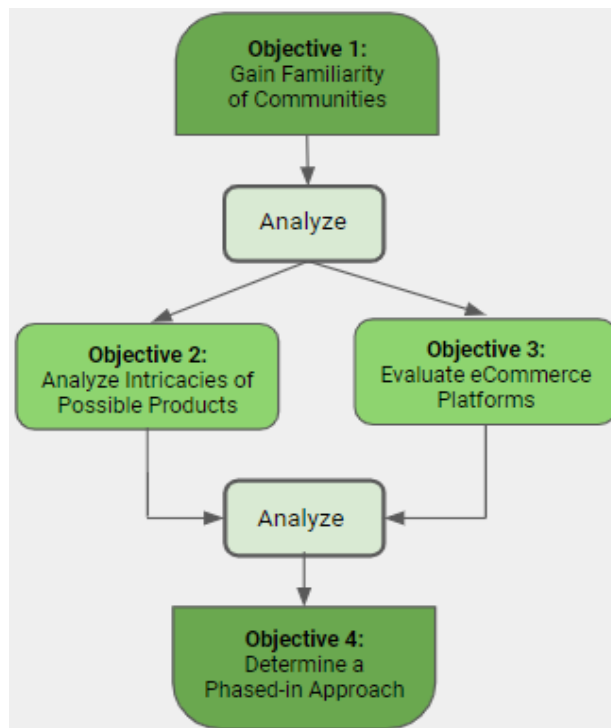
The WTN has asked the team to work together on the project goal, which was to compile information on multiple e-commerce platforms in which locally made products that comply with logistics of production and shipment can be shared to a larger market. In this fashion, the Sendero Pacífico trail communities could become an economically flourishing region. Joining the world of digital commerce may provide the missing piece the Sendero Pacífico region needs to increase tourist flow. The next chapter explains the team's approach to identify the locally produced products in the communities that are practical for a digital marketplace.

### 3. Methodology

The goal of this project was to encourage socio-economic development of the communities along the Sendero Pacífico by means of evaluating e-commerce platforms and analyzing the logistical feasibility for locally made products to meet new markets. We achieved our goal through the following objectives:

1. Gain familiarity with the communities along the Sendero Pacífico through community Ambassadors
2. Analyze regulations of potential products to determine their production and export feasibility
3. Evaluate the applicability and usability of e-commerce platforms
4. Provide the WTN and the Ambassadors with a phased-in approach to implement a digital marketplace.

Figure 3 displays the relationships among our objectives. The objectives built on each other for the final deliverable of a phased-in approach of a digital marketplace. Below, we explain in further detail on the process of completing our objectives to reach the project goal.



**Figure 3.** Relationships among objectives.

## **Objective 1. Gain Familiarity with the Communities along the Sendero Pacífico through Community Ambassadors**

To have an overall understanding of the individual communities within the Sendero Pacífico, we became acquainted with ambassadors from each community.<sup>1</sup> The Ambassadors gave an insider's perspective to the current situation in their community and offered product ideas for the future development of a digital marketplace. We conducted interviews to serve as a basis for our research on the logistical elements of possible products and platform choice, further described in Objective 2 and 3. The team worked with a total of seven ambassadors (one for each community) throughout the project duration, determining similarities and differences between the communities to better develop our subsequent research process.

We first established a mutual relationship between the team and the Ambassadors for easy and open communication during the project duration. The team and our sponsor Nathaniel Scrimshaw, chair of the WTN- Hub for the Americas, initialized contact using formal and subsequent informal introductions over the communication platform WhatsApp. We heavily relied on WhatsApp due to the platform's popularity and familiarity in the region. We communicated to them that they play a crucial role in helping to shape a thorough, well-executed project that will truly benefit the rural communities.

After getting to know the Ambassadors, we conducted semi-structured interviews (see Appendix A) with each of the seven ambassadors. This interview format allowed interviewers to ask follow-up questions depending on the interviewees' responses and maintained a relaxed atmosphere for the interviewees to share more of their thoughts (Galletta & Cross, 2013). The interviews consisted of two interviewers (facilitator and note-taker) and one interviewee and lasted between 30 and 60 minutes. The first interview involved all four team members, along with the sponsor and an interviewee who both spoke English and Spanish. The sponsor and interviewee corrected the format of interview questions and suggested edits to be more culturally respectful and to eliminate any potential conflicts with the other ambassadors. We conducted most interviews over a Zoom video or audio call with two interviews over a WhatsApp audio

---

<sup>1</sup> The Ambassadors are an unofficial group of members. Each represents the community they are mainly involved with and are widely respected by community members. Ambassadors either approached our sponsor, Nathaniel Scrimshaw, for the role, or our sponsor reached out to a qualified individual. In addition, they exhibited eagerness and interest in encouraging interactions among the communities along the Sendero Pacífico trail network.



call, all depending on strength of Internet connection and bandwidth limitations. We communicated consent to research participants and recorded the sessions upon permission.

We interviewed the Ambassadors seeking information on the general state of their community and their insights into possible products representative of the community. The Ambassadors represented the following communities: Monteverde, San Luis, San Antonio, Santa Rosa, Guacimal, La Colina, and Costa de Pájaros. We sought background knowledge of each community to truly understand the social, economic, and financial situation that could affect their needs for the digital marketplace. After learning about the community, we transitioned into asking the Ambassadors about products offered in their community (if any) and product ideas for the marketplace. Furthermore, we learned the level of Internet access and usage among community members, both contributing factors to the evaluation of digital platforms as described in Objective 3. Some of these interviews included additional questions about the technical and logistical aspects of the potential products since some ambassadors were producers themselves (see Appendix B). The additional questions set the stage for Objective 2 in researching the rules and regulations of the shipment, permits, and other logistical information to determine the feasibility of selling a product online.

The project team identified common themes and patterns of the Ambassadors' claims from the interviews. We determined commonalities and differences including what residents like about their community, what people do for a living, familiarity with Internet use, any product sales, and product ideas (Löfgren, 2013). This information was translated into a table as seen in Appendix C. The analysis gave us additional insights for subsequent interviews to narrow which products can be shipped nationally and internationally and potential e-commerce platforms that will support the communities.

## **Objective 2. Analyze Regulations of Potential Products to Determine Their Export Feasibility**

After identifying the types of products found in each Sendero Pacífico community through the ambassador interviews, the project team conducted research into the different types of permits and shipment regulations associated with each of the products. We collected all necessary information about the potential products and placed them in one location for the Ambassadors' convenience. The team analyzed the regulations of each product by identifying

the permits needed to sell the product (nationally and internationally), any additional payments required to export the product, and lastly, any regulations on the amount of product sold. These were important factors to learn about as the Ambassadors had expressed concern of the logistical requirements for selling abroad. The team found most of our information from Costa Rican and U.S. government websites, as seen in Table 1 below. We were fortunate enough to be working with the Ambassador representing La Colina who works with permits on a daily basis and showed us how to navigate the different Costa Rican governmental sites. We also supplemented our research with local producer interviews. We compiled all the collected information on 11 different types of products into an alphabetized list. This list was later used to create clear and organized infographics for the Ambassador manual, further described in Objective 4.

**Table 1.** Government websites searched for product rules and regulations.

Government Website	Purpose It Served
<a href="#">Ministerio de Comercio Exterior</a> Costa Rican Ministry of Foreign Trade	Contains information about the CAFTA-DR which contains the U.S. Tariff Schedule
<a href="#">U.S. Final Tariff Schedule</a> (spreadsheet from above website)	To obtain the classifications of each product as well as the corresponding 8 digit code later used to identify export permits
<a href="#">Consulta de Aranceles</a> Costa Rican Tariff Consulting System	To search through the Costa Rican customs system for specific export requirements using the 8 digit product code previously found
<a href="#">Internet Purchases</a> The U.S. Customs and Border Protection webpage regarding the responsibility of the buyer	Clarifications on the responsibilities and liabilities of the seller and the buyer when conducting business across international borders

To help guide our product research, we spoke with some of the ambassadors who were also producers. The team asked additional questions in these specific ambassador interviews to learn more about their businesses and experiences in shipping products. After the team completed the analysis of initial ambassador interviews, the ambassadors either left some questions unanswered or some needed further explanation. The gaps in knowledge arose from linguistic barriers and developments in the project. The project team contacted ambassadors with any follow up questions through a WhatsApp text.

The project team also reached out to two producers in the Monteverde area to determine their ability to grow a consumer base outside of Costa Rica, their experiences with exportations, and how they manage their web platforms. To obtain this information, we conducted semi-structured interviews with these producers, shown in Appendix B. One facilitator and one note-taker directed the interviews over Zoom, lasting about 30 minutes. The pair of interviewers made sure that oral consent was communicated before beginning the questions. The team then coded and organized these interviews into the different elements of maintaining an online market platform (Löfgren, 2013). As seen in Appendix E, the elements found included types of platforms (social media, personal website, or e-commerce platform), payment methods, and shipping services. By analyzing these interviews, the team pinpointed the types of features preferred by local business owners. Speaking directly with local producers assisted in our understanding of how feasible it is to sell a product online without solely relying on governmental research.

### **Objective 3. Evaluate the Applicability and Usability of E-Commerce Platforms**

Evaluating different e-commerce platforms was important to determine a select number of platforms that could fulfill the mission and values of the communities along the Sendero Pacífico and be the most suitable for the ambassadors' ease of handling. The team completed a comparative analysis of existing digital platforms to gain an understanding of how various digital platforms function, what they offer, and any additional information we could find that would assist us in our research of specific platforms. As seen in Figure 4, we explored the regulations

that must be followed to sell products, listing/selling fees, payment methods, and other general information with regards to the feasibility of the platform for both the sellers and customers.



**Figure 4.** Considerations when evaluating e-commerce platforms.

We then specifically investigated variations of platforms available in both Costa Rica and the United States. We chose the United States due to the variety of platforms available and we have the most familiarity with the various platforms as well. We gained a better understanding of what to look for when searching platforms used in Costa Rica from the observed information found when researching the U.S. based platforms. The team analyzed and organized the information about each platform based on specified features common among the various platforms.

As shown in Appendix F, we created comparative table checklists for the various platforms to increase the Ambassadors' understanding of the options available to them. Guo et al. (2020) explains that the inclusion of tables combined with text explaining the information increases the comprehension of the reader. The first column of this table lists the potential digital platforms and a top row explains the several features the platforms may offer. A check mark indicates a specific platform includes a certain feature. This table creates a useful visual that is an easy way for the Ambassadors to compare the various existing platforms by showing desirable

features for their future platform. The Ambassadors have the choice of adopting an existing platform or developing a platform with the desired features that would best fit their needs.

In addition to the charts, we compared the semi-structured ambassador interviews to find the overall needs and abilities of each community with regards to Internet capabilities and familiarity with online purchasing. Hence, we reduced the list of potential digital platforms to those that will best fit the communities. The process entailed the team to consider some of the concerns mentioned by ambassadors in the initial interviews, such as internet connectivity issues, the lack of online sales platform usage and knowledge, and the types of products to be sold. These constraints helped rule out some platforms and emphasized the usability of others.

