HISTORY OF TELECOM BPO

The need by telecom carriers to find reliable and cost effective systems to handle their complicated back office procedures has grown as monopolies dissolve, competition tightens, and new services abound. Responding to this need are numerous companies who specialize in Business Process Outsourcing (BPO). By most accounts, a majority of telecoms use BPO in some aspect of their business. How did telecom BPO evolve from a small niche industry in the 1980's to today's multi billion dollar worldwide business?

There's little in the way of formal written histories concerning telecom BPO, so we turned to two industry veterans for some color and background: On the European side, **John Cronin, Technology Portfolio Director, Chairman, Cambridge Broadband Networks Ltd.,** a provider of transmission equipment**, and Chairman, Bailey Fisher Ltd.** an executive search firm; and on the North American side, **Pete Sokoloff, Managing Director of Peter A. Sokoloff & Co.**, an investment banking firm that specializing in mergers and acquisitions in the telecom and security industries.

GROWTH OF BPO COMPANIES IN THE EUROPEAN MARKET

Cronin stated that prior to the 1990's, carriers developed systems in-house but with the deregulation of the early 1990's everything changed. Incumbent operators were faced with more competition and new business models and this spurred them to be leaner and more cost effective in order to retain customers. About 1992 **Cable &**

Wireless had an arm called **Mercury**. **Mercury** grew beyond C&W, offering outsourced services (including billing) to corporate, banking and manufacturing customers. Other vendors like **Geneva** developed extensive and sophisticated billing platforms which in some cases were provided as an outsourced service. It was about this time that **BT** joined the race.

BT was ahead of the game in Europe because they developed wholesale billing. They had an internal team which built an in-house billing system and in order to reduce its R&D cost, in 1992, they offered the systems to a Norwegian company called **Telenor**. When **BT** saw the success with **Telenor** they decided to take their system worldwide to incumbent companies like **Cable & Wireless, AT&T, Hong Kong Telecom, France Telecom**, and **Telefonica**.

Prior to **BT's** solution, the incumbent carriers had numerous wholesale billing agreements in place. The systems used to determine charges were incredibly

inaccurate. With the competition brought by deregulation and the associated cost for wholesale

John Cronin, Chairman, Cambridge Broadband Networks & Bailey Fisher Ltd.

communications, it was becoming critical to determine accurate billing. It was a natural result that many telcos would adopt **BT**'s new system,

preferring to use BT's experts to manage it, rather than their own.

Soon after, in 2003, **BT** spun out the interconnect billing operation as an independent company, **Azure**, and offered this and other services to customers worldwide. The original premise that carriers could have smoother operations and greater accuracy, while being more cost effective, continued to propel new **Azure** contract wins.

In Europe, on the retail billing side, the telcos were reluctant to let their in-house systems go BPO because of fears that inaccuracy and other problems would result in lost customers, decreased revenues, even poor cash generation if billing documents got delivered late. However, eventually it was found that outsourcers could define new functionality, offer higher service levels and do it at a much cheaper cost. Outsourcing companies came along and were able to streamline processes and locate services that telcos weren't billing for correctly. Said **Cronin**, "All sorts of errors were found that cut into the carrier's bottom-line. Outsourcers were able to fix and minimize these problems."

GROWTH OF BPO COMPANIES IN THE NORTH AMERICAN MARKET

According to **Sokoloff**, just like the European side, there was very little outsourcing done by wire line carriers in the US prior to deregulation. Most processes were handled in-house. For certain specialized and centralized outsourced activities the U.S. dominant carrier, **AT&T**, relied on the former **Bell Labs** (today known as **Telcordia**). Even after deregulation and the splitting of **AT&T** into seven Regional Bell Operating Companies (RBOCs), very

little outsourcing occurred; what was done continued to be in the domain of **Telcordia.**

Before and after deregulation some of the eleven hundred or so independent local exchange carriers that represented 20% of the overall US wire line market banded together in BPO co-ops which would provide a variety of services (mostly billing) to their carrier members.

In contrast, in the 1970's, a burgeoning cable television industry utilized outsource billing extensively. Cable's rapid rise left no time to develop back office processes as carriers did, so they turned to outsourcers. Early companies like **Cable Data** were formed to meet these needs. With the advent of cellular systems in the 1980's a similar BPO path was followed by cellular companies.

