



# PR1ME INSIGHT + FOCUS

## Speech Recognition Technology Offers Business Value

BY ANNA GIBSON

Many companies struggle with the issue of call observations. It is nearly impossible to get a sufficient sample of all call types and all agents. The significant time and expense that a QA program takes and the minimal number of actual calls analyzed compared to the total call volume of the organization is certainly an issue.

Wouldn't it be wonderful to analyze customer responses on more than just a small percentage of calls? Speech recognition technology allows you to do this, and to gain insight into the effectiveness of your sales strategies, marketing campaigns, agent issues and competitors tactics.

Speech recognition technology provides a means of significantly enhancing the analytical, data collection and coaching capabilities on recorded calls. It

automates analysis of large volumes of recorded call center interactions, and categorizes them based on their content, according to the criteria you define.

Here's how it works.

Your analyst takes recorded conversations and identifies specific words, phrases or a combination of words (e.g., a competitor's name, product name, etc.) that are relevant to understanding the effectiveness of business processes, competitive issues, agent knowledge and adherence to scripts or regulatory requirements.

A speech recognition program searches these interactions using the pre-defined words or phrases, and then evaluates and rates each instance, storing the results in a data mart for subsequent analysis of emerging trends in the recordings. Thirty

hours of audio can be scanned in a matter of 1 second, enabling a coach or QA manager to listen to key calls and analyze data to understand frequencies of specific issues.

This is fascinating technology with clearly the potential to enhance your ability to manage the business.

Should you be interested in exploring this technology for use in your business, visit [www.nexidia.com](http://www.nexidia.com) or [www.witness.com](http://www.witness.com). Undoubtedly other companies provide this capability as well.

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## WiMAX or Why-Wait?

BY STAN ROMERO

We've seen good deal of press in the last few months about WiMAX, that other proprietary wireless broadband solutions are being implemented now, and that their shipments are increasing at about a 50% annual growth rate. So a question is: "Will WiMAX be too late to the table finding the market already captured by popular proprietary technologies?"

At RFC's Broadband Services seminar in March, Joe English, Intel's WiMAX Campaign Manager, presented on what WiMAX really is and the WiMAX Forum's vision of rolling it out in 2005. WiMAX's promise of 15-75 Mbps speed and 3-5 mile cell radius (non-line of sight) sounds like a perfect solution to get broadband to the residential and small business

customers on a fixed-wireless basis. In addition, the enterprise application and future mobile applications are also very attractive.

But if proprietary wireless broadband networks are already proliferating at a rapid pace, should service providers wait for WiMAX, or will the proprietary networks make WiMAX a moot point? I went back to Joe English to get his views. He made three very good points:

1. Broadband wireless is not new - installed in over 125 countries. What is keeping it from really exploding is that it lacks the standards and accompanying economies of scale to support the cost reductions

associated with mass production. What WiMAX brings to the table is a very high-speed, widely available and cheap wireless broadband solution that will be flexible and quick to install.

2. Broadband wireless growth can be attributed primarily to two factors. First, the growing need for broadband and second, the awareness that WiMAX is coming soon. Intel and others are encouraging trials of pre-standards systems in order to prove the business cases and usage models in preparation for WiMAX availability.
3. The same companies that are pushing to get WiMAX out the door

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# 1Q DSL Gains Surpass Cable Modems

