Access to Innovation Brief on UPS Case Study August 23, 2013

THE PROBLEM

The IT-enabled UPS PharmaPort 360 is part of an integrated logistics service designed for life sciences and pharmaceutical transport. The PharmaPort offers a breakthrough in shipping technology, providing increased flexibility through guaranteed temperature settings, while providing expert access all along the shipping route to ensure no interruption in the movement of time sensitive goods.

UPS PharmaPort 360 maintains temperature within two degrees of the preset five degrees Celsius. The temperature setting can be maintained for more than 100 hours and contains a rechargeable battery for environmentally-friendly temperature control. Contrary to most temperature controlled shipping devices, PharmaPort 360 does not require dry ice which can complicate the shipping process due to hazardous material (HAZMAT) restrictions and safety precautions. Additional safety is provided through location monitoring and shipment data provided through GPS/GSM technology included in the PharmaPort container. UPS agents monitor containers for changes in temperature and potential risk via control tower, with "predefined contingency plans" ready for deployment.

THE PROBLEM

While the PharmaPort has been technologically effective in the United States and broadly successful, the challenge has been navigating the various international customs regulations that dictate tariffs. The PharmaPort 360 is itself being treated as a product rather than a piece of equipment. The World Customs Organization's (WCO) rules for instruments of international traffic (IIT) provide for the "the temporary importation of containers, free of import duties and taxes," although each country has its own way of interpreting these rules. For example, the United States "allows importers to admit vehicles, containers, and other holders used to transport merchandise…into the U.S. without entry and the payment of duty." Countries with similar language or interpretations of the WCO guidance include Hong Kong, Singapore, South Africa, South Korea, and the European Union.

However, other countries continue to treat the PharmaPort as the cargo itself rather than the IIT. This distinction is significant because the duty applied to cargo is much higher than IIT, which the WCO states should be free of duties and taxes. This has often made the PharmaPort prohibitively expensive to use for delivery, essentially blocking its use in certain countries. In some cases, the distinction between cargo and IIT has given an advantage to competitors because of the way that duties and fees are applied.

In addition to being a customs issue, this is a health care issue by extension because many pharmaceuticals and other medical supplies require temperature-controlled transit for safe delivery. If countries effectively block PharmaPort because of excessive taxes and duties, then they miss the opportunity to deliver the medical goods to their patients that PharmaPort can provide.

THE RESULT

The solution is ongoing. The effectiveness of the product is not in question, but its treatment by international customs administrations has created a regulatory block on its use overseas. UPS has been working with individual customs administrations to find a solution and while some have been accommodating, others have not. The reasons vary by country— for example, one country will treat the PharmaPort as IIT if the air carriers do, but air carriers have also inconsistently applied the IIT designation. A second issue is the re-export of the empty container, and while the WCO provides provisions for empty containers, the designation of an empty PharmaPort has created another hurdle. UPS's innovation in navigating these regulations has revealed the multiplicity of customs rules, the (in)consistency of following internationally-recognized regulations, and the importance of navigating these regulations to ensure the delivery of a successful product.