We then conducted additional research into the platforms that were deemed highly likely to fit the needs of the communities. The information collected was added to the manual to give the Ambassadors an additional section, beyond the comparison chart, with detailed information about the platforms. We formatted this information in a prioritized list for the Ambassadors who will determine the best platform to use, or to assist as a basis in the future creation of a website specific to the Sendero Pacífico region.

## **Objective 4. Provide the WTN and the Ambassadors with a Phased-in Approach to Implement a Digital Marketplace**

To give the Ambassadors all of the information we have found throughout the previous objectives, our team condensed the information into a document that is easily accessible and straightforward, so that they will be able to build on and continue towards developing a digital platform presence. This document includes a section outlining the phased-in approach that lays out a plan for the Ambassadors to follow in the implementation of a digital marketplace. The team deemed a phased-in approach to be appropriate for these communities, since building an e-commerce business takes time. A phased-in approach will slowly acclimate the region to this change.

We began outlining the phased-in approach by synthesizing the information from Objective 1 into different categories (Appendix C). We discerned the availability of products, Internet, established businesses as well as how the Ambassadors envisioned the platform. With these categories, we determined a starting point for the phased-in approach. This starting point was a phase that all communities needed to move forward with a digital platform. We also

understood that the end goal is a fully established platform. With a starting and end point, the team needed to find a feasible approach to get from one point to another that sufficed for all communities. The research completed in Objectives 2 and 3 outlined the phased-in approach. The project team needed to thoroughly understand product regulations, shipping processes, and available platforms before forming the intermediate steps. With the information collected, the team distinguished unique steps that aligned with community needs and allowed for a slow implementation of this new platform.

The project team created an informational manual for the WTN and the communities along the Sendero Pacífico (see Appendix G). There are different sections with detailed information and tables for the phased-in approach, products regulations, shipping options, and platform options. In the product and regulations sections, a table includes a list of products with corresponding production and export requirements. In addition to the brief overview provided by the table, a page number directs the reader to the location of a more detailed and in-depth description of a particular product's regulations. We then added the research conducted on potential platforms with their associated features listed in a chart to help demonstrate the differences between the platforms. The team narrowed down a number of potential platforms and suggested several options which would best fit the communities' needs. All the different sections in the manual were clearly labeled and separated to ensure user-friendly access to the information.

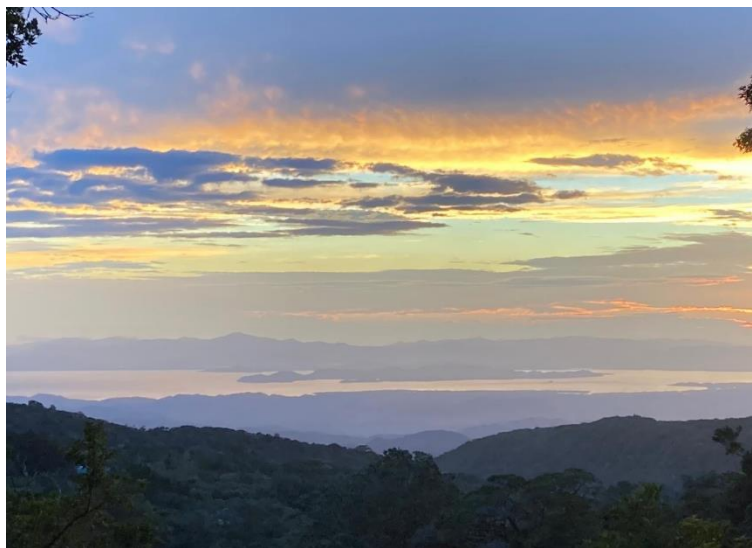
The personalized manual we created is tailored to the communities and breaks down necessary steps to establish a sustainable online presence. Recommendations are included in the manual on future steps for the Ambassadors to take to comply with product regulations and the development of a future platform. The project team created the manual in English because that is our primary language, and the WTN volunteered to translate the manual into Spanish, in order to offer greater utility to the Ambassadors and other stakeholders.

## 4. Findings and Analysis

The project aimed to help achieve a balanced distribution of socio-economic benefits for the communities along the Sendero Pacífico by identifying the logistical feasibility of selling products to a global audience through an online marketplace. To accomplish this, the project team gained familiarity with the communities; investigated the export feasibility of viable products; evaluated various e-commerce platforms; and created a manual explaining the steps and details of establishing an online marketplace. This chapter lays out the results of our research and provides interpretations of data upon which we based our recommendations.

### 4.1 Communities Along the Sendero Pacífico

We learned about the Sendero Pacífico communities of Monteverde, San Luis, San Antonio, Santa Rosa, Guacimal, La Colina, and Costa de Pájaros through our interviews with the Ambassadors (map of trail communities provided in *Introduction*). There are more communities within the trail network, but they did not have a representative Ambassador. Some of the information collected has potential for bias because it comes from one person speaking for the entire community. A summary of key findings from the interviews can be found in Appendix C. To assess the feasibility of an online marketplace, in the following sections we introduce the communities, local products, and the extent of Internet usage. A view of the Sendero Pacífico region from Monteverde to the Gulf of Nicoya is shown in Figure 5.



**Figure 5.** The view of the Sendero Pacífico from Monteverde to the Coast.  
(courtesy of Monteverde Ambassador)

## *Monteverde*

Monteverde is the most populous community in the region located at the start of the Sendero Pacífico. The representative Ambassador is a teacher at the Cloud Forest School and was born in the U.S. Besides serving an important role as an Ambassador, she is bilingual and accompanies international student groups that walk the trail. She noted Monteverde has an ideal climate that is neither too hot nor too cold with plentiful natural scenery. The Ambassador described Monteverde as a small, tight-knit community where people frequently interact with each other in public and sustain a healthy state of mind. International tourists, numbering about 200,000 per year, have not visited Monteverde since March 2020 at the start of the Coronavirus pandemic, but national tourism has increased to alleviate some of the economic downfall. Numerous ecotourism activities (e.g. Monteverde Cloud Forest Biological Reserve, canopy tours, bungee jumping, adventure tours) contribute to the large amount of economic activity in the area. Most people either work indirectly or directly with tourism, in jobs ranging from hotel, Airbnb, and restaurant staff to nature tour guides and those in transportation services. Besides tourism-related occupations, people work in a host of public service jobs.

Monteverde has many artisanal shops selling products such as silver jewelry, macrame, designer clothing, handmade Christmas ornaments, coffee, honey, personal care products, and everything in between. We learned that Monteverde has a non-profit artisan cooperative, called CASEM, where local women artists make unique handicrafts including wall hangings, clothes, and wood carvings. The Ambassador noted that many tourist-centered stores sell products made in China which gives financial assistance for the stores as opposed to the local community. In addition to products, the Ambassador stated that Monteverde has many eateries. Residents have access to the “Monteverde En Casa” mobile app which provides food for home delivery. The local Hotel Belmar uses its website to sell organic produce from its garden. The website of the Monteverde Institute lists up-to-date local food products for sale. The main purpose of Internet usage in Monteverde is for personal communication and purchasing locally made products/produce. Internet access may be readily available in Monteverde, but as the Ambassador explained, it is very difficult to shop online for outside products due to the difficulties of receiving packages in town. Additionally, it is customary to shop locally because everything one needs on a day-to-day basis is available in the area.



## *San Luis*

San Luis is the next community along the trail, adjacent to Monteverde. The Ambassador, an organic coffee business owner, describes San Luis as both an ecotown and a rural Campesino (farmer) community. He provided us with a panoramic image from San Luis, seen in Figure 6, ranging from the cloud forest in Monteverde to the coast. The description of the town diverges from that of Monteverde. Although many residents are farmers, we interviewed a biologist and educator from San Luis who explained the community's proximal location to Monteverde allowed San Luis to develop rural tourism as a source of income for the community. Many initiatives for rural tourism are underway but are contingent on tourists from Monteverde. Some San Luis residents rent Airbnb's for tourists which consist of small cabins, and there is even a restaurant in one case. San Luis is accustomed to accommodating fewer tourists than Monteverde. The Ambassador expressed his appreciation that community members depend on each other for transportation, work, and staying healthy.

The community members mainly work in agriculture, which leads to frequent trading of fresh produce (i.e. bananas, oranges, cucumbers, beans, lettuce) and other necessities among residents. According to the Ambassador, this collaborative aspect can contribute to the whole community feeling like one family where one can always count on others. San Luis also generates products other than produce including roasted coffee, embroidery work, woodwork, and jams. Both the Ambassador and a San Luis resident explained that there is an abundance of coffee farmers who support local businesses such as Bella Tica, Café San Luis, and Café Paraiso. Residents have Internet access, but its usage is limited, with online shopping being rare. There is an absence of online sites advertising local produce for sale or food delivery services. It is customary to purchase day-to-day items within the community and travel to bigger cities, such as Liberia or San Jose, for necessary items (e.g. home furniture, kitchen appliances).



**Figure 6.** A panoramic view from San Luis of the Monteverde cloud forests to the Gulf of Nicoya.  
(courtesy of San Luis Ambassador)

### *San Antonio*

Next along the trail are Veracruz and San Antonio. These are two small and separate communities located adjacent to each other, and one Ambassador from San Antonio represents both communities. The Ambassador, a middle-aged farmer, describes San Antonio as a small rural community where he enjoys the beautiful climate and the acres of farmland. He leads in efforts to reforest parts of the trail passing through San Antonio, previously deforested due to the expansion of agriculture and animal husbandry. The Ambassador is also part of the local Development Association which has one goal of bringing in more tourists to San Antonio and other nearby communities. Tourists, who are usually student groups, do not make San Antonio their destination but rather a trail stopover point where they spend the night and become acquainted with some community members. Residents built the trail's first hiking hut, or an *albergue*, to sustain a regular flow of such thru-hikers.

San Antonio consists of many farmers who grow fresh produce (i.e. corn, beans, tomatoes, chiles, potatoes) on vast open lands (Figure 7) and tend cows, chickens, and pigs. With an abundance of farm animals, San Antonio makes various meats and cheeses which can be traded along with the fruits and vegetables among residents. Other than fresh agricultural products, the Ambassador stated that the community does not have stores to sell other products, which can be found closer to Monteverde. The community includes a few artisan groups who

produce honey, handmade soaps, art paintings, and woodwork for friends and family. San Antonio does not have the capacity to sell outside their community due to inexperience in upscaling production and poor Internet access to connect to more people. Online usage is primarily used for personal communication over WhatsApp and Facebook, but the Ambassador indicated it would be a good change for residents to practice e-commerce to attain a global presence.



