



Mission Statement

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Our mission is to be:
The Global Leader in Voice
Navigation of Entertainment
and Communications Services

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Company Snapshot

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Date Founded	2000
Employees	35
Type of Company	Software/Services – Server Centric Voice Recognition
Target Industries	Cable Television & Mobile Communications
Core Products	AgileTV & Agile Voice Services
Investors	Motorola, Insight Cable, SpeechWorks, Private Investors
Outside Directors	Alan Herzig, Gary Lauder, Guy Sucharczuk
Offices	Menlo Park, CA & Gold Coast, Australia

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Introduction

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- **Major navigational challenges facing network operators in the delivery of content**
- **Voice control is the solution, but existing systems inadequate & expensive**
- **AgileTV solves the problem....**
 - Distributed architecture is key
 - High recognition accuracy
 - Low latency
 - Large vocabulary
 - Speaker independent, no training
 - Low cost to deploy

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Management Experience

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Expertise In Four Key Disciplines

Speech

IBM



Apple



IDEO

Consumer

H/W & SW Tech.

digital



Raychem

XEROX



VIACOM



AOL Time Warner

SHOWTIME

HBO

Operators



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Management Team

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Founders:

- **Paul Cook:** Chairman & CEO (Raychem, SRI, Nuance, DIVA)
- **Mark Foster:** SVP/CTO (Apple, Zenith, DEC)
- **David Hanson:** SVP Business Development (CBS, Viacom, Showtime, DIVA – 33 Year Cable Industry Pioneer)

Senior Management:

- **David Chaiken:** VP System Architecture (AT&T, DEC)
- **Jay Kistler:** VP S/W Engineering (Akamai, DEC)
- **Scott Maddux:** VP Consumer Applications (Apple, Hasbro, IDEO)
- **Harry Printz:** VP Speech & Language Technology (IBM, DEC)
- **Dave Redell:** VP Program Management (DEC, Xerox, Compaq)

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IP Strategy

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- Own the server centric voice domain in key areas of the cable and mobile markets
- 100+ Man-years in development
- U.S. Patents filed: 21 (1000+ claims)
 - Speech recognition
 - User interface
 - Software technology & services
 - Integrated hardware
- Foreign patents filed

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Cable Opportunity – Solution

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Opportunity

Cable has 2-way infrastructure enabling advanced interactive services

Problem

Explosion of content: Users lost in a sea of choice, lowering digital cable's price/value relationship

Solution

Voice control

- Gives cable a competitive advantage
- Drives additional revenue
- Easy to use, no training, self installed
- High margin service for operators & AgileTV

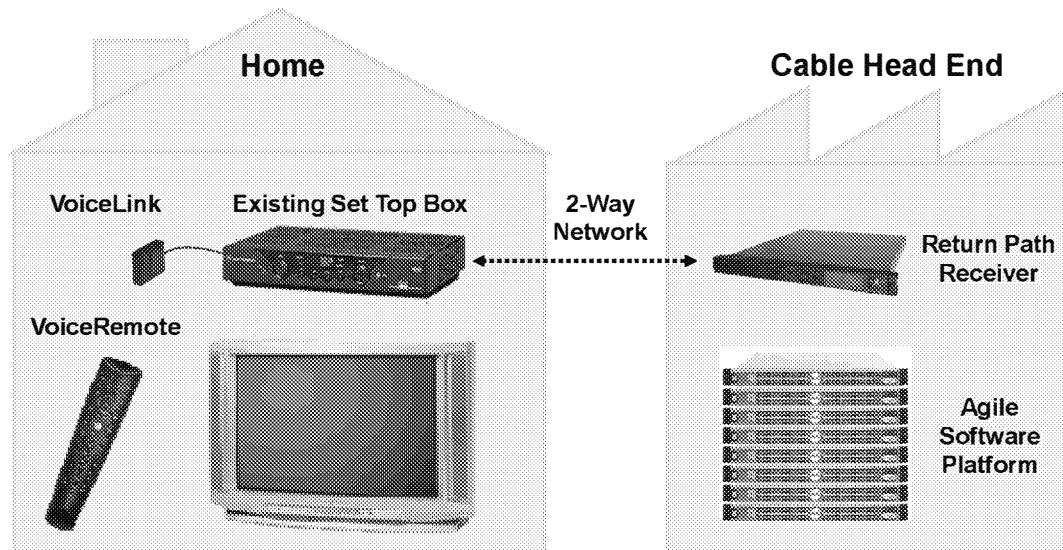
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Server-Centric Voice Recognition

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Enables voice control of all
cable programming & services



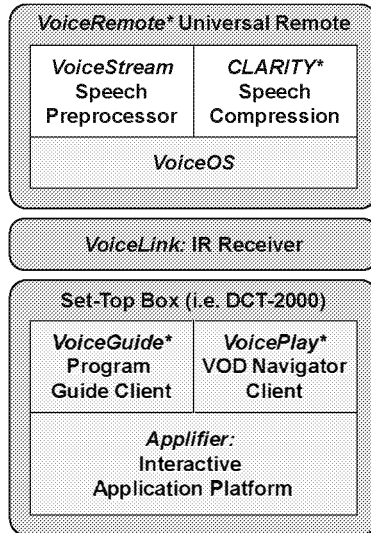
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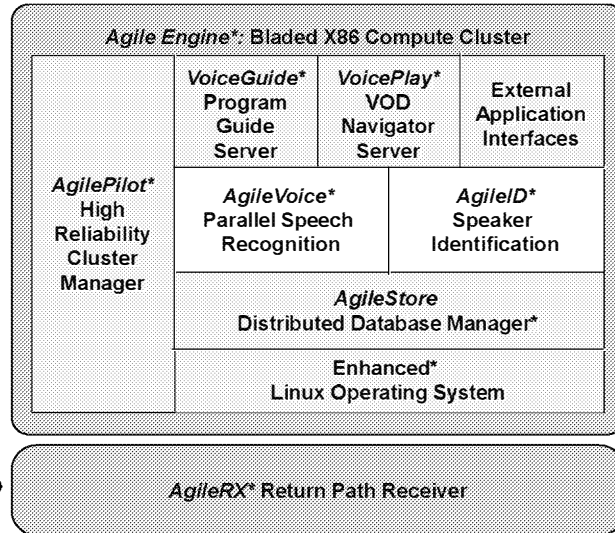
Software Architecture

