On the button

HUNTER NEWBY OF TEL^{X} LOOKS AT WHY YOU SHOULD MANAGE YOUR INVENTORY ACCURATELY.

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Network inventory management comes in many different shapes and sizes. It is of high importance, if not critical, to both the buying and selling carrier, yet many carriers continue to update inaccurate records, and even have no tracking method at all for some types of capacity.

While this is not a sound business practice for any enterprise, in the current telecom market in particular, accurate inventory management cannot be ignored.

Unfortunately, for many carriers, accurate identification of inventory is a monumental task. Even before a carrier begins the process, it must first understand where it needs to start and why accurate records are essential.

In failing properly to manage network inventory carriers run the risks of creating customer issues as well as internal issues such as accounting errors, budget overruns, low employee morale and the need for more customer service representatives. Unless the carrier can see from an executive management level down how the business is adversely affected and how less than optimal results will never be remedied until a serious, dedicated effort to manage inventory accurately is put in place, then the entire process may never happen.

The biggest motivating factor to get bandwidth inventory management in order is lost revenue. There are others, for example: missed opportunities due to being built out but not knowing it; a tarnished reputation for both the carrier and salesperson; lost credibility; additional cost and time in using alternative methods of interconnecting; not finding better ways to distribute bandwidth due to a general lack of network knowledge.

The normal sales process in telecom land is sell first and figure out how to provision later. Of course most sales orders that were signed were counted as revenue before they were installed and billed, but we can all see where that practice has taken the industry. Now it is all about the revenue and profit.

GOOD AND BAD REVENUE

There are two main issues with revenue – there is good revenue and bad revenue. Good revenue is profitable, bad revenue is generated from a service that costs more to deliver than can be billed out for it. Carriers that lack sound inventory records can fall in to the trap of selling a service at a price that has been calculated using static information.

For instance, when access facilities such as transport or dark fibre have been exhausted the next order in to that location will be delayed. The delay itself is lost revenue. When the carrier gets organised it might realise that the cost of new build in to that location cannot be financially justified based upon the revenue from the order. In that case it may avoid “bad” revenue, but risk tarnishing its reputation by telling the customer it cannot deliver the service after it has been sold. If the new build is done without financial analysis just to complete the order then it might have created a bad revenue situation. In either case, time has been lost due to poor inventory management and that costs money and credibility.

With the current costs of building out telecom

networks, it is not difficult to see how there could be accounting and budgeting problems. But aside from this and customer frustration, it's important to consider the salesperson's attitude.

Many people say that selling is the hard part. But as hard as it is, the installation process can be even more difficult due to inadequate inventory management. If the sales group is compensated based on service usage then they will be placed in an awkward position – being told to sell more, but not having been paid for what has already been sold. Add to that the customer inquiries about service installation dates, which eventually become complaints, and the sales position becomes even more precarious. If the carrier decides not to deliver the service and/or the customer cancels the order, then what has the salesperson been doing? Needless to say morale would be justifiably low.

THE STARTING POINT

So where does a carrier start? At the lowest possible point. First it should separate out lit networks from dark networks. Next, separate out the network by types of service (LD voice, IP, transport) and then customer segment (carrier, enterprise, consumer) if applicable. Within each segment go to the lowest common denominator in terms of the network, layer 0 to layer 1. The physical layer of the network needs to be understood before anything else. Just like a building, without a good foundation everything above it is not safe.

Metropolitan access, long haul and regional dark fibre networks are different, but all have the same common principles. There are conduits of varying size that go from A to B. Within them there are fibre cables (usually single mode) of a particular count (48, 72, 96, etc). Go to the PoPs and switch sites and do an inventory. Gather as much detail as possible on the type of fibre, connectors, fibre panels, suite numbers, addresses. All of this information should be compared with what currently exists and then eventually keyed in to a database.

Lit services (voice, IP, transport) each have their own special circumstances. Once inventory efforts reach the equipment level a real understanding a capabilities becomes necessary. As opposed to fibre, which is either on or off, equipment at the base level can either operate properly or not. It can be totally populated with cards and ports or not. Carriers should be aware of the box that has nothing in it. It looks good in the rack, but don't count on it to work when you need it to. Ordering the right cards takes time and money.

Of particular interest are the networks garnered through acquisition or merger. If proper integration did not happen at the time of the merger then the people with the knowledge are probably not around any more.

MAKE COMPARISONS

Once every piece of equipment is in its proper service and customer segment silo, and all the boxes, cards and ports have been counted, this data too should be compared with what currently exists in the database. The database selection process is a difficult task as well and should be started when the inventory process begins. The vendor's input can be very helpful in gaining insight to the process and determining whether the vendor is capable of supporting the carrier's future needs.

Finally, a few words about the database software. Many believe that software programs can save the day and magically eliminate hours of physical research. This is only partially true if there is a software-based inventory management system already in place. In this case an upgrade and then an update of existing information is necessary. This may take less time to complete, but does not take away the fact that this is a manual job.

Since it is manual there is the possibility for errors. In order to avoid bad data making it into the new database a simple bar code and scanning system could be used. Once a conduit, cable, rack, or piece of equipment is in inventory it can be labelled and scanned. This can help to eliminate duplication and show up omissions. As employees turn over new staff can simply scan the bar code to see what is inside and then make any necessary changes as they see it. This type of system also makes it easier for the data to be compiled and transferred to the database for updates.

In summary, accurate network inventory management is a key component to establishing predictable provisioning times, controlling costs and ultimately operating a successful communications business.