RD Tech Refurbishment: Abridged Executive Summary

RD Tech contracted the Thunderbird Emerging Markets Laboratory (TEM Lab) consultants to assess the feasibility of integrating internal computer refurbishment operations into their value chain in one of three East African locales: Mombasa, Kenya; Kigali, Rwanda; or Dar es Salaam, Tanzania. The assessment was to culminate in a differential cost analysis, which would compare sourcing refurbished computers from international suppliers to sourcing unmodified computers from computer owners to be refurbished internally. Once the feasibility of integrating operations was analyzed and the most suitable and cost effective location to host the refurbishment center was selected, the consulting team was to provide actionable recommendations for implementing the findings of the report, including a strategy for post-user product disposal.

This report details the assigned deliverables and the research and analysis utilized to develop them. It analyzes the feasibility of integrating internal computer refurbishment into RD Tech's value chain through the following two distinct scenarios:

Current Scenario

The current scenario assumes 2009 import levels and current retail sales locations in Rwanda, Burundi, and the Democratic Republic of Congo (DRC) and compares the following:

- Sourcing refurbished computers from current US suppliers
- Harvesting used computers to refurbish in a recommended East African location

Growth Scenario

The growth scenario diverges from the current state scenario by assuming a 450% increase in computer imports, as well as market expansion into 4 new East African target cities. The growth scenario also compares:

- Sourcing refurbished computers from current US suppliers
- Harvesting used computers to refurbish in a recommended East African location

The costing and analysis of these two scenarios culminates in the following units of comparison:

- Differential analysis of COGS (per unit) and total operational expenses over a 3-year time frame
- Breakeven analysis, measured in years and quantity of computers

Based on the above-mentioned units of comparison, the TEM Lab consultant team has made the following recommendations:

Current Scenario

RD Tech should immediately internalize the refurbishment process. This investment will lead to a cost breakeven of 2.79 years, after which RD Tech will begin to recognize a cost-savings of $16 per computer.

Growth Scenario

RD Tech should integrate the refurbishment process into its supply chain. After 0.07 years, RD Tech will recoup its initial investment. Each computer that RD Tech refurbishes in Mombasa will result in a cost-savings of $51.