No Jitter

Open Source PBX is 18% of North America Market

By John Malone | Jan 28, 2009

Sales of traditional PBXs and key systems have moderated in recent years. Experts attribute this to a variety of factors. Companies, they report, are just keeping their phone systems longer. The wave of Y2K replacements that flooded the market, now almost a decade later, are still in working order. Demand is affected by the economy; enough said. True, these are relevant considerations, but they largely miss the point.

Digium, Polycom, Aastra, Sangoma as well as other vendors inside the Open Source PBX business see what's occurring from a different vantage point, and arguably would dispute the experts. And they would be largely correct. A market shift is underway, and has been since Open Source PBXs arrived.

As Asterisk and other Open Source projects evolved, users have multiplied from geeks only, to early adopters, to the mainstream. That's mainstream and not backwater creek. And we are not just at a tipping point, we are well beyond that. Traditional telephone system manufacturers are now, largely unknowingly, competing for a bigger share of a shrinking market. And growing sales may be increasingly difficult for the largest names in the telephone business unless each takes share from the other. Granted, some traditional companies must see this happening, which may account for Nortel's acquisition of Pingtel and the new Nortel Software Communication System 500. But that is not yet the norm.

Because Open Source PBXs came into being like a garage band, they were somewhere between discounted and booed by most everyone. That was the early days.

WHY IS THERE SUCH GROWING COMMITMENT TO OPEN SOURCE PBXs?

But here's what recently got my attention. Last year I witnessed three companies, for each of which I've been on the board of directors, replacing their traditional PBX with an Open Source PBX. Two were moving, and the other wanted a pure IP solution, not TDM and not converged. The bottom line to me was that if all three transitioned to an Open Source PBX system, and were pleased with the outcome as each was, this must be a larger market than people give it credit for.

Why did they each choose Open Source? Not because I told them to, because I didn't. And not because they are all technology companies, because each is in the far reaches of technology and has no stake in Open Source. Each made the switch to Open Source because, they said, it proved to be equal in quality to the best traditional telephone system and it was cheaper. Not just a little cheaper, a lot cheaper. So cheap that no traditional PBX or key system approaches the cost of an Open Source PBX. Open Source PBXs are typically 40% or more below the cost of a conventional telephone system

Their decisions got my attention, because cost has been the single biggest phone system decision influencer since the 1968 Carterfone decision. Cost changes everything. Competition, and the importance of cost as the buyers' key decision variable is mostly why PBX prices have and continue to drop 5-10 percent annually. And if nothing can touch the cost of an Open Source PBX, there's a big market people have just not been counting.

Since The Eastern Management Group, as a research company, has been tracking traditional PBX and key system shipments for 30 years through its Quarterly Monitor Reports, we wanted to be the first to size the market for Open Source (OS) PBXs, and we had the tools to do it.

Our biggest questions were the most obvious. How much of the total PBX and key system market is accounted for by OS PBXs? Are all OS PBXs small (some say it's all fewer than 30 end points) or are systems being installed to more than 100 end points, or 500? Do average businesses, say in Banking, Education, Government, and Health Care use Open Source PBXs, or are all the buyers merely technology companies who can self install? And would anyone buy a second one?

Sizing the real commercial market for OS PBXs has historically not been done simply because it's difficult. Open Source is free software. People download it at whim on occasion, just to muck around with. A lot of it makes its way into laboratories. Techies put it in their homes just because they can. Others download multiple copies, to get the latest version, never turning one into a phone system for their business. These are among the non-commercial implementations and have to be subtracted from the total number of downloads of Open Source software available on the Internet. We too had to address all that in sizing the market for business OS PBXs.

To do so we began by performing three discrete studies, totaling more than 7,000 surveys.

The first survey had two phases, the initial being a test/control group of No Jitter readers. Several hundred surveys were completed, allowing us to evaluate the survey questions and responses. In the second phase, we conducted surveys of 6,734 IT executives chosen from a proprietary database of more than 80,000 individuals.

The second survey consisted of telephone interviews with 51 dominant vendors in the Open Source PBX business. The third survey was a telephone survey of 100 VARs.

All survey data was incorporated into market models The Eastern Management Group has built over several decades to track and forecast the size of the PBX and key system market, for our report services.

WHAT WE FOUND

After subtracting those OS PBXs that are not used as the day-to-day telephone system for company employees—and these non-production systems clearly remain the majority of today's Open Source PBX downloads--we conclude that in 2008, 2.86 million Open Source PBX end points were installed. Nortel, the largest manufacturer of conventional business telephone systems, lagged Open Source by 8%, having sold 2.63 million lines. (Despite Nortel's recent problems, their historic strength across all market segments has allowed them to keep the lead, at least up to this point, in our reckoning of the vendors' cumulative market shares.) Cisco and Avaya followed at 1.99 and 1.75 million lines respectively.

