

Conversational Access Technologies: Forecasting Application-Driven Growth

After reaching \$800 million in 2005, enterprise spending on hardware, software and services to support automated handling of telephone based transactions, queries and interactions (primarily voice-based) will exceed \$2.5 billion by 2009. CAT infrastructure is increasingly comprised of off-the-shelf elements which comprise "Take and Bake" solutions that are the products of 3rd party integrators. Over time the advancement of IP-Telephony and standards skew spending toward managed services and software that leverages Web-based logic and rendering.

January 2006

**Dan Miller
Sr. Analyst**

Opus Research, Inc.
330 Townsend St., Suite 201
San Francisco, CA 94107

For sales inquires please e-mail info@opusresearch.net or call +1(415)904-7666
This report shall be used solely for internal information purposes. Reproduction of this report without prior written permission is forbidden. Access to this report is limited to the license terms agreed to originally and any changes must be agreed upon in writing. The information contained herein has been obtained from sources believe to be reliable. However, Opus Research, Inc. accepts no responsibility whatsoever for the content or legality of the report. Opus Research, Inc. disclaims all warranties as to the accuracy, completeness or adequacy of such information. Further, Opus Research, Inc. shall have no liability for errors, omissions or inadequacies in the information contained herein or interpretations thereof. The opinions expressed herein may not necessarily coincide with the opinions and viewpoints of Opus Research, Inc. and are subject to change without notice.

Published January 2006. © Opus Research, Inc. All rights reserved.

Key Findings

Simplicity and affordability will be key to the proliferation of Conversational Access Technologies (CAT) over the next five years. Moving from the bottom of the value chain toward the top, CAT's transformation will take into account the following factors:

- **CAT builds on COTS (Configurable off-the-shelf)** – In the context of expanding the pie for conversational access technologies, 'commoditization' is not a dirty word, as the likes of Cisco, Intel, HP and IBM have learned for their basic line of servers and blades.
- **IMS builds in importance as a blueprint for adding broadcast capabilities to traditionally conversational networks for both enterprises and service providers** – Although it is rightfully criticized as a vague buzzword, the IP Multimedia Subsystem specification has become shorthand for a layered architecture promoting well-behaved media gateways and media servers under the control of business rules residing in applications servers. Make no mistake, IMS is also closely linked to the storage and distribution of video (called "IPTV").
- **Linking CAT to SOA deployments calls for toolsets and 'dashboards' to accommodate changing organizational structures and application management requirements** – CAT implementations must better conform to established and emerging business processes. Responses to demands for flexibility are manifold and range from IBM's broad-based tutorials on SOA governance and management seminars to Convergys' Open Hosting Environment for SpeechPort.
- **The fight is on for professional services** – More than half of all enterprises that deploy CAT turn to 3rd party resources for application development, deployment and tuning. This will give rise to a \$110 million opportunity which grows to \$200 million during our forecast period for system integrators, including vendor-supplied professional services.
- **Professional services also under assault from insiders** – It is the stated goal of most large enterprises to build internal resources to take care of and refine CAT resources. To an increasing degree, this involves a re-assignment of contact center personnel to the 'data center' where self-service applications reside.

- **Prepackaged will give way to “Take ‘n’ Bake” approach for applications development** – The mandate for fast payback periods and rapid deployment of new applications has cultivated the need for ‘pre-packaged’ solutions, but experience has taught enterprise IT executives that very few CAT solutions have the ‘plug and play’ reliability of a suite of productivity software. Instead they have attributes akin to ‘take ‘n’ bake’ pizza, where in-house resources or 3rd party development is required to make solutions fully-functional.
- **Zero CapEx options for SMBs and XXLs** – The ranks of hosted service providers that combine telephony management with contact center applications is growing and incumbent telcos are taking solutions to market for both their small to medium-sized customers and their largest clients.
- **Search and collaboration clients to define phone-based self-service** – During the forecast period, Opus Research expects the interactive world to take a closer look at the Directory Assistance model as a template for paid search. Likewise, the engines that back up traditional directory assistance are being augmented by search services that more strongly resemble familiar Web-based portals.
- **More disruption on the horizon** – With Microsoft and BBN ready to commoditize speech licenses and the likes of Asterisk and Pingtel introducing open source IP-PBXs, disruptive forces are about to dominate the marketplace. Whether they bring the often promised fruits from thousands of creative developers or cause prospective buyers to freeze in the glow of their headlights is the billion dollar question that will shape CAT’s adoption curve.

Table of Contents

Key Findings	ii
Conversational Access Technologies 2006: Keepin' It Real Time	2
The CAT Marketscape	3
Striking Growth Pattern	3
Bricks 'n' Blades: Doing More While Costing Less	5
Intel's Netstructure Architecture	7
A Universal Gateway from Brooktrout-Excel	8
Eicon's Migration Strategy	8
Core Software: Concentration and Commoditization	9
The Nuance Acquisition Rationalizes the Market	11
BBN Tests Price Elasticity of Server Side Speech	12
Microsoft Speech Server to Get More Disruptive	13
IBM: Protecting its Legacy, Promoting Web Services	14
The Money's in Applications	15
Embedding Speech in PDAs, Handsets, Autos and Games	16
Text-To-Speech: Adding Dialects and Geographic Scope.....	17
3 rd Party Development Environments	20
Development Environment Trends	20
Melding Multiple Systems and Services	23
The Eclipse-Conformant Providers.....	24
Microsoft Visual Studio: A Trojan Horse	24
The Application Conundrum	27
Keeping it Real Time.....	27
Focus on Teleservices	28
Patterns of Adoption.....	30
Distributed speech adoption patterns	31
Hosted Speech's Major Players.....	31
Exploiting the ASP Model.....	33

Table of Figures

Figure 1: Voice Driven CAT Forecast	4
Figure 2: Board Level Migration Path	6
Figure 3: Server Side ASR	10
Figure 4: Embedded ASR.....	16
Figure 5: TTS Vendor	18
Figure 6: IDE Suppliers	21
Figure 7: Development Environment Trends	23
Figure 8: Platform Providers.....	26
Figure 9: Categories of Hosted Speech Providers	31

TO PURCHASE THIS REPORT CONTACT US AT

1-415-904-7666 or info@opusresearch.net