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Customer Premises



Cable Headend



* Patent(s) Pending

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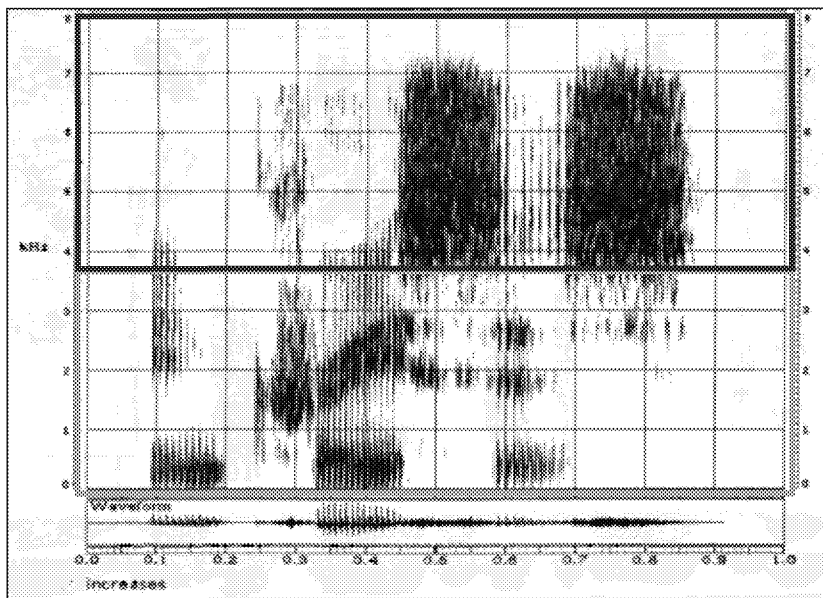
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Data Capture

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Audio spectrum of the word "increases"



Missed by
Telephone

Captured by
Telephone

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Usability & Market Research

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Usability Studies

User Interface
Remote
Receiver

- 300+ people
- 2001-04

Focus Groups

Pricing
Product Appeal
Packaging

- 450+ people
- 2001-03

Field Usage

USA
Media
Trial

- 35 people
- 2002-03

Comcast
Deployment

- 500 homes
- 2003-04

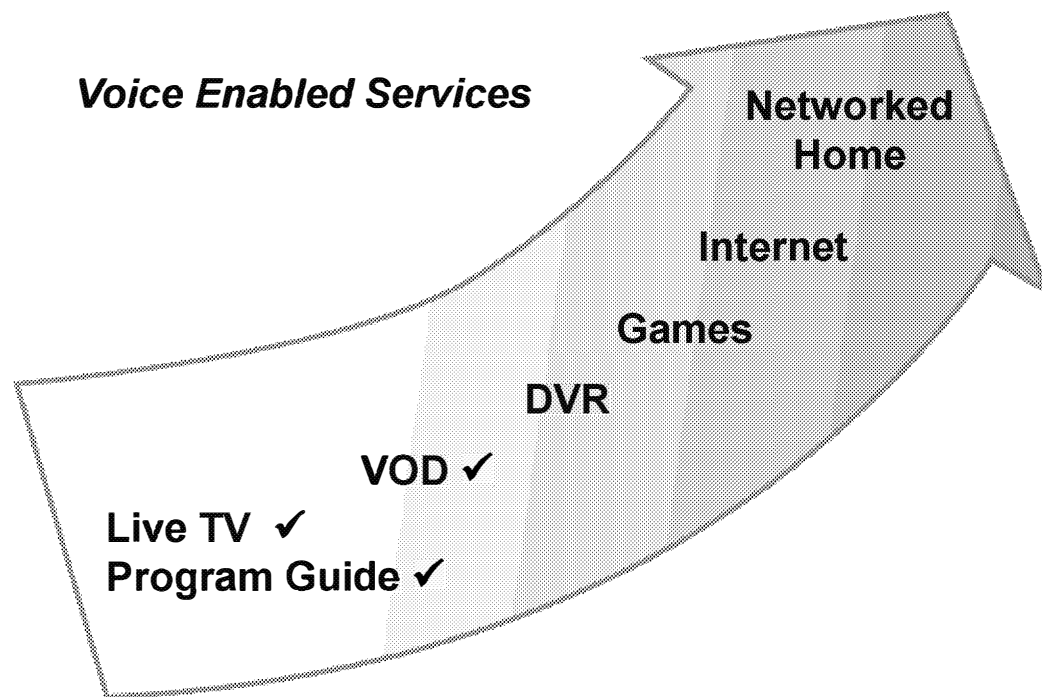


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Product Roadmap

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Completed Technical Milestones