The total market was 15.88 million lines, giving Open Source PBXs an 18% share. That places Open Source ahead of every PBX/key system manufacturer (see **Figure 1**).

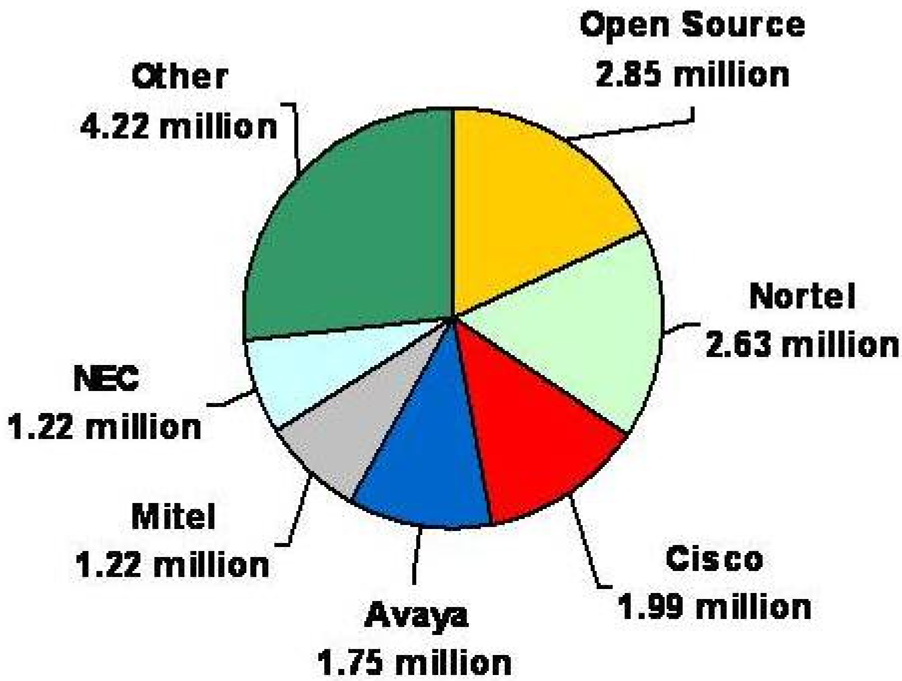

Figure 1: IP-PBX Market Shares

Looked at another way, were there no Open Source PBX, then the traditional PBX and key system market might have been larger by the same 18%, reflecting substantial vibrancy.

Companies using Open Source PBXs cannot be pigeonholed. Apart from technology businesses one expects might be users, we found high concentrations of OS PBX systems in many vertical markets, specifically Finance, Education, Government, Health Care, Manufacturing (non-technology), Retail, and Transportation. Of all 22 industries studied, constituting the universe of North American businesses, we observed to varying degrees Open Source PBXs in each of them. Almost 40% of companies with OS PBXs have no connection to the technology industry.

The size of a company does not bear on whether it uses an Open Source PBX to handle business communications. Hundreds of companies we surveyed have more than 1,000 employees. Dozens have more than 20,000. Two thirds of businesses with Open Source PBXs have multiple locations, though not necessarily with an Open Source PBX at each site. This means if companies using an Open Source PBX are pleased with the experience, there is a lot of runway for implementing additional systems at other locations. The study found 68% have two or more business locations, 13% have at least 11, and 3% percent have more than 100 (see **Figure 2)**

Total Company Locations	Percent of All Open Source PBXs
1	32%
2-10	55%
11-50	8%
51-100	2%
101-500	2%
500+	1%

Figure 2: Total locations of companies with open source PBX

More than half the study companies had more than one Open Source PBX, and it was not uncommon to find five systems or more installed within the enterprise.

The study showed that working Open Source PBX system sizes run the gamut from small, under 10 end points, to many hundred end points. 35% of systems had 1-10 end points, 40% had 11-50 end points and 25% had more than 50 end points. Two percent had over 1,000 end points (see **Figure 3**).