**Figure 7.** The San Antonio Ridge at sunset.  
(courtesy of Guacimal Ambassador)

### *Guacimal*

Guacimal is next on the trail, and it is located in close proximity to San Antonio and Veracruz and adjacent to Santa Rosa. The representative Ambassador builds wooden sculptures and other works of art for his interested clients. As with many other Ambassadors, he enjoys the incredible climate along with swimming in the Guacimal river (Figure 8) and hiking nearby mountains. Due to his occupation, he gets the chance to familiarize himself with unique community members. Guacimal does not serve as a tourist destination, but rather as a place to stay overnight after a day's hike, similar to San Antonio. The one road that passes by the town serves as a connection to other communities, although many residents enjoy staying in San Antonio more. The community's occupations mainly include practicing agriculture and animal husbandry. The Ambassador described that farmers grow a variety of fruits and vegetables, make

handmade bread, and tend to cows and chickens. He stated many women come together a couple times a week and volunteer to cook various dishes for the community. Guacimal is the home of an agricultural fair in which community members bring in their animals and can show and sell the crops they have harvested for the year.

Besides the Ambassadors, this community has only a few other residents who make products outside of food. Some residents make honey and wood carvings that are different from the Ambassador's woodwork. Anything that is made usually stays within Guacimal or can be given to friends of residents who live outside of Guacimal. The community is mainly self-sufficient, and it is uncommon to go online for any purpose besides personal communication. The Ambassador considers an online platform a necessity for the trail since the world has commercialized and therefore, people all over the world can discover what the communities along the Sendero Pacífico have to offer.



**Figure 8.** The Guacimal river.  
(courtesy of Guacimal Ambassador)

### *Santa Rosa*

Santa Rosa is a small close-knit community and very similar to the characteristics of Guacimal. The Ambassador is part of the local Development Association and has always lived in Santa Rosa. She enjoys hiking to the nearby waterfall, shown in Figure 9, with her family and noted that the community is very safe and full of very welcoming, open people. The community accommodates thru-hikers in a communal lodge (with cash payments) where residents, including



the Ambassador, cook meals, clean rooms, and perform other household work. Santa Rosa is another rural community that does not have any tourism attractions besides the passing by trail.

Since Santa Rosa is relatively far from the main town of Monteverde, residents make use of local resources on a regular basis. Many residents practice agriculture, like San Antonio and Guacimal, but also have a few artisans. We learned that Santa Rosa sells products outside of the region with one example being a local apiculturist selling honey to a national company. The Ambassador stated that there are local woodworkers who make wooden earrings and weave handmade baskets. A community member creates handmade soaps for people and pets that are infused with locally produced honey along with ingredients such as oats, aloe vera, orange, goat milk, cinnamon, and chamomile. In terms of Internet usage, residents mainly use WhatsApp and Facebook to communicate with friends and family. Some people use a mobile app called Wish in which residents can purchase local products for home delivery. Similar to previous communities, residents mainly access the Internet for communicating with friends and family.



**Figure 9.** A waterfall in Santa Rosa.  
(courtesy of Santa Rosa Ambassador)

### *La Colina*

La Colina is the last community on the trail before reaching the coastal communities. The Ambassador, a young gentleman who works at the University of Costa Rica in San Jose, describes La Colina as the same distance to Monteverde as to the coast. He enjoys the beautiful views of local nature and of the coast. The Ambassador explained that the community lacks the necessary infrastructure to attract tourists since the trail has poor and inconsistent signage. In addition, La Colina is far from the more popular trail segments closer to Monteverde, solely welcoming guided student groups to the community. To attract more tourists and accommodate potential thru-hikers, a few community members recently built an albergue. The Ambassador is part of the local Development Association which strives to create attractions that could interest tourists to stay in the community. Although he does not reside in La Colina, the Ambassador assists the community by applying his knowledge in customs and foreign trading for the future potential of exporting local products from the area.

Residents of La Colina have jobs as teachers and cooks, but many work in agriculture and animal husbandry similar to other communities. The products from La Colina are similar to other communities, such as honey, meats, cheeses, and woodwork. Community members practice local trading frequently with only one central supermarket available. The Ambassador expressed that many residents are not professionals in what they grow or make but have the skills to make an authentic product representative of the area. Due to its rural status, La Colina cannot access the Internet regularly. The Ambassador noted that younger people use the Internet more often, although there is no urgent need to use it. In terms of the online platform, the Ambassador shared that residents would enjoy making products to sell to those outside their community but lack the knowledge of the logistical process to get on the market.

### *Costa de Pájaros*

Costa de Pájaros is one of the three coastal communities (Costa de Pájaros, La Montaña de Coyolito, and Punta Morales) at the base of the trail adjacent to the Gulf of Nicoya. The Ambassador is a well-known woman from the community and has been involved in many empowerment groups for women such as Mariposas del Golfo (The Gulf Butterflies). This group cares for a butterfly garden as well as a community center where tourists can learn more about the butterfly garden project and residents gather to discuss tourism initiatives. At the time of the

interview, the community center was undergoing additions of an albergue for thru-hikers, who are usually international student groups. The group also runs boat tours from the coast to a nearby island, seen in Figure 10, in hopes of educating people on the importance of conserving the natural environment. Since the town is located the farthest from Monteverde (and the start of the trail), community members including the Ambassador are determined to make Costa de Pájaros a tourist destination. Residents hope to create more educational opportunities such as kayaking and ocean tours. Besides focusing on tourist initiatives, residents are fishers and artists who have the capacity to create and sell products to tourists.



**Figure 10.** Island Boat Tours in Costa de Pájaros.  
(courtesy of Costa de Pájaros Ambassador)

The Ambassador explained that the many women's groups in the area create unique products from local resources. Such products include artwork made of upcycled material, cloth items (i.e. bags, wallets), embroidery, mobiles, and woodwork. In addition, community members create pieces of jewelry out of fish scales, such as earrings, necklaces, and bracelets. The Ambassador indicated that the community is open to product suggestions as they have many types of materials to work with and have the desire to reach a global market. As in almost all of the communities, Costa de Pájaros does not need to use the Internet besides communicating over WhatsApp and Facebook. The Ambassador noted that younger people tend to use these platforms. The coast is a special spot with land and water resources, thus there is no perceived desire for items outside the area.

#### *4.1.1 Ambassadors' Thoughts on an Online Marketplace*

The Ambassadors for all communities shared that they are excited to work towards the development of this new online platform. Many of the communities expressed interest and ideas and explained how the communities could benefit from such an addition. The Ambassadors from Guacimal and San Antonio expressed that it is important to note that the communities have a general lack of knowledge with the process of creating products that satisfy the logistical requirements of exporting out of the region. The Ambassadors relayed to the project team of our critical role in determining the feasibility of potential products and assessing an ideal online platform. All the Ambassadors indicated that for most people, shopping online is not a normal activity and thus residents have little to no knowledge of how products should be maintained and marketed to an outside audience. Overall, the Ambassadors expressed positivity about the project and hope that the implementation of an online platform will benefit all of the communities along the Sendero Pacífico.

#### *4.1.2 Community Products Removed from Consideration*

We learned that agricultural and animal products are bountiful in the region, but they are not applicable for the online marketplace. We eliminated these products from consideration due to the lack of surplus to sell abroad, seasonal availability, competitive pricing, product weight, and shipping time. In addition, there are a multitude of health and export permits required that would not be as feasible to carry out as more stable and manufactured products.

The team did not consider heavy and large products. From many Ambassadors, we learned that many of their fellow community members create pieces of woodwork. When artists sell such products, the artist or their clients have the responsibility to deliver or pick up the product. Since the online marketplace requires the use of a shipping service, large pieces of woodwork would require high shipment costs that many producers would not be able to pay for at the start of the marketplace. We determined certain wooden pieces such as jewelry or small wooden carvings to be feasible before the region grows in economic wealth.



## 4.2 Product Information and Logistics

After gaining a sense of what products are locally made in each community, we investigated the products' export feasibility by reviewing required permits and other documents. The determined feasible products for exporting include: natural honey, salsa, jams, roasted coffee, handmade soaps, jewelry made using macrame, jewelry made with silver, cosmetics (shampoo, lotion), locally made clothing/cloth type products, mobiles, wooden sculptures, and local art paintings. Table 2 includes a quick comparison of the products with their general regulations. For a more detailed breakdown of what is necessary for each type of product, refer to Appendix D. The online marketplace targets U.S. buyers, therefore, we consulted required documents for exportation using the TICA system provided by the Costa Rican government. To supplement this information, we conducted interviews with local producers. The key findings from these interviews are found in Appendix E. We additionally noted import requirements from the U.S. government. We explained the feasibility of selling the determined products to express the characteristics of the product creation to shipment process in Appendix G.

**Table 2.** Product Restrictions Comparison. The table includes an overview of the necessary permits and regulations required for each type of product. Additional information on these products is available in Appendix D.

Products and Their Regulations					
Products	Export Permits	Selling Permits	Health/Sanitary Permits	Shipping Restrictions (Size)	Other Restrictions
Art Paintings				✓	
Beeswax (Bleached)	✓	✓	✓		✓
Clothing	✓				
Coffee (Roasted)	✓	✓	✓		✓
Cosmetics (e.g. Shampoo, Lotion)	✓		✓		
Honey (Raw)	✓	✓	✓		✓
Jams	✓	✓	✓		
Jewelry (Silver)					
Macrame/Knitting	✓				
Natural Soap (Handmade)	✓		✓		✓
Salsa	✓	✓	✓		
Upcycled Products (Mobile)					✓
Wooden Carvings				✓	

### 4.2.1 Permits and Other Documentation for Determined Products

Products of animal origin are more regulated than other products in Costa Rica and the United States, therefore more documentation is necessary when selling these types of products. Specifically, honey and beeswax require permits, certificates, registrations, and an on-site visit by a government official. Despite the number of steps necessary, a honey producer from Santa Rosa shared that the registration process is straightforward and takes a feasible amount of time. When shipping, the shipper must be conscious of packaging the honey in an innocuous container that will not alter the characteristics or composition of the product. An export permit to the U.S. is also required if one chooses to ship internationally.

For food products of plant origin, such as coffee, jams, and salsa, similar documentation is needed. The producer must first obtain registrations and permits before selling their products. Parallel to packaging honey, products of plant origin need to be packaged in innocuous containers. From our interview with the San Luis ambassador, an organic coffee business owner, we learned that selling less than five kilograms of coffee at once does not require a lengthy permitting process. To sell more than five kilograms of coffee, producers must undergo more regulatory registrations with the Institute of Coffee of Costa Rica (ICAFFE). Overall for these determined products, the permitting process only involves registration with a couple organizations at an affordable cost.

The sale of cosmetics does not pose a great challenge. From the determined products, cosmetics include handmade soaps (see Figure 11), shampoos, and lotions. We received a substantial amount of information from a local business owner in Monteverde who has experience with the permits for the production and export process. From the business owner's experience, the initial process of obtaining permits and other required documents was complicated, although now as a steady business the process is efficient. The same can be said in the business' first months with determining the shipping logistics of exporting to different countries with specific requirements.