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- Integrate with the most widely deployed set top boxes – Motorola DCT2000
- Reduce cost of software & hardware to less than \$1.00/sub/month
- Core return path receiver technology demonstrated to reduce latency & handle large scale deployment
- Attain better than 90% recognition accuracy
- Build speaker independent recognition engine to handle 100,000+ phrases

Completed



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Completed Business Milestones

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- | | <i>Completed</i> |
|--|------------------|
| • Deploy on Motorola DCT2000 network and meet economic requirements of MSOs | ✓ |
| • Create cable ROI model in conjunction with Comcast and Time Warner | ✓ |
| • Complete Comcast & Time Warner backed focus groups establishing consumers were willing to pay at least \$5 per month for AgileTV service | ✓ |
| • Input data from focus groups into ROI model and determine profitability for MSOs & AgileTV | ✓ |
| • Receive \$2 Million commitment from Comcast | ✓ |
| • Develop trial agreements & schedules with leading cable MSOs | ✓ |

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MSO ROI Model

AGILETV

- MSO revenue model built in conjunction with Comcast and Time Warner

- Model supports 80+ assumptions across 4 tiers of service

The screenshot displays the 'AgileTV MSO Revenue Model' spreadsheet. It features a title bar with the AgileTV logo and a main title 'AgileTV MSO Revenue Model'. The spreadsheet is organized into several sections: 'Input Assumptions', 'Revenue', 'Expenses', and 'Net Income'. Each section contains multiple rows of data with numerical values and formulas. At the bottom, there are 'Print' and 'Calculate' buttons.

- Can be used for ROI based on multiple deployment schedules
- Built-in metrics analysis for break-even on monthly and cumulative basis reporting in cash or accrual methods
- Calculates benefits of churn reduction and service uptake

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MSO Focus Group Results

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- Time Warner & Comcast collaborated in developing the research plan
- Time Warner executive on site to observe focus groups
- 3rd party research expert ran all focus groups
- **Key Findings**
 - 69% of digital subscribers are highly likely to subscribe
 - Virtually no truck rolls required
 - Median Monthly Fee: \$4.95
 - Median CPE Purchase Price: \$47.50

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Comcast/Time Warner Trial Plan

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- **Pre-Trial Technical Milestones**
 - Technical phase run by New Media Division under Mark Coblitz
 - Install in National Engineering head-end (completed)
 - Install in Willow Grove head-end (March '04)
 - 6 units deployed to 4 homes + 2 office locations
 - Alpha system deployed to 10 homes (June '04)
 - Beta system complete (July '04)
 - Version 1.0 complete (August '04)
- **Marketing Trial**
 - Marketing phase to be run by Operations & Marketing Divisions
 - Deployment to 500 Subscribers (August '04)
 - Marketing trial to run to end of '04

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Trial Goals

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- **Explore Marketing & Pricing Scenarios**
 - Direct mail, 1st month free, top-tier free, retail etc.
- **Service to be priced from \$0.00 to \$4.95**
- **Subscribers to reflect broad demographic sample**
- **Voice enhanced SourceGuide to serve as IPG**
- **AgileTV Barker video available via on-demand**
- **Additional Metrics**
 - Lift from Analog to digital
 - Lift to higher digital tier
 - Conversion of DBS subscribers
 - Churn Reduction
 - VOD traffic and sell-through

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Cost to MSO

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- **Capital investment per AgileTV subscriber**

– CPE	\$27.00
– Software	\$15.00
– Headend	<u>\$ 3.00</u>
	\$45.00

- **\$45 Amortized = \$0.75/sub/month**
- **Programming Fee = \$0.10/sub/month**
- **Total Cost to MSO = \$0.85/sub/month**

Capitalized costs depreciated over 60 months



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MSO Profit Calculation

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Monthly revenue per subscriber	\$4.95
AgileTV system costs per month	\$0.85
MSO operating costs	<u>\$0.50</u>
Profit per subscriber per month	\$3.60

- Cash payback in 12½ months
- 20% penetration of digital subscribers delivers over \$43 million in additional annual profit to Comcast
- 10% worldwide penetration in digital cable delivers over \$100 million per year to AgileTV



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Go-to-Market Plan

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- Initially target MSOs using Motorola platform
- Sign with these MSOs
- Deploy with at least one MSO in the next year
- Profitability in 2005
- Then target MSOs Using Scientific Atlanta STB

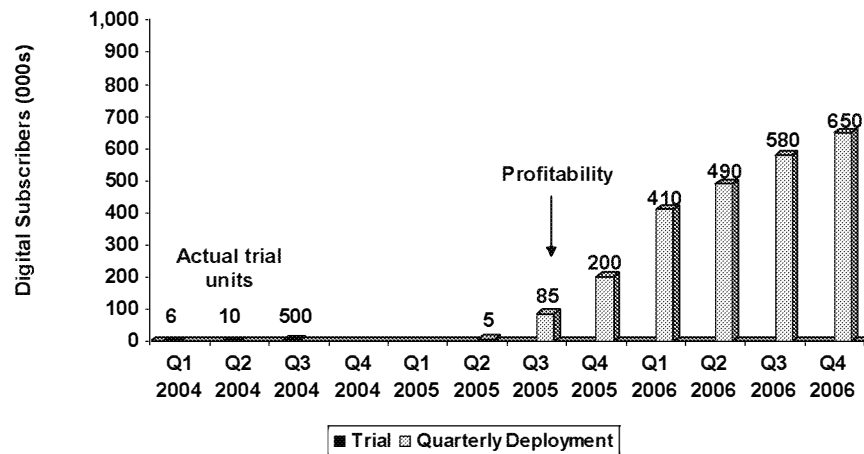
Name	Status
Comcast	Signed Trial Agreement
Time Warner	Co-trial w/ Comcast
Insight	MOU for Launch
Charter	After Comcast
USA Media	Initial Deployment
Cox	In Discussions
Adelphia	In Discussions
Sea Change	Integration in Progress
TV Guide	Discussions Underway
Motorola	Integrated