Broadband Service Provider	2003			2004		
	4Q Gain	4Q In Service	4Q % Gain	1Q Gain	1Q In Service	1Q % Gain
<b>Major Telco DSL</b>						
SBC	377,000	3,515,000	12.0%	446,000	3,961,000	12.7%
Verizon	203,000	2,300,000	9.7%	345,000	2,645,000	15.0%
BellSouth	126,000	1,462,000	9.4%	156,000	1,618,000	10.7%
Qwest	45,000	637,000	7.6%	107,000	744,000	16.8%
Sprint	40,000	304,000	15.2%	45,000	349,000	14.8%
ALLTEL	23,053	153,028	17.7%	21,461	174,489	14.0%
Frontier	14,800	119,800	14.1%	21,500	141,300	17.9%
CBT	24,400	99,000	32.7%	11,000	110,000	11.1%
CenturyTel	7,100	83,400	9.3%	13,692	97,092	16.4%
<b>Total US</b>	<b>860,353</b>	<b>8,673,228</b>	<b>11.0%</b>	<b>1,166,653</b>	<b>9,839,881</b>	<b>13.5%</b>
<b>Major Cable</b>						
Bell Canada	91,000	1,482,000	6.5%	115,000	1,597,000	7.8%
TELUS	45,500	561,600	8.8%	43,600	605,200	7.8%
Aliant	9,883	123,400	8.7%	10,100	133,500	8.2%
MTS	4,248	76,313	5.9%	5,821	82,134	7.6%
<b>Total Canada</b>	<b>150,631</b>	<b>2,243,313</b>	<b>7.2%</b>	<b>174,521</b>	<b>2,417,834</b>	<b>7.8%</b>
<b>Total Telco</b>	<b>1,010,984</b>	<b>10,916,541</b>	<b>10.2%</b>	<b>1,341,174</b>	<b>12,257,715</b>	<b>12.3%</b>
<b>Major Cable</b>						
Comcast	422,900	5,283,900	8.7%	394,100	5,678,000	7.5%
Time Warner	182,000	3,228,000	6.0%	193,000	3,421,000	6.0%
Cox	144,402	1,988,527	7.8%	161,442	2,149,969	8.1%
Charter	75,900	1,565,600	5.1%	125,200	1,653,000	8.2%
Cablevision	72,220	1,057,020	7.3%	71,910	1,128,930	6.8%
Adelphia	74,415	951,406	8.5%	120,532	1,071,938	12.7%
Bright House	35,000	625,000	5.9%	25,000	650,000	4.0%
Mediacom	19,000	280,000	7.3%	22,000	302,000	7.9%
Insight	21,500	230,000	10.3%	28,000	258,000	12.2%
<b>Total US</b>	<b>1,047,337</b>	<b>15,209,453</b>	<b>7.4%</b>	<b>1,141,184</b>	<b>16,312,837</b>	<b>7.5%</b>
Shaw	48,040	934,260	5.4%	50,740	985,000	5.4%
Rogers	22,700	777,800	3.0%	50,700	828,500	6.5%
Videotron	27,000	406,000	7.1%	27,000	433,000	6.7%
Cogeco	17,439	222,618	8.5%	12,610	235,228	5.7%
<b>Total Canada</b>	<b>67,139</b>	<b>1,406,418</b>	<b>5.0%</b>	<b>90,310</b>	<b>1,496,728</b>	<b>6.4%</b>
<b>Total Cable</b>	<b>1,114,476</b>	<b>16,615,871</b>	<b>7.2%</b>	<b>1,231,494</b>	<b>17,809,565</b>	<b>7.4%</b>

Source: The companies, Cable DataCom News and Research First Consulting Inc. research.

## Observations:

1. US Telco DSL quarterly growth exceeded 1M units in 1Q '04 for the first time in history.
2. Total Telco DSL quarterly growth exceeded cable modem growth in 1Q '04 for the first time.
3. Telco quarterly growth rates are now greatly exceeding Cable.
4. No cable company exceeded 13% growth in the last two quarters but Telcos did ten times.

