

## **A Suitable Supplier for a New Global Market**

### **Company Overview**

With the demand of the latest and top performing electronics that allow for a vast amount of accessibility to the global network, the internet has brought must-have applications and products onto the market. Voice and data convergence are continually exceeding set boundaries as traditional and new media providers are fusing and uniting; all the while a large amount of the world remains unconnected. FoxRouter Electronics' goal is to bring solutions for communication and connectivity.

### **Company Background**

FoxRouter Electronics was created by a small group of near-graduating savvy business, technology, and engineering majors from MIT in 1998. While still students in college, they received help from one of the group's older brothers, Clyde. Within two years the company emerged onto the market with the latest technological advances in modems and connectivity products for the telecommunications industry. Over the years, FoxRouter has taken that small group of savvy university majors and has developed into a global communications company that today employs over 4,000 people and provides a current product line in excess of 200 products.

### **Operations and Facilities**

FoxRouter's goal of connecting the globe comes with no geographical boundaries. Over half of the corporate revenue comes from international customers deploying products overseas. Headquartered in Boston, Massachusetts, FoxRouter has sales and support operations in Western Europe, Central/Eastern Europe, Asia/Pacific, Mexico, Canada, and across the United States. FoxRouter is an ODM (Original Design Manufacturer) who designs products in-house and outsources the manufacturing of the products. FoxRouter utilizes suppliers for components that go into the final assembly of the product and Contract Manufacturers (CMs) to perform the final assembly and pack out of product for shipment to FoxRouter locations. Testing of these products occurs in house at testing warehouses. FoxRouter's suppliers and CMs have been thoroughly dependable meeting all qualifications thus far; therefore, the company does not currently see the need to move manufacturing in-house. The only CM relevant to this new market project is located in Kunshan, China. All other final assembly CMs used by FoxRouter are at full capacity and production is running smoothly for distribution to the other markets; they cannot be considered for utilization in this new market project.

### **Customers**

FoxRouter Electronics' customers span the size spectrum, ranging from small businesses to Fortune 500 companies. The majority of these customers specialize in telecommunications which primarily consist of carriers, service providers, and corporations with private networks.

## The Product

### Model 301 Frontier IP Router

The Model 301 Frontier IP Router offers easy installation and operation with high speed IP routing. The 301 Router is perfect for bandwidth intensive applications such as LAN-to-LAN networking (Local Area Network), multimedia services, and e-commerce transactions while offering simple interfacing to any network with router support. Its standard Internet Protocol (IP) feature set provides bridging and routing functionality along with advanced IP security features like Network Address Translation (NAT) and Firewall, as well as optional IP security-based Virtual Private Network (VPN). In addition, Model 301 has point-and-click control with built in Hypertext Transfer Protocol (HTTP) / Simple Network Management Protocol (SNMP) interfaces along with a complete, managed, end-to-end system when used with the central site. With these features, the Model 301 Frontier offers the clear and simple choice for mission-critical networking.

**Estimated FoxRouter retail price:** 668.47 USD

**Estimated total cost to build:** 247.93 USD

(Cost breakdown is currently unavailable. Estimated cost excludes transportation costs.)

**Expected number units for new market area per Sales Department:** 250,000 / Year

**Dimensions:** 5.5in x 4.2in x 1.5in (13.9cm x 10.6cm x 3.8cm) (inches, centimeters)

**Weight:** 4.2 lbs (pounds)

## Suppliers

Currently, FoxRouter has a dependable contract manufacturer (CM) established for full-assembly of the product located in Kunshan, China that allows for product to be delivered on time to the distribution warehouses worldwide. The FoxRouter Executive department does not want to relocate this final assembly CM due to timing reasons for the new product launch. However, FoxRouter's main supplier for the Model 301's PSU has run into financial difficulty and faces losing its tier 2 status in line with FoxRouter's supplier qualifications. Due to this supplier's financial instability, FoxRouter needs to find a new supplier in order to provide continuity of production. The company is pressed for time to select a replacement supplier for the part below; this PSU part is critical, as it is used for other FoxRouter products and cannot be eliminated nor altered.

**Power Supply Unit:** External universal 90-260 Voltage in Alternating Current (VAC) input or -48 Voltage in Direct Current (VDC).

Fortunately, FoxRouter Electronics' sourcing department has done some research and has located three suppliers that have previously quoted the PSU part, currently meet FoxRouter Electronics' supplier qualification requirements, and appear to be financially sound. There are no other suppliers available for FoxRouter to use for this part. The suppliers available are listed below in table format provided by the Sourcing Department. There is no additional information that can be provided for the selection process.