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Subscriber Deployment By Quarter

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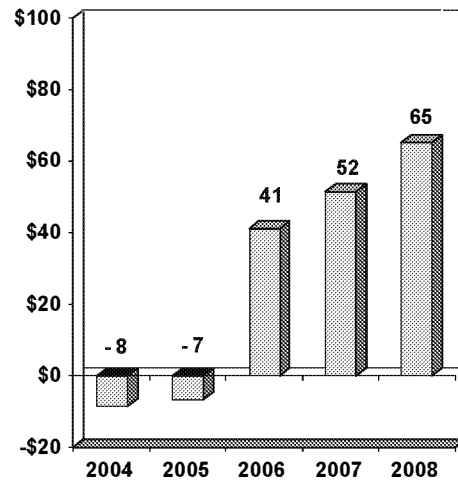
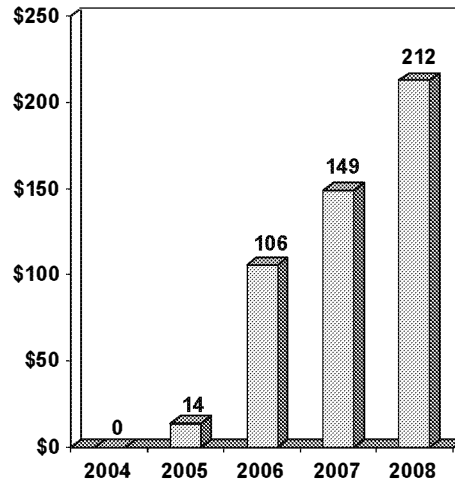


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Revenue & Pre-Tax Profit

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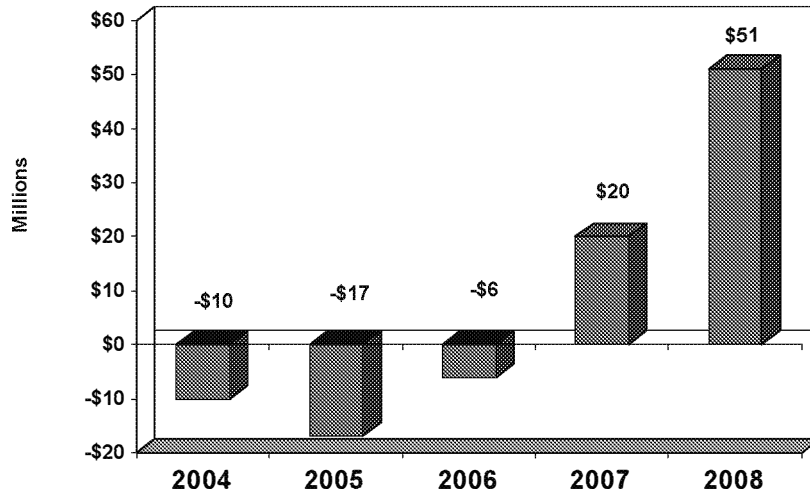


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Cumulative Cash Flow

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Phone Strategy

Leveraging Agile TV's technology and lessons learned enables Agile Phone to execute faster with less money

- **The value proposition is similar**
- **The execution model is similar**
- **75% of the technology needed for Agile Phone is already built**
- **We already have interested strategic partners**

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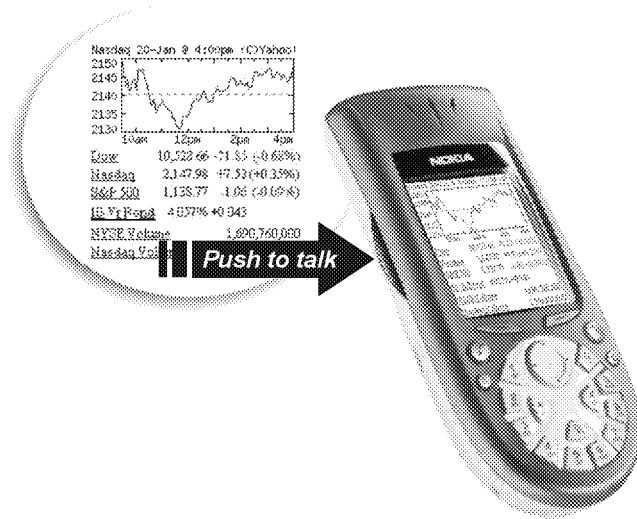
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What is Agile Phone?

**“Show Me The Nasdaq,” “Send photos to Susie,”
“Find the new Outkast ring-tone”**

Easy to Use Navigation:

- General phone menus
- PIM applications
- Internet portal apps
- Messaging (email, photo messaging)
- Games