Figure 11. Handmade soap from Santa Rosa

For the remaining community products that we determined feasible, the process of getting to the point of sales is uncomplicated. For jewelry, paintings, sculptures, and other art products (see Figures 12 and 13), the TICA system displayed no issues exporting them from Costa Rica to the U.S. Macrame and other clothing products will require a permit to export, detailing the type of fabric and its materials composition. It is



**Figure 12.** Wooden art from Guacimal



**Figure 13.** Handmade mobiles from Costa de Pájaros

important to note that products that have various ways of creation need to stay consistent with the same quantity and quality of material. Otherwise, special permits are required. Accounting for the types of products currently being made within the communities, these problems will most likely not surface because of the absence of regulations with the available material.

### *Advantage of Exporting to the United States*

The above paragraphs contain some information on which products require an export permit between Costa Rica and the U.S. The Food and Drug Administration (FDA) lists products requiring an export permit (provided on Costa Rica's post office website). The products on the list that pertain to the communities are foods of all kinds, cosmetics, and textiles. The amount of documentation required for the permit is minimal due to the fact that the U.S. and Costa Rica are in the Dominican Republic-Central America Free Trade Agreement (CAFTA-DR). The free trade agreement allows a larger flow of imports and exports without a complicated system for a product to be feasibly shipped (CAFTA-DR, n.d.).

### *Tariffs*

International shipment entails the payment of tariffs by the buyer. Therefore, tariff numbers for the products one ships are not required and does not negatively impact a package's shipping progress. The team consulted the U.S. Tariff Schedule and only noted a product's

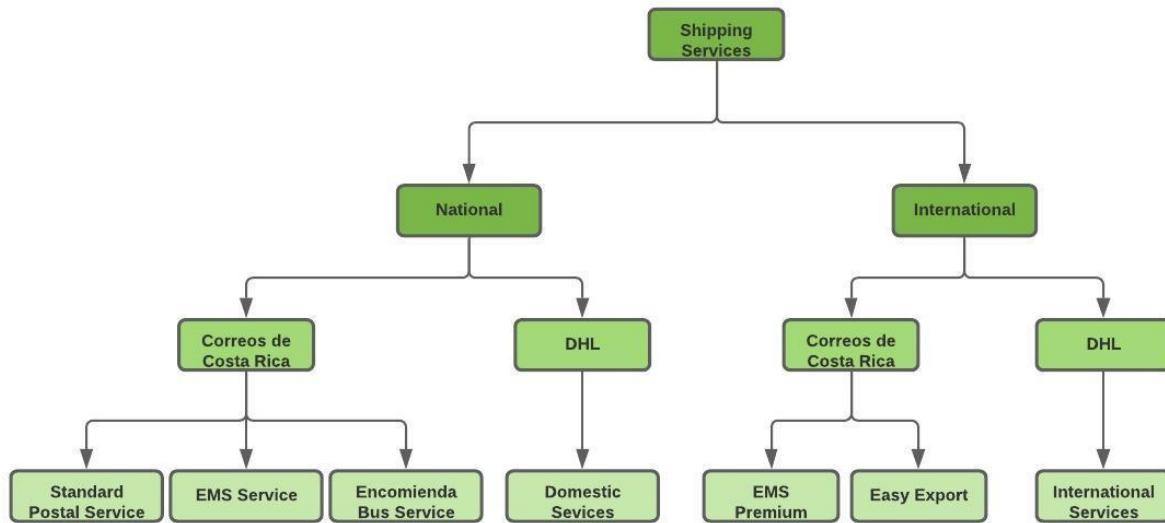
identification code to determine if they need export permits found through the TICA system. In some cases, using an identification code can help smooth the customs process and avoid misclassification of products and applicable fees. The U.S. Customs and Border Protection (CBP) will notify the buyer of the extra fees to be paid due to the international shipment (*Internet purchases*, n.d.). Since tariffs could raise the true cost of a product, the seller must be wary that their prices do not act as a disincentive to purchasing.

### *Customs*

U.S. CBP outlines the responsibility and liability placed on one who imports products into the U.S. The organization specifically states the importer “is responsible for assuring that the goods comply with a variety of both state and federal government import regulations” (*Internet purchases*, n.d.). Products imported into the U.S. “must clear CBP and may be subject to the payment of duty as well as to whatever rules and regulations govern the importation of that particular product into the United States” (*Internet purchases*, n.d.). The seller holds the responsibility to provide accurate product information within required shipping documents.

### *4.2.2 National and International Shipping Options*

After we determined the necessary product registration processes, a shipment service needed to be chosen. We considered their costs, physical locations, and added features. Figure 14 distinguishes various shipping services available. We compared national and international services separately and identified the most viable options for the Sendero Pacífico region.



**Figure 14.** Shipping services available in the Sendero Pacífico region. Correos de Costa Rica, the national postal system, and DHL, a separate courier service, offer customized options for national and international shipments.

Postal and courier shipping services serve the Monteverde area and can be utilized by the communities along the Sendero Pacífico. The Costa Rican postal service is called Correos de Costa Rica. There are multiple courier services in Costa Rica, including UPS, FedEx, and DHL. Through research on their websites and interviewing select producers from Monteverde, San Luis, and Guacimal, we found that DHL is the only courier service to serve Monteverde. The postal service and DHL both serve Monteverde and the next town of Santa Elena which is inconvenient for the other communities that would need to coordinate a private transportation system to deliver products.

### *National Shipping*

Correos de Costa Rica and DHL both offer national shipping. All their services have comparable costs. We identified a key theme from the Ambassador interviews that the national post office system is most commonly used among residents. The standard postal service handles regular mail and small packages daily. EMS service is a type of courier service offered by the post office for faster and more secure delivery of packages that cannot be easily handled by the standard post office service. This service offers more features but may not be advantageous. In addition, the cost is slightly higher than the standard postal service. The Encomienda bus service “mails” packages to bus terminals for the convenience of the purchaser. Although Encomienda

appears to be of great service for major towns, like Monteverde and Santa Elena, the service does not accommodate any other communities and is only convenient for very local purchases. DHL is another option with domestic services and a convenient mobile app, although the producers we interviewed from Monteverde mainly used them for international purposes.

### *International Shipping*

International shipping consists of many options provided by the national post office system and DHL. The post office system offers EMS Premium, an international courier service for individuals up to large businesses. Easy Export is another service that specifically assists micro, small, and medium-sized businesses that requires the business to be registered with PROCOMER (Promoter of Foreign Trade of Costa Rica), an export support service. None of the Ambassadors mentioned EMS Premium or Easy Export as their service of choice, but we deemed them comparable to DHL.

DHL is another option to ship internationally. An organic coffee business owner from San Luis explained that they use DHL instead of the post office system due to lower costs and short delivery times. A cosmetics business owner in Monteverde uses both DHL and the post office, depending on the products and current service rates. Other local producers who use the post office system indicated that Correos is very efficient, cost-effective, and delivers quickly. In general, they feared the potential of higher costs for DHL.

If the Ambassadors choose DHL as the international shipping service, they can receive assistance (for an extra cost) in the Customs clearance process for a smooth delivery process. Although the post office system does not have this advantage, the Monteverde cosmetics owner explained that one needs to register with the PROCOMER service to export. The service would help the exporter if either DHL or the post office is of service for them.

Shipping internationally is much more expensive than shipping nationally. In many cases, as observed in a handful of Monteverde and San Luis businesses selling abroad, shipping costs outweigh the product cost. The shipper and U.S. buyer (who we are targeting with the online platform) must consider the unavoidable extra processing and fees imposed by the CBP, sometimes exceeding the cost of their purchase (*Internet purchases*, n.d.). These costs can disincentivize customers to buy such products. The Ambassadors expressed that community members have little to no experience with international shipping, making a stronger case to use

the export support service, PROCOMER. The local products we investigated do not pose much difficulty in shipping; the selection of the best shipping service is where the difficulty comes into play and is ultimately up to the communities. After this step, the communities come one step closer in selling their unique products on an e-commerce platform.

### **4.3 E-Commerce Platform Options**

We evaluated e-commerce platforms for the communities along the Sendero Pacífico to sell their products while also incorporating their unique stories and backgrounds. We focused on Costa Rica and the United States as the two main locations for e-commerce due to a large pool of potential buyers from the U.S. Both locations make available the platforms described below. We considered two types of e-commerce platforms: existing and build-your-own. Existing platforms are established e-commerce websites with active users onto which an individual and/or a business to join anytime. Build-your-own platforms allow individuals up to large businesses to create their own e-commerce websites. Appendix F includes platform comparison tables which serve as a quick summary of all the options.

From the Ambassador interviews, we learned to be aware of certain features of the platform. All the Ambassadors expressed that communities experience difficulties with Internet accessibility and inconsistent connection. The Ambassador from Monteverde mentioned that they do experience Internet instability from time to time, although to a lesser degree than smaller communities. In the more rural communities down the trail, Ambassadors stated that cellular data on personal phones is often used over Wifi services. In addition, all Ambassadors stated that community members rarely shop online and thus do not have the familiarity with using e-commerce websites. As a consequence, the platform needed to be compatible and easy to use with mobile phones and not be solely restricted to computer access. Beyond displaying products, the communities and the individual producers wanted to share their unique stories which would be possible if the platform included customization options. The Sendero Pacífico already has its own Facebook page which could serve to advertise and attract more interested individuals to the platform. Therefore, we determined social media compatibility (and specifically with Facebook) an important aspect of the platform to reach a broader audience. Due to very little economic activity in the region, especially in the more rural communities south of San Luis, we found platform fees to be a potential roadblock. The region does not have a lot of finances to support

platforms that charge many fees or that have high monthly subscriptions. We compared the features of each type of platform to discern the best option for the region.

#### *4.3.1 Existing E-Commerce Platforms*

The existing e-commerce platforms we looked into include: Amazon, eBay, Etsy, and MercadoLibre. We also explored the feasibility of selling and marketing on the social media platforms Instagram and Facebook. Each platform varies in features, prices, and accessibility options for both the seller and the customers. We sought information in regard to: key features, fees, payment options, ease of use, customization options, social media compatibility, and mobile phone accessibility.

To start a business, Amazon, eBay and Etsy showed very similar options. All three have no startup fees, but they do have monthly subscription fees and referral fees per item. In addition, all of them have a currency conversion fee when potential buyers from the U.S. using the U.S. dollar purchase products listed in Costa Rican Colones. All three platforms also have mobile apps in which the seller can both post products and monitor their account activity (*Beginner's Guide*, n.d.; *Beginner's Guide to Selling on Etsy*, n.d.; *Selling / eBay*, n.d.). This can be beneficial for many communities, especially those down the trail in a more rural area where residents have been found to own a mobile phone rather than a laptop.

The existing platforms do not have many capabilities for customization and personalization. Amazon only allows a seller to post items and does not grant Costa Rica the opportunity to have a virtual storefront (*Stores – Create a Brand Page on Amazon.Com*, n.d.). eBay allows for customization but requires a subscription upgrade to \$100 per month– which is not a feasible option. The basic eBay plan only allows a seller to post products. Unless the customer clicks on the user's profile, they will not have a view of all the products sold by that particular seller (*Selling / eBay*, n.d.). A seller on Etsy can make a personalized shop featuring all their products in one centralized location. Customization options include the shop's logo, banner, color scheme as well as a short description about the shop (*Beginner's Guide to Selling on Etsy*, n.d.). These options are minimal and do not give the shop owner the creativity of incorporating the unique aspects of the Sendero Pacífico which the sponsor expressed as an important aspect.