Supplier Name	Global India	China Worldwide	Taiwan Supply
Supplier Location	Pune, India Tier 1	Shenzhen, China Tier 2	Taipei, Taiwan Tier 2
Quality of Materials	99.8%	98%	99.2%
Part Delivery on Time	99.6%	97%	99%
Production Capacity	Excellent	Allowable for Increase	Stable
Customer Service	Excellent	Fair	Good
Negotiated price for each PSU Part (negotiated production at 50,000 / Month)	5.76 USD	3.86 USD	4.45 USD

**\*Current Supplier (Zhongshan City, China) PSU negotiated price was: 4.05 USD, Tier 2 Status. 4.05 USD is currently included in the total cost to build.**

**\*Transportation costs to the CM site are included in the negotiated PSU price.**

### The New Market

The marketing department has located three potential markets for the new product illustrated and outlined in light blue below. This includes South Africa; Victoria, Australia; and Brazil, South America. There are no other new potential markets currently being observed. The images below show the area of each continent for market emergence, for ease of location setup, these areas are specifically located near major ports as indicated by a red dot (Port of Durban, Port of Melbourne, and Port of Santos). Another port for import can be considered within the new market area outlined in blue. (Team must present clear reasoning as to why another port choice was chosen). Resource to use:

<http://www.worldportsource.com>



As a brand new market, FoxRouter has only established the potential customer base but has not established the shipping methods, shipping terms, warehousing, logistical flow of goods, marketing, IT structure, etc. It will be up to your team to define some of these solutions that are requested on the following page.

## Team Role

As the Supply Chain and Logistics Management Team within FoxRouter, your role is to first provide an explanation why your team-chosen supplier is the most appropriate in a comparison of all three suppliers based on performance metrics, costs, and location to the CM for the PSU component to be used in the Frontier 301 IP Router. Second, explain why your team chosen new market is the "most suitable" out of the three new market locations in relation to these categories: transportation, IT tracking, storage methods, and cost findings. Third, provide in a summary why you suggest FoxRouter should launch in this new market and discuss why this new market is "most attractive" in a comparison of all three new markets based on any variables your team may find. Keep in mind you are presenting your research to the Executive department of FoxRouter and they are very familiar with the content and supply chain terminology of this new market selection process. The Executive department needs to be convinced your new market location is the most ideal to emerge based on comparisons to the other new market locations.

## Tasks and Deliverables

Choose a PSU supplier: Choose one PSU supplier out of the three listed in the case study supplier table that your team believes would be the best fit based on performance metrics, cost, and location. Present a comparison between the three suppliers and state why the supplier chosen by the team would be the best fit for the new market compared to the other two suppliers. Include the cost impact of the chosen supplier to the cost of the unit. Identify any variables based on the chosen supplier and what the team has in place to ensure these variables are covered. The CM has not provided a cost breakdown for the 301 Router, instead an estimated total cost has been provided.

Select the New Market: Select a new market to launch the 301 Frontier Router. In a general comparison, illustrate which new market is the most ideal for emergence while reasoning demographics, economics, and social/ethical structures among the three new markets. Once the team has become familiar with the new markets structure, provide a comparison of costs and transit times from the CM to the specific team-located warehouse destination including full-landed cost (total transportation costs including taxes and duties). Provide a statement as to which new market your team deems the most attractive for the FoxRouter 301 Frontier IP Router.

Define Transportation Methods: Define the transportation method(s) and Incoterms 2010 from the CM Site Door to the team-chosen "relative" warehouse location within the new market (see *Transit Times and Cost Spreadsheet*).

Select a New Market Warehouse Location: There are two relative warehouse locations to decide upon located in the new market. One is a warehouse located right outside of the container yard (CY) of the destination port. The second warehouse is centrally located in the city-defined market area (see *Transit Times and Cost Spreadsheet*). Please specify why you have chosen the specified warehouse location using the SWOT analysis and include any cost savings, transit time efficiencies, convenience, etc.

Calculate the Transportation Costs: Calculate the total landed cost of transportation from the CM facility to the warehouse destination (depending on your warehouse location) including the duties and taxes calculated by the team to import into the new market. (See *Transit Times and Cost Spreadsheet*).

Research an IT Inventory Tracking Solution: Currently, tracking is done by barcode at final destination warehouse. Provide an IT solution for improved inventory tracking in your presentation. Present your research and define any start up cost involved for this solution and cost per part.

**Presentation Length:** 35 minutes

An additional 10 minutes will take place at the end for questions from judges.