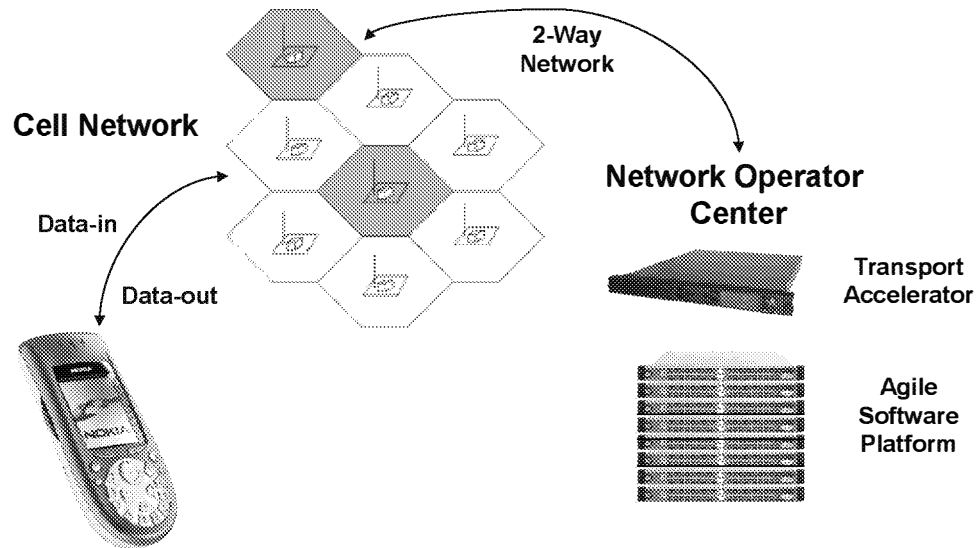


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Architecture

Agile's server-centric solution is basically the same as in cable

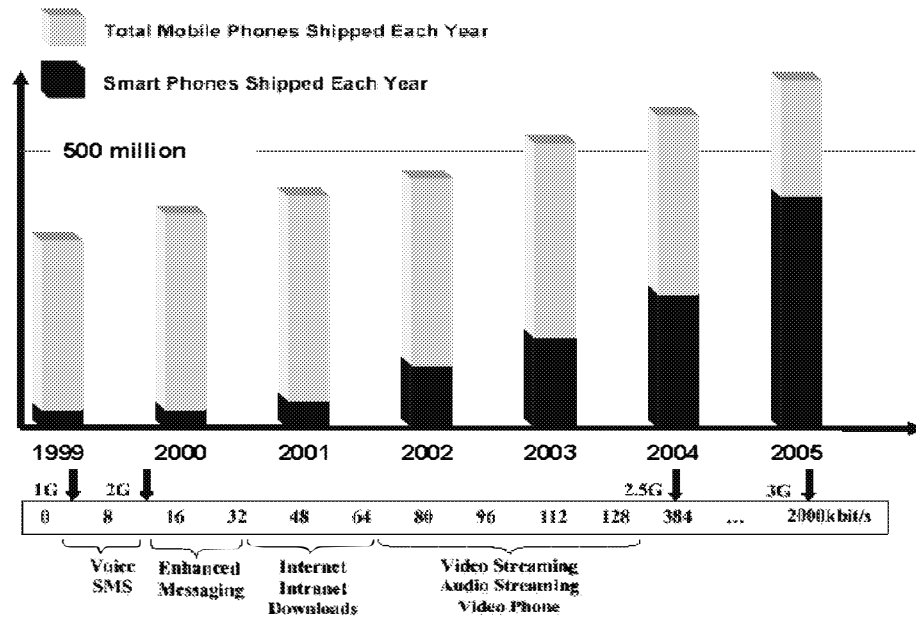


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Market Size

520 million phones shipped in 2003 alone (IDC)