MercadoLibre differs from the previous platforms as it is an e-commerce website used in Costa Rica for local sales. Although the platform is known to many Costa Ricans and includes



no startup fees, it is logistically unfeasible for the communities' purpose. MercadoLibre includes many individual sellers trying to sell their own products to others nearby without the capability of creating a virtual storefront (*Free Market Costa Rica*, n.d.). To purchase and receive products, the buyer must speak with the seller directly and decide on a pick-up location. This concept does not fit into the idea of the online marketplace reaching a more global audience.

Facebook and Instagram have recently become more commercialized and contain features to sell products directly from their sites. However, this feature is not available in Costa Rica for Instagram (*Instagram Business / Checkout on Instagram*, n.d.). For Facebook, the feature is only available when an external website is connected (“Introducing Marketplace,” 2016). Both Instagram and Facebook allow for existing store websites to be connected to business pages as well as posting and advertising products within the social media sites. Since the Sendero Pacífico has their own Facebook page, this option can be beneficial for marketing purposes. This scenario would require an external e-commerce platform to be connected. We discussed some options we looked into in the next section.

#### *4.3.2 Build Your Own E-Commerce Platforms*

Build-your-own e-commerce platforms help individuals or businesses create an online presence for their products or services separate from the competition. Many of these platforms specialize in helping small business owners design their ideal online marketplace. We looked into BigCommerce, Shopify, and SquareSpace. Similar to the existing e-commerce platforms, we took note of key features, fees, payment options, ease of use, social media compatibility, and mobile phone accessibility.

BigCommerce, Shopify, and SquareSpace all claimed that it is easy to create a new website with them. None of them required any coding experience; the platforms provided templates (free and at a small cost) and features that allow for easy integration of both products and media into the webpage. This type of platform allows the communities to share their unique stories, while also posting and selling their local goods all in one location. Customization options are widely available and always accessible— a website may appear very simple and basic at first before the user learns best how the website should appear to its audience. The build-your-own platforms offer a variety of startup plans for businesses at different levels of growth. For all, the basic plan includes a monthly fee of less than \$30 per month. These plans allow for the creation

of the webpage, a unique URL, 24/7 support, and a variety of other features. As a business grows or if the business seeks a major platform change, all three platforms have easy access to upgrades for a different plan that may offer additional features inapplicable for a startup business (BigCommerce, 2021; *Getting Started – Squarespace Help*, n.d.; *How to Start an Online Store*, n.d.).

Payment methods differ for these three platforms. Squarespace only allows PayPal which select Ambassadors said was an uncommon payment method for the area (*Getting Started – Squarespace Help*, n.d.). Both BigCommerce and Shopify have a variety of payment options including credit or debit cards for only a small fee. In addition, both of these platforms allow different currencies to be set up for both the seller and the customer to ease the burden of knowing the actual price of a product (BigCommerce, 2021; *How to Start an Online Store*, n.d.).

All three platforms have mobile app accessibility. BigCommerce allows the user to track and update orders and provide customer support. Additionally, this platform ensures that users' pages will load and appear on a mobile phone as they would on a computer (BigCommerce, 2021). Shopify is also mobile-friendly and allows the seller to fulfill orders, update inventory, and address customer concerns and questions. Within the Shopify app, the seller can also add products, photos, change prices, and email or call customers. In addition, Shopify holds a seamless experience in which the webpage adjusts to any size of mobile device used (*How to Start an Online Store*, n.d.). SquareSpace's mobile app can be used to edit pages, products, and view any site analytics. However, the platform recommends initially setting up the webpage on a computer and becoming familiar with the program there first. The iOS version of the mobile app is limited in what tasks sellers may perform as it mainly allows for adding, editing, and managing products. Even with these constraints, SquareSpace ensures a seller's website appears presentable on any device (*Getting Started – Squarespace Help*, n.d.).

As previously highlighted, both Facebook and Instagram allow the integration of external websites for purposes of advertising and promotion. All of these options have unique URLs that would allow marketing and advertising to be performed on the established Sendero Pacífico social media pages. Even though Facebook and Instagram are not as well established as existing e-commerce platforms with a daily stream of customers, the sites have customization features unavailable on the other platforms. Using Facebook and Instagram gives the opportunity for the Sendero Pacífico communities to create their own consumer base all while sharing their stories and promoting the region.

## **5. Recommendations and Conclusion**

The project team gained community perspectives from the Ambassadors to understand their needs in selling unique products on an e-commerce platform that conveys the values of the Sendero Pacífico region. We compiled our findings gathered by means of consulting the Ambassadors, local producers, Costa Rican government sites, and other applicable websites into an informational manual (Appendix G) which includes much more specific information related to all topics discussed. The manual should help the World Trails Network (WTN) and other stakeholders in reaching a broader audience for their local products. We developed specific recommendations for the region to take for immediate economic assistance before the implementation of the platform can take place.

As noted by the WTN, we acknowledge that the Sendero Pacífico communities are working to establish the formal Alliance of the Sendero Pacífico (the Alliance) for the maintenance of the platform. This group of people would be responsible for receiving permits and oversee administrative tasks, such as profit distribution and executive decisions on platform design. It is important to note that the Ambassadors are actively pursuing formally establishing the Alliance, working with the WTN. After consultation with a former leader for the Lebanon Trail who also interacted with the communities, we recommend that an impartial leader (other than an Ambassador) has the responsibility of advancing the growth of the platform and the broader Sendero Pacífico region. We acknowledge the Ambassadors have additional responsibilities (i.e. main occupation) that would hinder progress on the platform. With a formal Alliance in place, the associated individuals could implement our project findings.

### **5.1 E-Commerce Platform Recommendations**

Based on the needs and wants expressed by the Ambassadors, we recommend creating a platform specifically for the Sendero Pacífico. This will allow for the communities' products to remain in one convenient and easy-to-navigate location. The communities can share their stories, photos, and videos on the page as a means of promoting the products and trail usage. An e-commerce platform can help achieve and maintain WTN's goal of promoting separate communities as one whole community along the trail.

### *5.1.1 Recommended E-Commerce Platform*

After the team considered the various options available for potential platforms, we recommend the use of a build-your-own platform over an existing e-commerce platform. Existing platforms do not allow for as much freedom in terms of customization, and do not meet a lot of the requirements for the communities. We believe Shopify is the best option to fit the needs expressed by the Ambassadors. Compared to the other options, Shopify has a variety of payment options, allows for easy use of templates, and is the most customizable without the use of complex design tools.

Although there are many benefits to Shopify, there are some limitations and concerns with regards to the technical design and maintenance of the platform. Shopify is known for its user-friendly design process which is an important characteristic since the Ambassadors raised concerns about a lack of knowledge with online platforms and shopping. To initially create the website, the team recommends WTN acquires an intern or a new project team to take the community stories and determined products of the Sendero Pacífico and incorporate them into the design of the website. Having an external individual(s) would both reduce bias of who creates the website from within the communities and would also expedite the process of designing the platform by having someone who is more familiar with computers and online stores in charge of the creation. It is important for the website creator to train members of the formal association on how to operate the site such as inventory management, platform design change, and customer service. From this point on, members of the association can run the platform sustainably and address new needs or wants readily.

### *5.1.2 Platform Marketing and Design*

Since we recommend using Shopify, a build-your-own platform, the website needs to be marketed to potential shoppers. We recommend integrating the website into the Sendero Pacífico's Facebook page. The Facebook account has almost 800 followers who can visit the website with a simple click. Since the link to the website is present on a social media site, the followers can share their interest in the website with other Facebook users, friends, and family which can quickly expand outreach. We also recommend creating an Instagram business account

to feature products and their producers, as it is easily compatible with websites created through Shopify.

To design the platform itself, the mission and values of the communities need to be communicated thoroughly. We recommend the Ambassadors share details and stories from their communities, similar to section 4.1, to bring the experience of the Sendero Pacífico to the customer in the comfort of their own home. The integration of photos and videos would help communicate to the website visitor why this region is different from other community groups. The story aspect would help resurface memories of past hikers and energize new individuals to purchase a product.

To assist in the story aspect, we recommend embedding an interactive map of the Sendero Pacífico onto the website that would incorporate a bird's eye view of the region. A WTN intern created this map outlining the Sendero Pacífico trail as well as information about local communities and businesses. As realized through Ambassador interviews, some producers already have their own website with a means to sell online. We believe linking their websites onto the community they are from and designating a separate page of all such producers where they and their brand can be featured will help the producers increase their online presence. Additionally, we recommend using Google Street View to implement panoramic or 360 degree views of different parts of the trail as well as major community locations. The software is very user-friendly and is readily accessible via mobile phones which is the only type of electronic device available to most community members. Including this feature can encourage past visitors and new customers to make purchases.

## **5.2 Shipping Service Recommendations**

For e-commerce to be the most feasible at the start, we recommend shipping nationally first. Producers would avoid the additional processes to ship internationally and become accustomed to preparing products for shipment, from packaging to required documents to passing the product to the shipping service. We recommend the standard postal service, Correos de Costa Rica. As mentioned previously, the post office requires minimal paperwork and costs to ship smaller objects (that can fit in mailboxes). For larger objects, we recommend using the EMS Service that is provided by the postal system. The costs are slightly higher, but the service specializes in delivering large packages in a short time.

When international shipping becomes feasible, we recommend using DHL. Many producers we spoke with use this service and praise them for their efficiency. DHL assists in the Customs clearance processes which will be helpful for those who have never prepared Customs forms. Additionally, the international services provided by the postal system does not offer this feature. However, a designated member of the formal Alliance would need to create a business account with DHL and pay the extra costs that come with this feature.

Finally, we recommend shipping the products using one address. Having one address simplifies the documentation process. The formal Alliance would only have to be familiar with the shipping information for one address rather than every producer sending products using a different address and, in turn, filling out additional paperwork. This location could either be central to the trail or on the upper end, like Monteverde, closer to postal services. Any undelivered or returned packages would be known to be located at this single distribution point.

### **5.3 Recommendations for Obtaining Product Documents**

The determined products associated with the communities are feasible to sell both nationally and internationally, and we provided them with fully researched and understood regulations around shipping. To aid in obtaining required documents, we recommend branding the products under the name of the Sendero Pacífico and its logo. With a unifying brand, the producers will not have to individually undergo registration processes. Branding the Sendero Pacífico may be a more concrete goal for the platform once the formal Alliance is underway. Whether the region is resembled as a brand or not, we highly recommend consulting PROCOMER, an organization that assists businesses in all permitting processes and provides advice to businesses trying to sell internationally. The cosmetics owner from Monteverde we interviewed explained that the organization helped his business make it feasible to export both nationally and internationally. Even though there is a cost to use this service, PROCOMER can either help the local producers or the branded region in reaching products to interested customers.