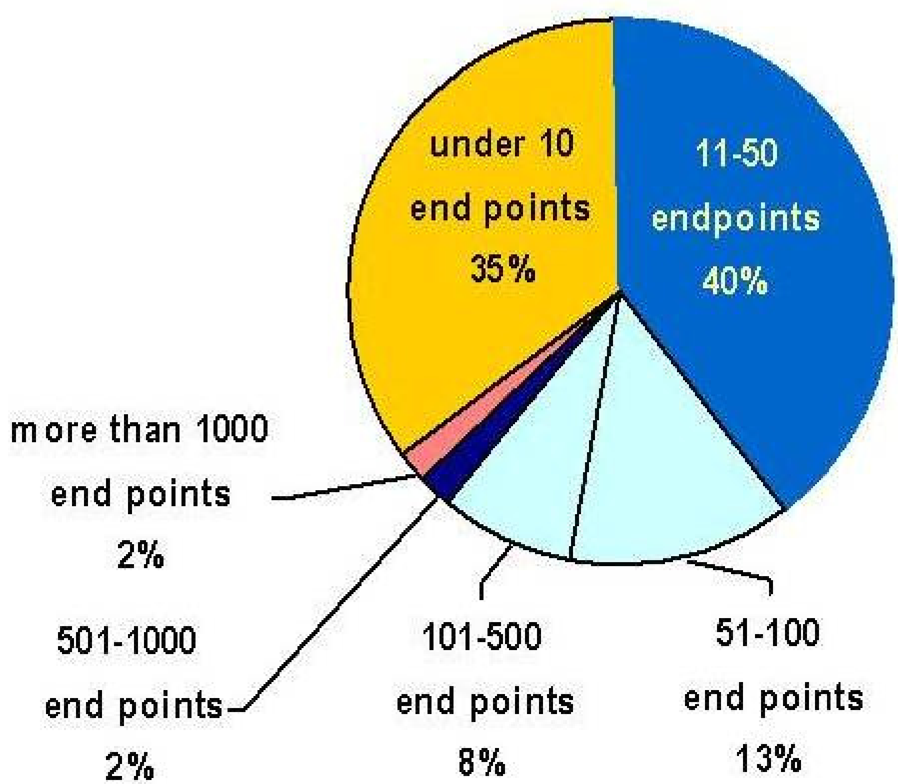

Figure 3: Total Locations of Businesses with at Least One Open Source PBX

Asterisk is the most widely used Open Source PBX, and dominates in market share with more than 85% of the Open Source market. Competing alternatives such as CallWeaver, FreeSWITCH, sipX/sipXecs and YATE play varying roles.

Customers often turn to a manufacturer to sell and install the Open Source PBX since it's worth the money. Digium has almost half of this market, though other companies are represented, including Fonality and Aastra.

Not surprisingly, a large number of SIP phone manufacturers provide end points within Open Source PBX-based systems. Among them we found strong sales by Aastra, Linksys, Polycom, Grandstream and snom. Polycom leads all other manufacturers of SIP phones for use with OS PBXs with 11% market share.

Digium is the largest supplier of gateways, but other players are in evidence including Cisco, Sangoma, AudioCodes, Dialogic, Grandstream, PIKA, Quintum, and Rhino.

Few traditional PBX manufacturers we interviewed saw Open Source PBXs as any threat to their business. However we came across no traditional PBX manufacturer that knew open source is 18% of the total market. And it's growing.

IN THE FUTURE

For Open Source to be the success it is, might suggest the largest VARs were early to seize a nascent business opportunity, and could justifiably take credit. That's not the case. Working with a list of the largest 500 VARs, we began one series of interviews working our way down the list from the top, only to conclude that smaller VARs deserve more credit for the growth of Open Source. So far, large VARs have been largely under-accounted-for in the Open Source PBX market.

In the future there should be substantial growth of large VARs entering the Open Source PBX market. Driving this behavior will be all the enterprise customers that need implementation support, as our study found, since these same customers have already been converted to Open Source. It's inevitable that the large VAR is going to follow the large customer. And this is going to add to the growth of Open Source PBXs.

CONCLUSION

The economic climate for the next few years may well be an asset to the Open Source PBX market and vendors. Many businesses have already made decisions to acquire one or more IP PBXs, and the price of OS PBXs are so low as to attract more than passing attention. Even if the market for all systems slows, the demonstrated success of the OS PBX market has already provided a suitable foundation to ensure durability of this technology in any climate.

John Malone is president and CEO of the Eastern Management Group, a global research and consulting firm advising telecommunications industry clients. Its PBX systems practice is one of Eastern Management's oldest advisory services, and has assisted hundreds of companies worldwide for three decades. Eastern Management's PBX and Key System Monitor tracking service has reported system shipments each quarter for 25 years. Eastern Management's current study on Open Source is entitled The Market for Open Source PBXs and is available by contacting The Eastern Management Group, www.easternmanagement.com.