In order to create competition in the marketplace the early cellular industry was set up with two licenses given out for each market by the Federal Communications Commission (FCC); one to the incumbent wire line operator and one to a new entrant. Like the cable companies, the new entrants had no systems in place, so they looked to outsourcers. Outsource billing for independent cellular operators went on to evolve with a number of service bureaus, some of the largest being **Convergys** and **ITDS**.

In the late 1980's the tide started to shift. Cellular companies that were being run by wire line veterans and/or independent companies that were being acquired by the incumbent operators began to bring billing back in house. **Sokoloff** stated, "With some notable exceptions like **Convergys** (who still handles some of **AT&T**'s business), cellular service

bureau business has been on the decline. We saw much of it die out because of the consolidation of the industry. By the 1990's the trend for North American operators to utilize in house or licensed software and forsake outsourced billing was clear."

After the Internet explosion of the late 1990's and moving into the telecom meltdown during the first few years of the new decade, carriers were faced with decreasing profits and requirements to significantly reduce capital

Pete Sokoloff, Managing Director, Peter A. Sokoloff & Co.

expenditures. "Many thought this would presage a resurgence of service bureaus for billing. This was not in fact the case. The status quo continued, with service bureaus operating principally in the cable television industry and a few wireless service bureaus, representing a declining fraction of the overall market," said **Sokoloff**.

The demise of CLECs further hurt outsourced billers as many Tier 2 and 3 CLEC customers simply went out of business. Today in the United States a few wireless service bureaus remain, some of the original co-ops for the rural ILECS continue and much of the cable industry continues to outsource its billing. One bright spot is that certain niche service providers have turned to outsourced billing to assist in the delivery of new VoIP and Broadband services.

Outsourced OSS has shown some promise, most prominently via **Synchronoss**, the provider of an outsourced provisioning system used by **AT&T** to launch **Apple's iPhone**. **Synchronoss'** success is evidence of the truth of the original assumption that better quality and cost effectiveness can be achieved with a BPO arrangement.

THE FUTURE

Fred Brott, President, Intec Billing, Inc.; Managing Director, Intec North America and Chuck Achuff, Vice President, Intec Managed Services, offered their viewpoints on the future of BPO. "Historically, North America has always shown more interest in outsourcing their billing, and I believe that North America will continue to have significant activity," says **Brott**. **Achuff** further stated "We are now also seeing more of a trend in Europe for outsourced billing and we have some BPO aspiration around interconnect. **Another hot spot in the foreseeable future appears to be the Asia Pacific region, where we've engaged in a few projects**."

Lakshimi Srinivasan, Head of Telecom BPO, for Tata Consultancy Services, said he sees the future telco as a company that will only be responsible for their brand, strategy, and customers. The rest will be outsourced. **He also observes a major trend in business process management.** "With BPM, we created a value by providing a full service. We did more than just tackle systems, we managed the processes. This allows us to be a true partner to the telco." Because business process management is becoming so popular, carriers can now actively start to outsource their processes.

In Europe**, Cronin** feels there will be more outsourcing than in-sourcing. "If outsourcers can provide a more cost effective way to handle back office and do a better job (which they have proven they can), there's no reason for a telco to do it in-house. Outsourcing is becoming a commercial necessity, especially with IP.

"The world of IP is like the wild west, it's really changed the playing field. Telcos are in need of new processes and you really have to have experts that are able to structure systems that can handle complex billing and OSS," said **Cronin**. **A lot of the telcos don't have the skills to bill for the new types of services that are being demanded by IP, so they turn to an outsourcer.** "Already, it's very rare to find a telco running its own computer systems and almost all Desktop IT departments are outsourced and will continue to be."

Bureau services, which are a managed service without outsourcing the people, are popular with certain types and certain sizes of operators. **One of the trends also seems to be strategic tie ups between large telcos and vendors in order to reduce the number of systems and associated complexity.** "The operators who go for a "preferred vendor" approach think that less complexity and one-vendor functionality outweigh the benefits of competitive tendering," stated **Cronin**.

According to Cronin, these inclinations all show that choice, competitive tendering and in-house expertise are valuable up to a point but for many operators they are not valuable enough. The pressures to reduce operational complexity and provide support functions are leading to single vendor solutions and outsourcing. "If this can be done either to the end customer's benefit or with no customer impact, then the trend looks set to continue."

Sokoloff's perspective is that unlike the general BPO sector which has been heavily influenced by 'cost of manpower' economics, OSS/Billing BPO continues to be driven by operators' new service delivery requirements and newly emerging operators. As carriers roll out new services in response to marketplace considerations, opportunities to provide targeted solutions by outside vendors are created.