### **5.4 Verdes Integration**

For the communities to receive immediate financial support, we recommend fellow community members who grow fresh produce or make perishable animal products participate in

the Verdes local currency program if it grows to encompass the Bellbird Biological Corridor. Users can earn Verdes, post listings, and purchase other listings using Verdes on the Cambiatus platform. This recommendation stems from discussions with the 2021 Enlace project team who was working on this endeavor. Currently, the program is mainly utilized in the Monteverde area, but it lacks certain necessities, such as fresh food, for purchase which was explained by the Enlace team. This would apply specifically for the communities growing an abundance of produce to have a local option to sell their products. These communities could use this platform rather than the Sendero Pacífico platform because it is a more feasible and functional option when dealing with these types of goods. Verdes could be an additional integration tool for the trail if the currency becomes available outside the Monteverde community. It is important to mention that Guacimal has its own local currency, Guacimos, which could complicate the spread of Verdes down the trail or be seen as another opportunity to sell fresh food for immediate economic benefit. While this suggestion does not directly correlate with the goal of developing an online platform to reach those outside the Sendero Pacífico area, the Verdes program could aid in increasing the interactions between communities, which is part of our underlying goal.

## **5.5 Conclusion**

The creation of an online sales platform for the Sendero Pacífico communities is not a quick task to complete. It requires a lot of decisions and planning to create a functional and effective sales platform. However, it also presents a great opportunity for the producers in the local Sendero Pacífico communities to advance their businesses and sell their products to a global community. The unequal distribution of tourism highlights the importance of building social networks for residents to value the products and services their community offers. We have compiled information on options for a platform to work in conjunction with locally made products in hopes of easing the process for the region to financially benefit sooner rather than later. The Ambassadors are the ultimate decision makers about what can truly encourage their community's socio-economic development. Tourist traffic is currently very low due to the Coronavirus pandemic. The communities along the Sendero Pacífico have a promising opportunity to represent themselves to the nation of Costa Rica and beyond.

# References

- Ayazlar, G., & Arslan Ayazlar, R. (2015). Rural tourism: A conceptual approach. In *Tourism, Environment and Sustainability* (pp. 167-185). St. Kliment Ohridski University Press.
- Beginner's Guide: How to Sell on Amazon*. (n.d.). <https://sell.amazon.com/beginners-guide.html>.
- Beginner's Guide to Selling on Etsy*. (n.d.). Etsy Help. <https://help.etsy.com/hc/en-us/articles/115014502448-Beginner-s-Guide-to-Selling-on-Etsy>.
- BigCommerce. (2021, March 2). *Grow Your Ecommerce Business With The Essentials* <https://www.bigcommerce.com/essentials/>.
- Bowker, J. M., Bergstrom, J. C., & Gill, J. (2007). Estimating the Economic Value and Impacts of Recreational Trails: A Case Study of the Virginia Creeper Rail Trail. *Tourism Economics*, 13(2), 241–260. <https://doi.org/10.5367/000000007780823203>.
- Bratton, S. P. (2012). *The spirit of the Appalachian trail: Community, environment, and belief on a long-distance hiking path*. University of Tennessee Press.
- Briedenhann, J. & Wickens, E. (2004). Tourism routes as a tool for the economic development of rural areas-vibrant hope or impossible dream? *Tourism Management*, 25(1), 71–79. [https://doi.org/10.1016/S0261-5177\(03\)00063-3](https://doi.org/10.1016/S0261-5177(03)00063-3)
- Burg, N. (2012, December 10). *UPS BrandVoice: 5 Logistics And Shipping Mistakes Small Businesses Make*. Forbes. <https://www.forbes.com/sites/ups/2012/12/10/5-common-logistics-and-shipping-mistakes-small-businesses-make/>.
- CAFTA-DR (Dominican Republic-Central America FTA). (n.d.). Office of the United States Trade Representative. <https://ustr.gov/trade-agreements/free-trade-agreements/cafta-dr-dominican-republic-central-america-fta>.
- Coltrain, D., Barton, D., & Boland, M. (2000). Value added: opportunities and strategies. *Arthur Capper Cooperative Center, Department of Agricultural Economics, Cooperative Extension Service*. Kansas State University.
- Corina, G. (2018). Rural tourism an opportunity for development. *Journal of Tourism*, 26. <http://revistadetourism.ro/rdt/article/view/421>.
- Dagdilelis, V., Satratzemi, M., & Evangelidis, G. (2003). Implementing a Nationwide System for Training Very Small Enterprises for ICT Innovation: The Greek Case. *Journal of Educational Technology & Society*, 6(1), 26–31.
- Dalakoglou, D., & Harvey, P. (2012). Roads and Anthropology: Ethnographic Perspectives on Space, Time and (Im)Mobility. *Mobilities*, 7(4), 459–465. <https://doi.org/10.1080/17450101.2012.718426>.



- Deyo, N., Bohdan, M., Burke, R., Kelley, A., van der Werff, B., Blackmer, E. D., Grese, R. E., & Reo, N. J. (2014). Trails on tribal lands in the United States. *Landscape and Urban Planning*, 125, 130–139. <https://doi.org/10.1016/j.landurbplan.2014.02.020>.
- Egbali, N., Nosrat, A. B., & Alipour, S. K. S. (2011). Effects of positive and negative rural tourism (case study: Rural Semnan Province). *Journal of Geography and Regional Planning*, 4(2), 63–76. <https://doi.org/10.5897/JGRP.9000046>.
- Free Market Costa Rica*. (n.d.). MercadoLibre. <https://www.mercadolibre.co.cr>.
- Galletta, A., & Cross, W. (2013). The semi-structured interview as a repertoire of possibilities. In *Mastering the semi-structured interview and beyond: From research design to analysis and publication* (pp. 45-72). NYU Press. <http://www.jstor.org/stable/j.ctt9qgh5x.7>.
- Getting started – Squarespace Help*. (n.d.). Squarespace. <https://support.squarespace.com/hc/en-us/articles/206756327>.
- Grieves, M., Adler, M., & King, R. (2014). To preserve the mountains and the community: Indigenous ecotourism as a sustainable development strategy. *Social Thought & Research*, 33, 83–111. <http://www.jstor.org/stable/44807707>.
- Guo, D., Zhang, S., Wright, K. L., & McTigue, E. M. (2020). Do You Get the Picture? A Meta-Analysis of the Effect of Graphics on Reading Comprehension. *AERA Open*, 6(1), 2332858420901696. <https://doi.org/10.1177/2332858420901696>.
- Hassen, Y. A., & Svensson, A. (2014). The Role of E-commerce for the Growth of Small Enterprises in Ethiopia. *The Electronic Journal of Information Systems in Developing Countries*, 65(1), 1–20. <https://doi.org/10.1002/j.1681-4835.2014.tb00463.x>
- How to Start an Online Store. (n.d.). Shopify. <https://www.shopify.com/blog/start-online-store>.
- Identity statement. (n.d.). *Appalachian Trail Conservancy*. <https://appalachiantrail.org/our-work/about-us/identity-statement/>.
- Instagram Business | Checkout on Instagram*. (n.d.). Instagram for Business. <https://business.instagram.com/shopping/checkout>.
- Internet purchases*. (n.d.). U.S. Customs and Border Protection. <https://www.cbp.gov/trade/basic-import-export/internet-purchases>.
- Introducing Marketplace: Buy and Sell With Your Local Community. (2016, October 3). *About Facebook*. Facebook. <https://about.fb.com/news/2016/10/introducing-marketplace-buy-and-sell-with-your-local-community/>.
- Iorio, M., & Corsale, A. (2010). Rural tourism and livelihood strategies in Romania. *Journal of Rural Studies*, 26(2), 152–162. <https://doi.org/10.1016/j.jrurstud.2009.10.006>.
- Kunaeva, M. (2012). *Sustainable Tourism Management along the Camino de Santiago Pilgrimage Routes* (Master's Thesis, HAAGA-HELIA University of Applied Sciences). <http://www.theseus.fi/handle/10024/40139>.

- Löfgren, Kent. (2013, May 19). Qualitative analysis of interview data: A step-by-step guide for coding/indexing. <https://www.youtube.com/watch?v=DRL4PF2u9XA&feature=youtu.be>.
- Long, J. M. (2019). The Small Business Marketplace. In *Management and Leadership Skills that Affect Small Business Survival* (pp. 91–104). Anthem Press. <http://www.jstor.org/stable/j.ctvg5bsg5.12>
- Mar a Mar: Costa Rica. (n.d.). *El Camino De Costa Rica*, [www.caminodecostarica.org/](http://www.caminodecostarica.org/).
- Monteverde Info. (2020). Monteverde Info. <https://www.monteverdeinfo.com/>.
- Pollock, N., Chase, L., Ginger, C., & Kolodinsky, J. (2012). The Northern Forest Canoe Trail: Economic impacts and implications for community development. *Community Development*, 43(2), 244–258. <https://doi.org/10.1080/15575330.2011.583354>
- Reddy, M. (2007). SMALL BUSINESS IN SMALL ECONOMIES: CONSTRAINTS AND OPPORTUNITIES FOR GROWTH. *Social and Economic Studies*, 56(1/2), 304–321.
- Saxena, G., & Ilbery, B. (2008). Integrated rural tourism a border case study. *Annals of Tourism Research*, 35(1), 233–254. <https://doi.org/10.1016/j.annals.2007.07.010>.
- Selling / eBay*. (n.d.). eBay. <https://www.ebay.com/help/selling>.
- Sick, D. (2008). Coffee, Farming Families, and Fair Trade in Costa Rica: New Markets, Same Old Problems? *Latin American Research Review*, 43(3), 193–208. <https://www.jstor.org/stable/20488155>.
- Siemens, L. (2010). Challenges, Responses and Available Resources: Success in Rural Small Businesses. *Journal of Small Business & Entrepreneurship*, 23(1), 65–80. <https://doi.org/10.1080/08276331.2010.10593474>
- Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. *Tourism Management*, 20(2), 245–249. [https://doi.org/10.1016/S0261-5177\(98\)00069-7](https://doi.org/10.1016/S0261-5177(98)00069-7).
- Stores – Create a brand page on Amazon.com*. (n.d.). Amazon Advertising. <https://advertising.amazon.com/solutions/products/stores>.
- Value-Added Marketing. (n.d.). *National Agricultural Library*, U.S. Department of Agriculture, [www.nal.usda.gov/afsic/value-added-marketing](http://www.nal.usda.gov/afsic/value-added-marketing).
- Wang, C. C., Zhang, T., & Song, Z. (2019). E-Commerce Adoption and the Dynamics of the SMEs Cluster: Evidence from Zhili Children’s Garment Town, China. *China Review*, 19(4), 125–150.
- What is ICT (Information and Communications Technology)? (n.d.). SearchCIO. <https://searchcio.techtarget.com/definition/ICT-information-and-communications-technology-or-technologies>.

Why trails? - American trails. (2020). American Trails. <https://www.americantrails.org/why-trails>.

World Trails Network. (2020). World Trails Network. <https://worldtrailsnetwork.org/>.