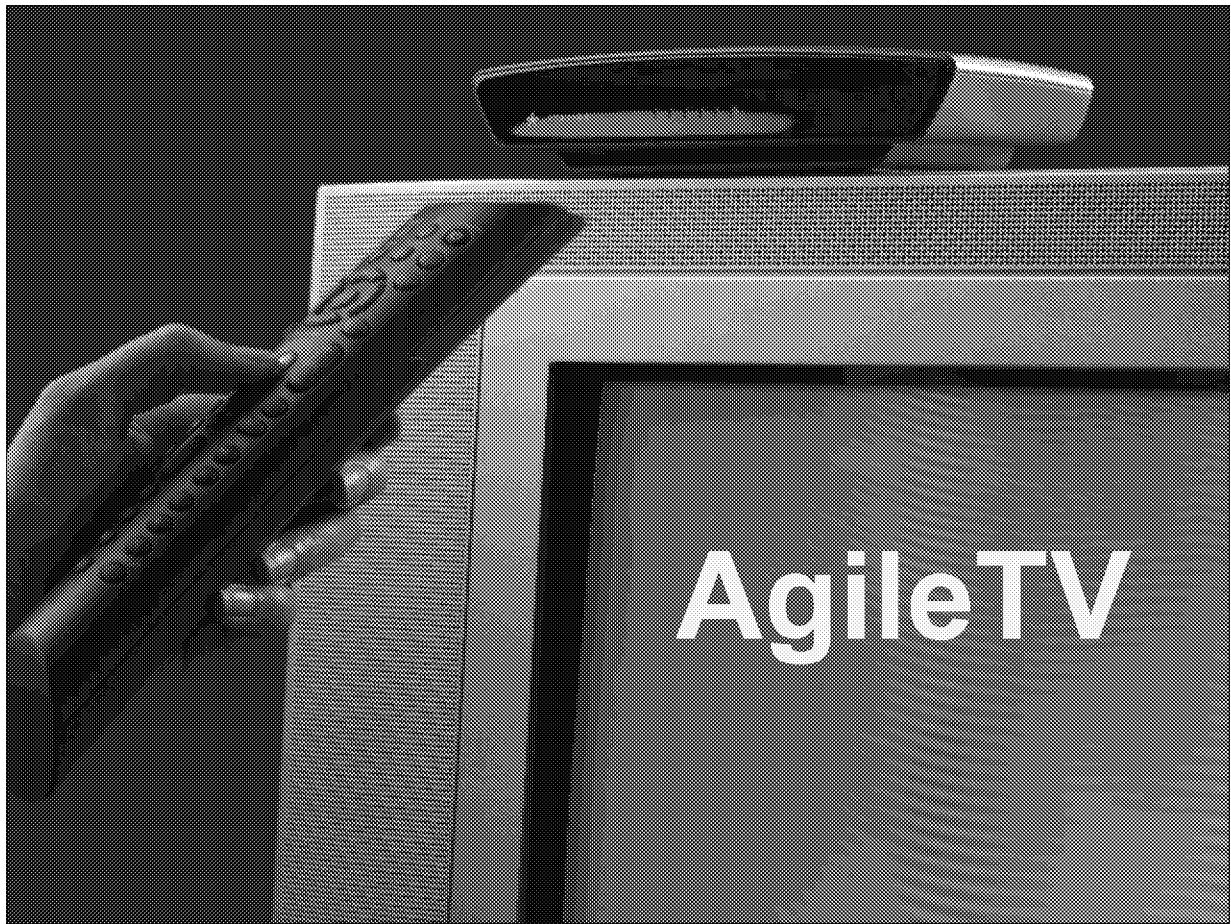


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*The
future is
simple.*





Mission Statement

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**AgileTV's Mission is to be
The Global Leader in
Voice-Controlled
Entertainment and
Communications Services**

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Company Snapshot

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Date Founded	2000
Employees	35
Type of Company	Software/Services – High Accuracy, Server Centric Voice Recognition
Target Industries	Cable Television & Cellular Phone
Core Products	AgileTV & AgileMobile Voice Services –
Funding	\$37.5M (Motorola, Insight Cable, SpeechWorks, Private Investors)
Offices	Menlo Park, CA & Gold Coast, Australia

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Multiple Business Lines

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AgileTV: Cable

AgileMobile: Cell Phones

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Opportunity – Solution

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Opportunity

Cable has 2-way infrastructure enabling services Satellite can't economically offer

Problem

Satellite is taking Cable's highest paying customers

Solution

Voice Controlled Television

- Gives Cable a Competitive Advantage
- Drives Additional Cable Revenue
- High Margin Service

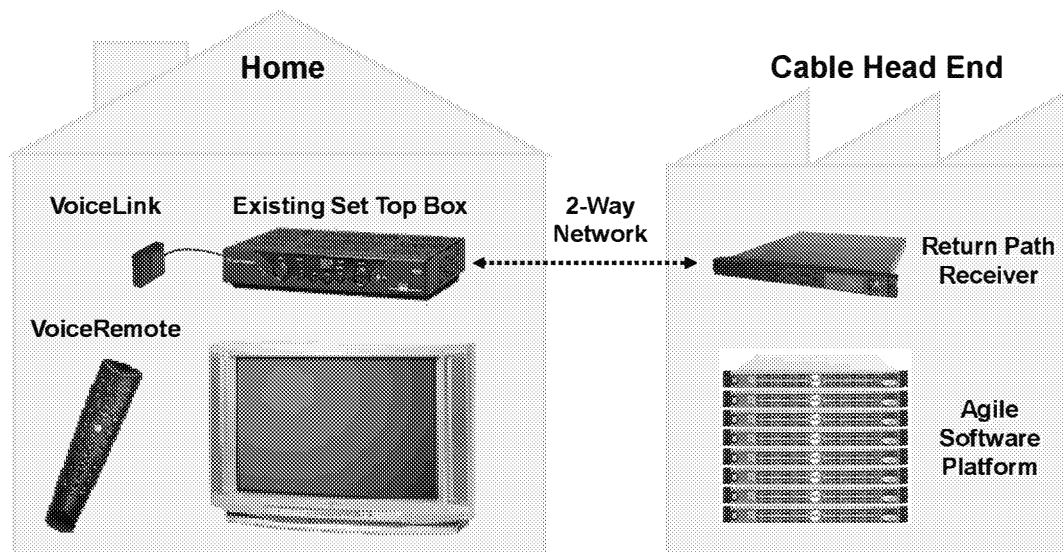
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Server-Centric Voice Recognition

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**Enables Voice Control Of All
Cable Programming & Services**



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Voice Recognition Breakthroughs

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- **Speaker Independent**
 - No Training Required
- **Large Vocabulary**
 - 100,000+ Total Phrases
- **Latency**
 - Less Than 1 Second Latency
- **Accuracy**
 - 94% Recognition Accuracy
- **Cost**
 - Server-Centric Solution is Most Cost Effective

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Accomplishments

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- **Filed 22 Patents**
- **Integrated on Motorola Platform**
- **Successful USA Media Cable Field Trial**
- **Cost Reduced Consumer Premises Equipment**
- **Functioning Return Path Receiver Model**
- **Voice Controlled Programming Guide Drives Motorola's Most Widely Used Set Top Boxes**
- **VoiceGuide Operational at Comcast**

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Management Experience

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AgileTV: Expertise In Four Key Disciplines



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Product & Market Research

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Usability Studies

User Interface
Remote
Receiver

- 300+ people
- 2001-02

Focus Groups

Pricing
Product Appeal
Packaging

- 400+ people
- 2001-03

Cable System Trials

USA
Media
Trial

- 35 people
- 2002-03

Comcast &
Others

- 50-500 homes
- 2003-04



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Latest Focus Group Results

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- Time Warner & Comcast Collaborated in Developing the Research Plan
- 8 Focus Groups, 57 Subscribers
- Hands-On Set Up & Use of Product
 - Ease-of-Use: 65% Rated Product 5 out of 5
 - Interest Level: 47% Rated Product 5 out of 5
- Subscriber's Willingness to Pay
 - Purchase CPE: \$49.95 Median Price
 - Monthly Fee: \$4.98 Median Price

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USA Media Cable – Alpha Trial

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- Trial Duration: 15 Months with 13 Families
- In-Depth Exit Interviews with 9 Subscribers
- All Would Subscribe & Pay \$5 or More per Month
- 7 of 9 Would Pay \$10 or More per Month
- The Longer They Used It, The More They Liked It
- Voice Control Enhanced Digital Cable
- They Miss It!