"There is a "push-pull" dynamic between outsourcing and insourcing in the OSS/Billing world. **Consistently we have seen carriers turn to BPO firms to help start ups and for launching new services. After awhile, in many cases the carrier, now in a more mature billing and OSS environment, will decide to insource once again**," says Sokoloff. He feels that as new services continue to unroll from the carriers, BPO will have an important role in leading the way in OSS/Billing applications.

COMPARING EUROPEAN, NORTH AMERICAN, INDIAN, and LARGE CONSULTING COMPANIES

EUROPEAN COMPANIES	CLIENTS	WHAT THEY DO FOR THEM
Alcatel-Lucent	Tier One Carriers all over the world including: AT&T, Brasil Telecom, Sprint, Telfonica, France Telecom, China Telecom, NTT and BT.	Solutions to deliver voice data and video communication services to end users.
Intec	70 to 80 clients which include Tier One and Tier Two Carriers, wireless companies, and cable MSO's.	Core market offering is CABS in the U.S. augmented with remittance processing, CD fulfillment, various accounts receivables and other back office processes. Additional offering in BPO area is retail billing solution: Intec Covergent Billing.
Ericsson	More than 100 managed services contracts including T-Mobile, Vodafone, O2, and Deutsche Telecom.	Designing, building, operating and managing day-to-day network operations, hosting service applications and enablers, and providing network coverage and capacity on demand.
Subex-Azure	BT Telecom	Interconnect Billing Services

NORTH AMERICAN COMPANIES	CLIENTS	WHAT THEY DO FOR THEM
Amdocs	Services companies in more than 50 countries around the world including: AT&T, Sprint, Telstra, BT, Openreach, and KPN.	Offers OSS solutions and a Managed Services Portfolio which consists of Business Process Operations, BPO, Applications Outsourcing, and IT/Data Center Outsourcing.
Convergys	Clients including: BT, AT&T, Comcast, Time Warner Cable, Verizon, Nortel as well as 26 of the Fortune Top 50.	Delivers a broad range of customer relationship management, billing, and human resource management solutions.
CSG Systems	Clients including: Comcast, Time Warner, Echostar Communications, Charter Communications and Mediacom Communications.	Integrated outsourced solutions spanning customer care, billing, order, revenue, and workforce management, and statement output services.
Startek	AT&T, T-Mobile	Customer Care, Sales Support, complex order processing, accounts receivable management, technical support, and other industry-specific processes.

| Synchronoss | AT&T, Cablevision, Clearwire, Comcast, Embarq, Level 3, Sprint, Time Warner Cable, Verizon Business Solutions, and Vonage. | Enables their clients to deliver a comprehensive digital customer experience from any channel or device, to any network across multiple types of content at any time. Their ConvergenceNow® software platform automates, synchronizes and simplifies electronic service creation across existing networks. |

INDIAN COMPANIES	CLIENTS	WHAT THEY DO FOR THEM
Infosys	7 of the Top 10 CSPs worldwide, 5 of Top 6 North American telcos, 4 of Top 6 European telcos, 1 of Top 5 Asia-Pacific telcos, 3 major cable operators and 2 major ISPs.	Fulfilment, assurance & billing, as well as enterprise areas like finance & accounting, reporting & analytics and procurement.
Tata	Over 160 telecom clients across the world including BT.	Revenue Assurance, Consulting, Business Process Management, IT services, infrastructure outsourcing, systems integration and testing solutions.
Wipro	Over 620 Telecom clients all over the world.	End-to-end solutions across the entire product engineering life cycle and multiple services including R&D, software, hardware, verification, and systems integration.

LARGE CONSULTING FIRMS	CLIENTS	WHAT THEY DO FOR THEM
Accenture	BT, Canadian Satellite Radio, Virgin Media, XM Satellite.	BPO, application outsourcing and infrastructure outsourcing.
KPMG	Tier One Carriers and services 80% of the BPO area.	Audit, Tax, & Advisory Services.
PWC	Wouldn't disclose.	Advisors in the areas of convergence, consolidation, managing customer relationships, billing & provisioning, regulation, and technology.

The author, Clarissa Jacobson is with Peter A. Sokoloff & Co., an investment banking firm specializing in mergers and acquisitions in the telecom and security industries. www.sokoloffco.com She can be reached at: cjacobson@sokoloffco.com