# Appendix A

## *Ambassador Semi-Structured Interview Protocol*

Welcome to our interview! We are a group of students from Worcester Polytechnic Institute in Massachusetts, USA who are working with the World Trails Network and communities along the Sendero Pacífico. We are conducting this interview to learn about the community you are representing.

**Consent:** As a reminder, this is a voluntary interview. Your personal information will not be used in our report without your consent. This interview should only take an hour or less. Feel free to ask us any questions. If there are any questions you do not feel comfortable answering, you may skip it and end the interview at any point.

Advisors: Sarah Strauss [sstrauss@wpi.edu](mailto:sstrauss@wpi.edu) Melissa Belz [mbelz@wpi.edu](mailto:mbelz@wpi.edu)

Project Team Contact: [gr-wtn-monteverdeb20c21@wpi.edu](mailto:gr-wtn-monteverdeb20c21@wpi.edu)

Would it be fine if we recorded this interview? Do you have any questions before we get started?

---

### Questions:

1. Tell me about yourself. (don't let them go on for too long, direct with follow up questions)
  - a. Where are you from?
  - b. Have you always lived in \_\_\_(insert community)?
    - i. If no, what brought you there? What made you stay?
  - c. What are some of your favorite parts of living there?
  - d. What do you like doing in your free time (any hobbies)?
  - e. What are some of your favorite places to shop in your area?
  - f. Are there artisanal shops in your area? Or are there artisans there?
  - g. What is your role in the community? What do you do for work?
2. Do you see a lot of tourists visiting your area?
  - a. If yes...
    - i. What do you think tourists like the most about \_\_\_ (insert community)?
    - ii. Why does that appeal to them?
  - b. If no...
    - i. Have there been any efforts to bring tourists to the area?
3. What do people do for a living in \_\_\_(insert community)?

4. What do the community members here make that they sell to the community? Tourists?

As you might know, we are working to outline steps for an online marketplace for the Sendero Pacífico region, part of our research includes learning about different products available in the communities, so we want to ask you:

5. What are some product ideas that you think could do well in this virtual market?
  - a. If idea...
    - i. Have you mentioned this project to any of the people that produce these products?
      1. If not, do you think that they would be interested in using the platform to promote their products?
  - b. If no idea...
    - i. What about (item from #4)?
6. Do people in your community shop online often? (Amazon, Etsy, eBay)
7. Do people in your community sell online?
  - a. Do they have their own website or are they using sites like Amazon?
8. Do you have any suggestions to help us in our research?

These are all the questions that we had planned for today. This information will be very useful for us to better understand the communities we are working with and help us gear the direction of our research.

We really appreciate your help, as an ambassador, in this as we are not able to be physically there. Your dedication to this project is very helpful and we are hoping that you will be willing to help us get in contact with the community when needed. Thank you.

†a Spanish version of this interview was conducted

# Appendix B

## *Producer Semi-Structured Interview Protocol*

We are a group of students from Worcester Polytechnic Institute in Massachusetts, USA who are working with a Sendero Pacifico ambassador from your community alongside our sponsoring organization, the World Trails Network. We want to talk with you today to understand the logistics of the product you make to further understand our project goal in evaluating digital platforms and the potential products that have potential to be placed on it.

**Consent:** Your participation in this interview is voluntary and should not take more than one hour. Names and other personal information will not be disclosed in our report or future publications without your consent. Please stop us and ask for clarifications on any questions as needed. You may choose to not answer a question(s) or withdraw from the interview at any time.

Advisor Contact: Sarah Strauss [sstrauss@wpi.edu](mailto:sstrauss@wpi.edu) Melissa Belz [mbelz@wpi.edu](mailto:mbelz@wpi.edu)

Project Team Contact: [gr-wtn-monteverdeb20c21@wpi.edu](mailto:gr-wtn-monteverdeb20c21@wpi.edu)

Would it be fine if we recorded this interview? Do you have any questions before we get started?

---

1. Do you produce the product yourself in your own facility?
2. Is the product produced seasonally or year round?
3. How often do you sell the product?
  - a. When sold, how many do people usually buy?
    - i. What is its normal price range?
4. What is the weight and size of the product?
5. Is it perishable? Fragile?
6. What is the estimated production time?
  - a. Do you keep stock?
    - i. If so, how much stock is there at one time? How often is the product restocked?
7. Does this product have any certifications?
8. What are the governmental regulations imposed on the product?
9. How do consumers know the existence of your product? (social media, web platform, word of mouth)
  - a. If sold on a digital platform,
    - i. How do you post your products?
    - ii. How is the money organized?
    - iii. How do people pay?

iv. Who ships the products?

10. Do you have references/suggestions that could help us better understand the logistics of exporting products nationally and internationally from Costa Rica?

11. Do you have any questions for us?

\*additional questions added of relevance for each producer

†a Spanish version of this interview was conducted

# Appendix C

## *Key Findings from Ambassador Interviews*

The chart provides a summary of what the team learned in the Ambassador interviews. We identified major themes and highlighted the key points within each. There is no particular order to the information.

<b>The Sendero Pacifico Communities</b>	<b>Regional Appreciation</b>	Situated in an ideal climate, often described as neither too hot nor too cold.	Bountiful flora and fauna with beautiful views of nature.	Residents enjoy the small community aspect within each community.	
	<b>Tourism Activity</b>	Monteverde is the hub of tourism. Most tourists only visit Monteverde and San Luis.	Communities other than Monteverde and San Luis host student groups and thru-hikers in a community center or a family's house.	Most tourists, if any, pass by the other communities on the trail.	
	<b>Occupations</b>	All communities practice agriculture and animal husbandry. Monteverde only has small-scale farms (mainly coffee) on the outskirts.	Monteverde is comprised of a large amount of people directly and indirectly involved in tourism.	The regional Development Association plays a major role in maintaining community project groups.	
	<b>Online Usage</b>	Communities other than Monteverde and San Luis have poor Internet access and solely use the Internet, when available, for personal communication.	Monteverde offers online services to buy local food and products.	There is an absence of online shopping due to a lack of convenient shipping. Residents are accustomed to life without discretionary spending.	Younger generation uses the Internet more often. WhatsApp and Facebook are the most popular platforms in the region.
	<b>Product Types</b>	All communities produce fresh agricultural products. It is more evident outside Monteverde and San Luis.	Products are made from local resources and for personal consumption.	Monteverde businesses additionally sell products manufactured outside the country.	
	<b>Local Product Expertise</b>	There is a general consensus of minimal to no experience with product exports and permits.	Many people do not grow or make products to sell outside of their community but are willing if given proper guidance and online access.	Members of the regional Development Association can contact others with experience in required product documentation.	



# Appendix D

## *Detailed Product Regulation Descriptions*

### *Natural Honey and Beeswax*

Products of animal origin, including natural honey and beeswax, require more documentation than most other products before becoming an established product for sale. The Ministry of Agriculture & Livestock (MAG) requires an individual or organization to register as an apiculturist. In addition, a Veterinary Operation Certificate (CVO) is required from the National Animal Health Service (SENASA). A government official is required to come on-site and determine the price the producer pays for a certification based on the number of beehives and apiaries. If one meets the requirements of a small or medium agricultural producer, they need to register with the service PYMPA accessed through MAG. This information is supported from contacting a local honey producer in Santa Rosa. An export permit to the U.S. is also required if one ships internationally. Although there are many steps before becoming an apiculturist, the local honey producer commented that the approval process takes a short time.

### *Roasted Coffee, Jams, and Salsa*

Products of plant origin also include more documentation compared to the other products. In the case of the Sendero Pacífico communities, these products include roasted coffee, jams, and tomato or other sauces (i.e. salsa). The agricultural producer needs to be registered with MAG and the State Phytosanitary Service (SFE). For coffee, no registration is needed with the Institute of Coffee of Costa Rica (ICAFE) if a producer is selling less than five kilograms to one customer. Above five kilograms, ICAFE requires a lengthy documentation process including reporting the entire coffee production process, working conditions, quantity produced, and obtaining an export permit. We obtained this information from our interview with San Luis' ambassador who described his organic coffee business. A municipal patent is needed to allow for the official production of coffee. An active permit from the Ministry of Health is also needed and is renewed at a low cost every year. Every seven years, a permit from the National Environmental Technical Secretariat (SETENA) is needed which exceeds \$1000 USD. SETENA harmonizes the environmental impact with production processes while conducting environmental impact assessments. Overall, the permitting process products of plant origin only involves

registration with a couple organizations at an affordable cost without the extra hassle of obtaining export permits.

### *Soap, Shampoo, Lotion*

The ability to sell cosmetics, which includes handmade soaps, shampoos, and lotions, does not come with too many challenges. We received a substantial amount of information from a local business owner in Monteverde who has experience with the permits for the production and export process. An export permit is required for shipment from Costa Rica to the U.S. As with agricultural products, a permit is needed from the Ministry of Health. Additionally, there are some taxes that need to be paid related to having a local cosmetics business as well as obtaining a License of Operation from the government. From the business owner's experience, the initial process of obtaining permits and other required documents was complicated, although now as a steady business the renewal process is efficient. The same can be said in the business' first months with determining the shipping logistics of exporting to different countries with specific requirements.

### *Jewelry, Clothing, and Art Products*

For the remaining products determined feasible from the communities, the process of getting to the point of sales is uncomplicated. For jewelry made of silver or made using macrame, the TICA system displayed no issues exporting them from Costa Rica to the U.S. Macrame type products and clothing are an exception because they require a textile export permit from the Textile Quota Office detailing the type of fabric and its material composition percentage. Paintings, sculptures, and other art products do not require an export permit or any other permits. These products are mainly limited due to weight and size, described in a subsequent section on weight and size. Importing all of these products included many documents due to the same reason as stated above of encouraging national commerce.

It is important to note that products that have various ways of creation need to stay consistent with the same quantity and quality of material. Otherwise, special permits will be required, according to the Ministry of Foreign Trade. This information can be applied to the different kinds of jewelry and art products described above. Mobiles also fit this description in which the producer uses the same materials. Considering what the project team learned from the

communities, these problems will most likely not surface because of the absence of regulations with the available material.

### *Packaging*

Packaging of some of the products requires more attention. Wooden sculptures can contain fragile pieces depending on the shape. As noted by the Ambassador from Guacimal, good packaging is key to avoid the misfortune of broken pieces from handling the piece from the woodworker to the customer. Good packaging becomes even more important when shipping internationally. The Monteverde cosmetics business owner also agrees that packaging needs to be thought through to ensure the highest quality to the customer. The owner made a special comment about their handmade soaps that need more packaging than other products due to their inherent fragility. Moreover, the soaps take about a month to produce, therefore careful handling reduces the chance of wasted product. Food products, such as honey, jam, salsa, and roasted coffee, need to be packaged in unbreakable containers that do not alter the characteristics or composition of the product. None of the other products have outstanding packaging concerns; it is up to the individual who packages the product to select the most suitable packaging method and material that will sustain the delivery process.