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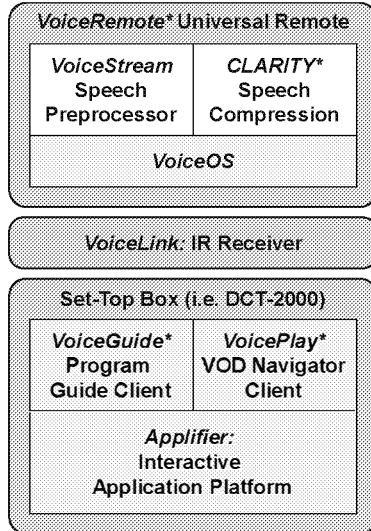
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Server Centric Solution

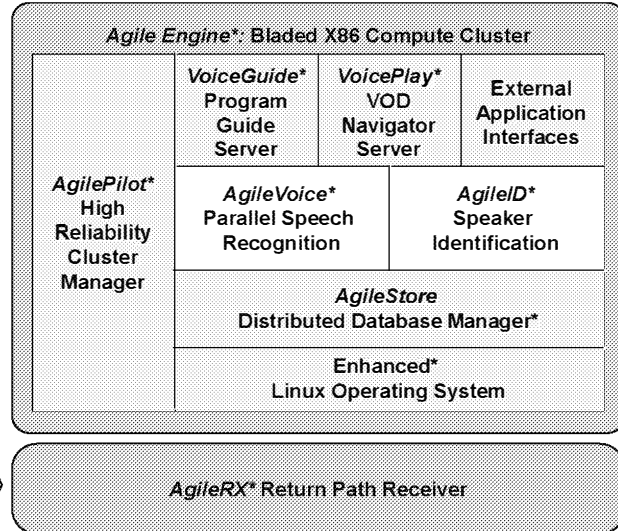
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A Sophisticated Solution With Broad IP Protection

Customer Premises



Cable Headend



* Patent(s) Pending

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IP Strategy

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- **Strategy: Own the Server Centric Voice Domain**
- **100+ Man-Years in Development**
- **U.S. Patents filed: 22 (1000+ claims)**
 - **Speech recognition**
 - **User interface**
 - **Software technology & services**
 - **Integrated hardware**
- **Foreign Patents Filed**

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Marketing Strategy

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- **Marketing by Industry Veterans**
- **Rifle Approach to Key Decision Makers**
- **Use Marketing Trials to Confirm Expectations**
- **Initially Target MSOs Using Motorola Platform**
 - Comcast, Charter, Cox, Adelphia, Insight, MediaCom & Bresnan
- **Then Target MSOs Using Scientific Atlanta**
 - Time Warner, Cox, Adelphia, Cablevision & Rogers

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MSO Relationships

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- Adelphia – Continuing Discussions
- Bresnan – Initial Discussions
- Charter – Will Follow Comcast Deployment
- Comcast – Initial Marketing Trial
- Cox – Initial Discussions
- Insight – Investor
- Media Com – Initial Discussions
- Time Warner – Participating with Comcast
- USA Media – Alpha Deployment Complete

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MSO Revenue Model

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- Revenue Model Developed With Direct Input from Comcast & Time Warner
- Model Assumptions Validated With Field Trial Participants and Focus Group Research
- Pricing & Cost Alternatives Validated For Revenue Model Result in Very High Profitability for MSOs

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Cost to MSO

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- **Capital investment per Agile Subscriber**
 - CPE \$27.00
 - Software \$15.00
 - Headend \$ 3.00
- **These costs depreciate at \$0.75/month/sub**
- **Programming Fee of \$0.10/month/sub**
- **Total Cost to MSO of \$0.85/month/sub**

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MSO Revenue Model

AGILE TV

Microsoft Excel - MSO Tiered Revenue Model v0.5.xls

File Edit View Insert Format Tools Data Window Help

B32

AgileTV MSO Revenue Model

Overall Assumptions

Timeframe of Deployment in Months	36 Months
Digital Subscribers	700,000
Accounting Method	Accrual

Adoption Scenarios

Straight Line Deployment	Linear
Deploy most subs early	FrontLoaded
Deploy most subs later	BackLoaded

Cost Assumptions

Headend Amortization Schedule	34 Months
Headend Equipment Cost Per Sub	\$ 3.00
CPE Amortization Schedule	60 Months
AgileTV CPE Equipment Cost	\$ 27.00
AgileTV One Time SW Fee Per Sub	\$ 15.00
AgileTV Monthly Fee Per Sub	\$ 0.10
Truck Roll Cost per Sub	\$ 60.00
Truck Rolls Required	5%
Customer Acquisition Cost	\$ 5.00
CSR + Ops per Sub Per Month	\$ 0.10