# Call Center Staffing Will Become A Challenge

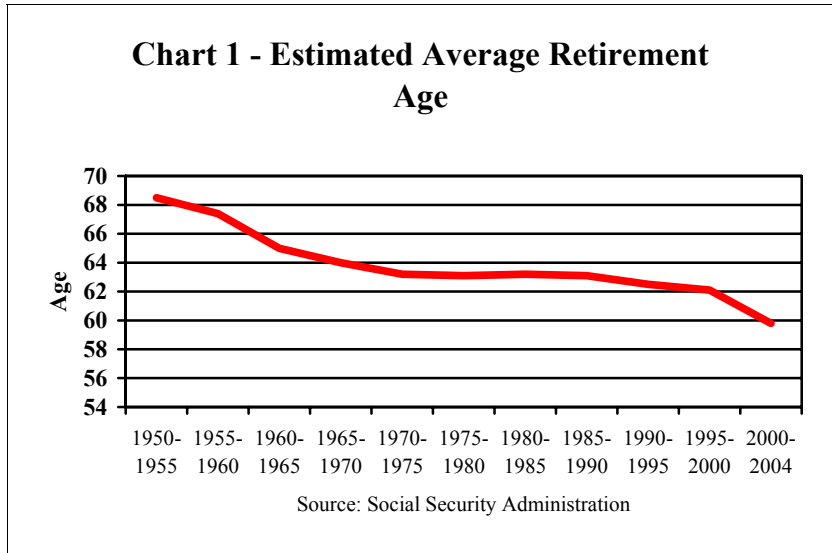
BY ELLIS D. HILL

Filling vacant jobs in the call centers and indeed the telecom industry will become more of a challenge now and continuing well into the next decade. Why is this happening?

There are several reasons:

- Baby boomers started retiring in 2001
- Yuppies, Gen X, & Gen Y families have 1.7 children versus the baby boomers who averaged 2.7 children
- Our economy continues to grow

Baby boomers are choosing to retire at an earlier age than their parents. As can be seen from the graph in Chart 1, the average retirement age from 1950 to 1955 was 68.5 years, which dropped to between 64 and 65 years of age one decade later. This trend continued for 10 years to when the average retirement age dropped to just under 63 years of age and flatten out until the early 1990's when it again started dropping. Baby boomers who retired from the military were eligible to do so after 30 years service at ¾ pay (they may retire after 20 years service at ½ pay but most continue in the work force). This means that those born in 1946 who joined the military at age 18 and retired after 30 years began doing so in 1994 and their generation (born between 1946 – 1964) will continue to do so until 2012. Federal employees may also retire after 30 years of service.



Baby boomers in the private sector that retire at age 60 as indicated in the chart will begin doing so in 2006, although anecdotally many of us know people who are retiring earlier than 60.

The baby boomers impact upon the work force is seen in Chart 2. In 1980 there were approximately 27 million baby boomers, which represented about 41% of the total workforce peaking in 1995 at 70 million workers or about 75% of the workforce. Baby boomer workers declined to 55 million in 2003 representing about

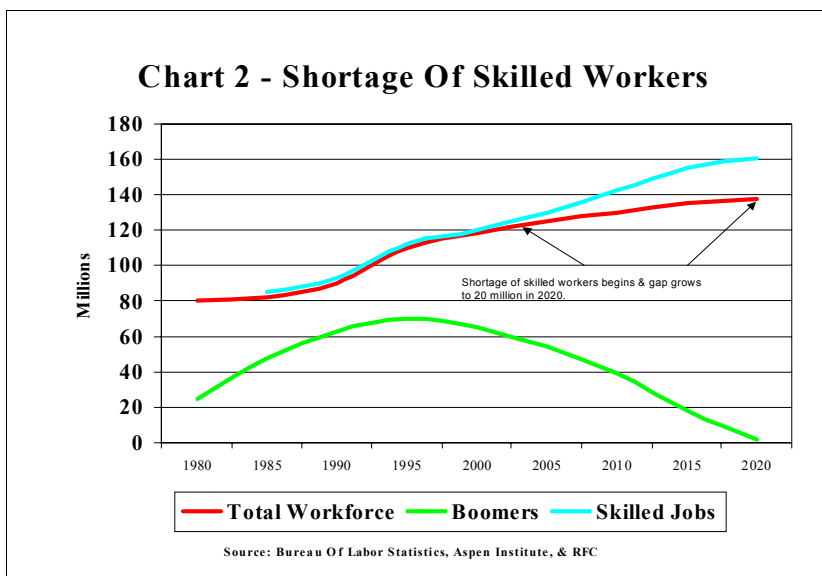
54% of the workforce. This decline is projected to continue to less than 40 million baby boomer workers in 2010, which will be about 38% of the workforce.

In addition to the baby boomer decline creating job vacancies, the drop in family size for Gen X and Gen Y to an average of 1.7 children from the baby boomers' 2.7 children also contributes to this problem. This shows itself in chart 2 in the total workforce line, which grew 20% from 1980 to 2000, but is projected to grow at less than half that rate for the next 20 years.