### *Weight and Size*

The most important products to consider in terms of their weight and size are paintings, sculptures, and other art products. All shipping services state the maximum dimensions a package can have, described in detail in the informational manual (Appendix F). Community members who will create such products need to be conscious of the size. In addition, large packages have high shipping costs which might not be financially feasible for the communities. The product's weight poses a concern as well. Shipping services state the maximum package weight they accept, although making large and heavy products will be financially limiting due to very high shipping costs. Some communities, such as Guacimal and San Antonio, have woodworkers and painters known to create larger pieces of art. However, they typically deliver their products locally themselves or their clients pick up the product, therefore avoiding the large shipping costs related to size and weight. Honey is most likely the only other product that may be limited in weight and size because of its naturally high density. All other determined products are either small or flexible when it comes to packaging and should not pose a problem.

# Appendix E

## *Key Themes from Producer Interviews*

The chart provides summaries about the two main themes we determined from interviews and personal communications with local producers from the Sendero Pacífico region. The producers were aware of the team’s efforts to help establish a digital marketplace for the trail communities. There is no particular order to the specific information.

Local Producers from the Sendero Pacífico Region				
Main Themes	Specific Information Provided by Producers			
<b>Successful Business Growth</b>	It is possible to build a successful business in the region .	Sustainable business growth needs a thorough approach. Overnight success is unfeasible.	Some businesses reach international markets.	It is important to keep records and always be prepared for the following year.
<b>Spread of Knowledge About a Business</b>	Instagram and Facebook used for advertisement and marketing.	Residents and tourists advertise local businesses primarily by word of mouth.	Customer contact and product inquiries primarily occur via WhatsApp.	Personal websites and Amazon are benefical to make additional sales.

# Appendix F

## Comparative Table Checklist of Digital Platforms

### Existing Platforms

	One Time Fees	Monthly/ Recurring Fees	Referral Fees	Accessible on Mobile Devices	Customization Options	Compatible with Social Media	Allows for Chosen Products to be sold	Allows for Different Shipping Options	Other
Amazon	No startup fees	Subscription fees: \$0.99 per item or \$39.99 per month	Typically 8%-15% of item's listing price	Yes (App)	No	Yes	Yes*	Only Amazon's Standard International Shipping	See Amazon section for further information
Ebay	No startup fees	Subscription fee: \$21.95 per month	Typically 10% of item's selling price	Yes (App)	Yes (Requires Upgraded Plan)	Yes	Yes*	Only eBay's International Shipping Option	See eBay section for further information
Etsy	No startup fees	Listing fee: \$0.20 per item and 2.5% currency conversion fee per item	5% of item's selling price	Yes (App)	No	Yes	Yes	Use your own shipping methods	See Etsy section for further information
Mercado Libre	No startup fee	None	None	Yes (Web)	No	No	Yes	Use your own shipping methods	See MercadoLibre section for further information

\*Some additional info may be required when posting certain items for sale

## *Build-Your-Own Platforms*

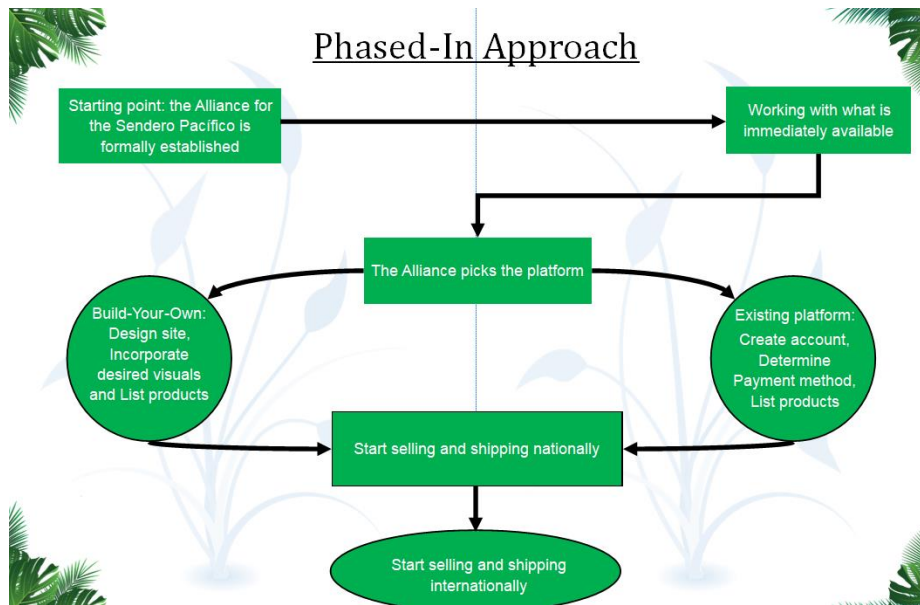
	One Time Fees	Monthly/ Recurring Fees	Referral Fees	Accessible on Mobile Devices	Design Experience	Compatible with Social Media	Allows for Chosen Products to be sold	Allows for Different Shipping Options	Payment Method Options
BigCommerce	No Startup fees	Subscription: \$29.95 per month	No	Yes	Some advanced design tools required	Yes	Yes	Use your own shipping methods	Credit/Debit Card with fees No penalties when using 3rd party payments
Shopify	No Startup fees	Subscription: \$29 per month	No	Yes	No prior design experience needed	Yes	Yes	Use your own shipping methods	Credit/Debit Card with fees Wire Transfer Other 3rd party options with penalties
SquareSpace	No Startup fees	Subscription: \$30 per month	No	Yes	No prior design experience needed	Yes	Yes	Use your own shipping methods	PayPal only

# Appendix G

## Informational Manual

We provided here sample screenshots of the informational manual. The manual includes in-depth analysis of the topics covered in *Findings* and *Recommendations*. All the information is specifically selected to be of relevance for the Sendero Pacifico communities. See the supplementary document uploaded with this project report to view the full manual.

Example page from the *Phased-In Approach* section. We display a summary of the step-by-step approach for an online marketplace before going into detail about each phase.



Example page from the *Phased-In Approach* section. We describe each step to be taken to have a fully established online marketplace.

The screenshot shows a page titled "Phased-In Approach (continued)" with a green header. The main heading is "Phase 5". The text describes the next step: "The next step would be to start shipping and selling products nationally. We acknowledge that there are some producers who are already at this step, however there are many who are not. The producers would want to start selling products both locally and nationally first. They should determine which shipping service works best for their products nationally, information on this is available later in the manual." It then recommends starting nationally to help producers become accustomed to the shipping process and notes that national shipping is cheaper than international. A list of factors to consider is provided: "Shipping Fees", "Platform Fees", "Producer Profits", "Permit Fees", and "Giving Back to the Sendero Pacifico". A blue hibiscus logo is visible in the bottom left corner of the page. At the bottom, there is a page number "6" and a link "More Phased-In Approach" with a right-pointing arrow.

Example page from the Products section. We identify the products by category as given by the U.S. Tariff Schedule and list the required documents (if any).

**Clothing:**

**U.S. Tariff Code:** Codes beginning with 6103 and 6104

Multitude of product categories according to type of material and percent composition

**Tariff Base:** Varies

**Tax relief category:** A or J

**TICA System:** export

- Document Code: 0134
- Description: Textile Export Permit. Textile Quota Office

**Required documents:**

- Textile export permit from Textile Quota Office (FDA requirement)

**Cosmetics:**

<p><b>U.S. Tariff Code:</b> 34013010 (Organic surface-active products for wash skin, in liquid or cream, contain any aromatic/mod aromatic surface-active agent, put up for retail)</p> <p><b>Tariff Base:</b> 4%</p> <p><b>Tax relief category:</b> A</p>	<p><b>U.S. Tariff Code:</b> 34013050 (Organic surface-active products and preparations for washing the skin, in liquid or cream form, put up for retail sale, neso)</p> <p><b>Tariff Base:</b> Free</p> <p><b>Tax relief category:</b> G</p>	<p><b>U.S. Tariff Code:</b> 33051000 (Shampoos)</p> <p><b>Tariff Base:</b> Free</p> <p><b>Tax relief category:</b> G</p>
--	--	--

**TICA System:** export: none

**Required documents:**

- Export permit for international shipment (FDA requirement)


**Required documents for physical business:**

- Municipal patent to carry out cosmetics production
- Permit from Ministry of Health (\$50, yearly) (received 15 days from request)
- For each product and operating permit for activity

14

Example page from the Shipping section. We describe the main company and go into detail about their offered services.

**National Shipping (continued)**



**The National Postal System**

<https://correos.go.cr/>

**Max package weight:**  
30 kg

**Max package dimensions:**  
1.20m W x 1.20m L

**Delivery time:**  
Within 1-3 days

**Location:** Santa Elena / Monteverde Branch  
Puntarenas, Monteverde  
North Side of the Plaza Monteverde Shopping Center


**Shipping Prices:** Based on actual or volumetric weight (whichever is greater) (prices are displayed in section tables)

Must add 13% of the Value Added Tax to all rates

**Tracking:** Tracking shipments only available on Correos website with specific shipment number


**How to access Terms & Conditions of Correos postal services:**

1. Navigate to website section titled "Encomienda Nacional"
2. Click on "Condiciones" to expand section
3. Click on "Ver términos y condiciones del servicio postal" to download the Microsoft Word document




**Required Set-up and Documents for National Shipments**


Create an account with the shipping service of choice




Address of sender and recipient




Create a shipping label



Additional documents (permits, etc.)




23

Correos de Costa Rica-National 




Example page from the Platforms section. We lay out the top options for existing platforms with details such as account setup, selling plans, and key features.

**Existing Platforms (continued)**



**Cell Phone Compatibility**  
eBay has its own app!  
Sellers can view products, post new products, and respond to customers

Post new products on an Instagram or Facebook business page and it will send users right to the product on eBay!



---


## Etsy

**Key Features**

- Every seller on Esty has their own store
  - This allows them to share all of their goods in one convenient location
- Most Etsy sellers are made up of small businesses and at-home crafters

**How To Set Up An Etsy Account**

Necessary Items to Begin




→


- Sign up and create an account
- To sell and take payments in Costa Rica it may require a business license
- Credit or debit card

**40** Etsy Continued →

Example page from the Platforms section. We lay out the top options for build-your-own platforms with details such as account setup, payment options, and customization features.

**Build-Your-Own Platforms (continued)**



 **Customization Options**

Shopify is a company that helps in the design of a unique website. A unique URL is created and the site can be designed from start to finish. There are pre-made themes that will make creating a site easier and their drop-and-click store builder requires no previous design experience to use. It is just as easy as a few clicks.


**Payment Options**

→

Credit/Debit Card with fees  
Wire Transfer  
PayPal (Need Account)  
There is a penalty when you choose to use a 3rd party payment option

**Cell Phone Compatibility**  
Shopify has its own app! It allows a seller to fulfill orders, check inventory, and contact customers. It is also guaranteed that, when opened, the shop should look the same on all kinds of devices.

Ability to link the website right on an existing Facebook or Instagram account to advertise the new site.



**49** SquareSpace →