Subscriber Deployment Assumptions

	Platinum	Gold	Silver	Classic
Digital Tiers	15%	25%	35%	25%
Subscriber % by Tier	3	3	3	3
Months of Promotional Free Services	3	3	3	3
Price Charged For 1st AgileTV CPE	\$ 39.95	\$ 39.95	\$ 39.95	\$ 39.95
Price Charged For 2nd AgileTV CPE	\$ 39.95	\$ 39.95	\$ 39.95	\$ 39.95
Monthly Service Charge 1st AgileTV	\$ 4.95	\$ 4.95	\$ 4.95	\$ 4.95
Monthly Service Charge 2nd AgileTV	\$ 3.95	\$ 3.95	\$ 3.95	\$ 3.95
Subscriber Adoption Scenario	FrontLoaded	FrontLoaded	FrontLoaded	FrontLoaded
Months to Penetration	12 Months	15 Months	18 Months	24 Months
Subscribers to AgileTV Service	30%	25%	20%	15%
Subscribers Buying 2nd CPE	20%	15%	10%	5%
AgileTV Monthly Sub Churn	1%	1%	1%	1%
AgileTV CPE Returned	90%	0%	0%	0%

Value Added Assumptions

VOD Rev Per Sub Per Month	\$ 4.00	\$ 4.00	\$ 4.00	\$ 4.00
AgileTV Uplift on VOD Sales	5.00%	5.00%	5.00%	5.00%
Value of Uplift to Higher Tier	\$ 10	\$ 10	\$ 10	\$ 10
AgileTV Uplift to Digital Tier	3.00%	3.00%	3.00%	3.00%
Current Churn Rate per Month	5.00%	5.00%	5.00%	5.00%
AgileTV Churn Reduction	0.25%	0.25%	0.25%	0.25%
Value of Keeping a Dig Sub/Month	\$ 60	\$ 70	\$ 60	\$ 60

Print Calculate

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MSO Profits

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- Monthly Revenue Per Subscriber \$4.95
- AgileTV System Costs Per Month \$0.85
- MSO Operating Costs \$0.50
- Profit Per Subscriber Per Month \$3.60
- Cash Payback in 12½ Months

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Additional Benefits to MSO

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- **Solves Cable's Navigation Problem**
- **AgileTV Gives Cable a Competitive Product Advantage Over Satellite**
- **Reduces MSO Capital – Extends STB Life**
- **Helps Reduce Digital Churn**
- **Helps Bring Satellite Subs to Cable**
- **Helps Increase VOD Usage & Buy Rates**

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Strategic Vendor Relationships

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- **Set Top Box Manufactures**
 - Motorola
 - Scientific Atlanta
- **Guide Companies**
 - SourceGuide
 - Microsoft
 - TV Guide
- **VOD Suppliers**
 - SeaChange
 - Concurrent & Others
- **Voice Technology**
 - Scansoft/Speechworks

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Competitive Landscape

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No one pursuing server-centric cable solution

Microsoft

Pursuing PC voice applications

PHILIPS

Pursuing Embedded Voice Solutions

THOMSON

Pursuing Embedded Voice Solutions

NUANCE

Customers Focused on Telephony Market

IBM

Focused on Business to Business Market

SpeechWorks

AgileTV Supplier

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Agenda

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AgileTV



AgileMobile

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Problems With Telco Voice Reco

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- **Low Accuracy**
 - 8-Bit, 8Khz Limitation
 - Signal Dropouts a Major Problem
 - All Cell Phones Sound Different
 - Use Only Basic Acoustic Models
- **Limited Vocabulary**
 - Embedded: Limited to 100s of Phrases
 - Server-Centric: 1000s of Phrases
- **Session Setup Requires Lengthy Phone Call**
- **Requires Major Context Switch for User**
 - Can't Stay with a Call *AND* Perform Other Tasks
- **Navigating Audio Menus is Slow & Tedious**

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AgileMobile Introduction

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- Cell phones have similar navigation challenges
 - Increasing digital content and services
 - Limited buttons, small display
 - Interface limitations inhibit growth of new services
- AgileTV Developments make speech recognition work
- Experts in speech-input, display output UI
- AgileTV's distributed speech recognition architecture is ideal for cell phones
- Screen phone market is exploding
 - Estimated 1 billion devices by 2008
- AgileMobile leverages AgileTV technologies

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How AgilePhone Works

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- **Optimize cell phone Design**
 - 16-bit 16 KHz sampling
 - Add **SPEECHCOMMAND** button to phone
 - Proprietary **SONIFY** acoustic equalizer
 - AgileTV's **CLARITY** front-end and compression
- **Utilize data, not speech transport**
 - Compressed bitstream sent to mobile switching center
 - Uses retries: no signal dropouts
- **Leverage AgileTV's speech servers**
 - Same core architecture as used for cable TV
- **AgilePhone's Fast Server Architecture**
 - Incorporates proxy server for display responses
 - Returns display content, not URL
 - Accelerator in phone receives bundled display data
 - Rapidly pushes display content into browser
- **Faster, more accurate access to information**

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What's Right With AgileMobile

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- **Better speech input**
 - 4X more data
- **Better compression**
 - Zero loss in recognition accuracy
- **Better transport**
 - Digital data transport: no dropouts
- **Better recognition**
 - Doesn't assume everyone sounds the same
 - Learns without requiring training
 - Supports tens of thousands of utterances
- **Instant access, All the time**
 - Works even during a phone call
- **FAST access to content and services**

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Possible AgilePhone Markets

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- **Consumer**
 - Voice enabling network provider's portal
 - Stocks, weather, traffic
 - Music, videos on demand
 - Games
- **Business**
 - Enterprise applications
 - Logistics
 - Service
 - Sales force automation
- **Mobile Professional**
 - Intelligent Assistant
 - Email, Calendar
 - Messaging

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