A third factor that will make jobs harder to fill is that our economy continues to grow thus creating a growth in jobs. As shown in Chart 2, the shortage of skilled workers begins to reveal itself in 2004 and will this shortage will continue to increase reaching a 20 million-worker shortfall in 2010 assuming market conditions, immigration, and demographic statistics are constant.

This is significant to us in the telecommunications business because we are interested in filling skilled jobs with skilled workers. If the number of skilled jobs continues to outnumber the skilled workers, the demand that is created will drive up labor costs for

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# Balanced Scorecard

BY ANNA GIBSON

Business leaders need a comprehensive set of measurements to monitor performance, to effect changes in operations and to quantify improvements in their companies. Financial measures that are typically reported quarterly provide lag indicators of a company's performance. Indicators related to customers, employees, operations, community and continuous improvement are more difficult to define and measure, but are essential for financial success. Together, the performance measures in key dimensions lay the foundation for a balanced scorecard.

The balanced scorecard can be a very helpful tool for a leader to manage the business and bring focus to the entire organization. It measures how well an integrated strategy is being executed. It is a comprehensive set of measures that evaluates performance in dimensions such as: customer, financial, operations and learning and growth, people and marketing effectiveness.

It is critical that the measures are strongly linked to a company's mission, strategies and key success factors. The

approach brings clarity and focus to organizational priorities by mapping the strategy, linking key performance indicators to strategy and cascading the strategy and measures of success to the entire organization (Sitaraman, 2004).

In order to establish a balanced scorecard for an organization you must first start with understanding the customers' expectations. The organization's strategy and mission must be defined and goals and objectives set. Critical success factors are then identified and scorecard metrics developed that measure performance. For example, a company has a strategy of maintaining 80% or greater market share for landline service. A key linkage to market share is customer satisfaction. Scorecard metrics in this area may include the JD Power results, customer satisfaction as measured by an externally conducted survey, the number of customer complaints and internal QA scores.

This approach provides a cause and effect relationship between strategy execution and business results. It also provides clarity and focus to organizational priorities through proactive, actionable measures.

Dimensions identified will be those that link to the organizations strategy and mission. Below are examples of key dimensions and specific metrics that link to the dimensions.

The mechanics of how to build a balanced scorecard by linking strategy to metrics that evaluate performance was a topic at RFC's Sales/Care & Operations seminar in Miami, April 2004. Ram Sitaraman, Director Planning & Analysis from Qwest brought significant insight into understanding the effectiveness that a balanced scorecard approach can bring to an organization.

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## Sample Balanced Scorecard Dimensions and Metrics

<b>Financial</b> Toll Revenue Revenue Growth Margin Write-off Access Line Loss	<b>Customer Satisfaction</b> External Satisfaction Survey Complaints QA Scores	<b>People</b> Employee Survey Satisfaction Attrition Diversity Staffing Cycle Time
<b>Operations Effectiveness</b> Service Level Revenue/Order Cost/Call Service Order Quality Fallout	<b>Marketing Effectiveness</b> Revenue/Customer Product Churn Win-back Penetration of Bundles Market Share by Product	<b>Supplier Effectiveness</b> Missed Appointments Held Orders Installation Intervals Public Policy

## WiMax

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are generally in the broadband wireless business now and selling proprietary systems. The major contributors to the WiMAX forum account for 80% of the total broadband wireless systems sold in the market today, and they want WiMAX products as soon as possible.

From Intel's point of view, the growth in current proprietary broadband wireless systems is a positive sign that WiMAX demand will be even larger when it is deployed.

How do you see wireless broadband fitting into your current broadband services portfolio? Will it simply be a technology that allows you to reach those isolated customer areas with fixed-wireless broadband services? Will you use it to give your DSL customers a mobile broadband service? Or, will it be the vehicle to bring a video service to your package offerings? Let me know if you would like to include this as one of our "hot topics" on our next BMMA monthly call.

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## Staffing

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those companies filling the jobs.

What can be done? RFC believes that one solution for managing this problem for the call center type skilled workers and 1<sup>st</sup> line supervisors is to create a trade association to help recruit, develop, train, professionalize, and retain the best people for the industry. This ultimately reduces turnover and the associated costs.

With this in mind, RFC has solicited support from key industry players for a feasibility study and has commitments from 4 companies and is seeking the agreement of 2 other key companies before proceeding.

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