

Maximize The Payoff From Your Broadband Investment



Workshop

2014 Broadband Communities Summit

Austin, Texas, April 7, 2014

Why we Build Broadband Networks

Operators

Revenues from network subscriptions

- Investment, operations & maintenance costs

= PROFIT

Local Economy

**Increased productivity and competitiveness,
increased revenues, new jobs,
better quality of life, etc.**

- Investment, utilization programs and support

= BENEFITS FOR THE COMMUNITY

**“Off-
balance-
sheet”**

The Uncomfortable Situation with Broadband

All public broadband networks have these attributes:

Accept current performance and risks, potentially:


- Fail to achieve expected economic and social benefits
- Damage to reputation (economically and politically)
- Fail to reach sustainability

VS.

Driving network utilization:

- Create ground-up demand for services
- Help potential customers identify real benefits – driving take-up
- Identify and bridge gaps in the business plan/performance
- Alter course as required to reach sustainability

 Money and human capital has been invested in broadband networks

 Government, community stakeholders, businesses and subscribers want to know if these are wise investments.

Doing what you've always done will get you what you've always got.



The Field of Dreams

Technology is not enough

To be sustainable and realize economic benefits, broadband network operators need to do more than build infrastructure and maintain it.

Low Network Adoption and Utilization Harms ROI

Challenge!

When end-users don't see the value of broadband, operators seeing slow adoption of broadband

Indeed



Why would you need a Porsche to only cruise the driveway to get the mail?

The real question is **HOW** to make broadband relevant to end-users and improve network performance?






Utility vs. Technology

Utility	Technology
Basic Need (water, roads, electricity)	A Luxury, a “nice to have” (smart phone, DVR, HD TV)
Basic Internet Service	Ultra fast and/or fiber Internet Service

-  The “Broadband is a Utility” argument discounts the fact that **adopting better broadband is a technology upgrade decision.**
-  In 2014, to maximize broadband’s benefits and drive innovation, **business, organizations and households must adopt and utilize...**
 - E-Solutions
 - Ultra-fast broadband

Technology's Adoption Groups

-  We all tend to fall somewhere on the “technology adoption curve”
-  “Innovators” alone will not create a sustainable network
-  This is the “nature part of the equation of broadband’s consumers (stay tuned for the nurture)

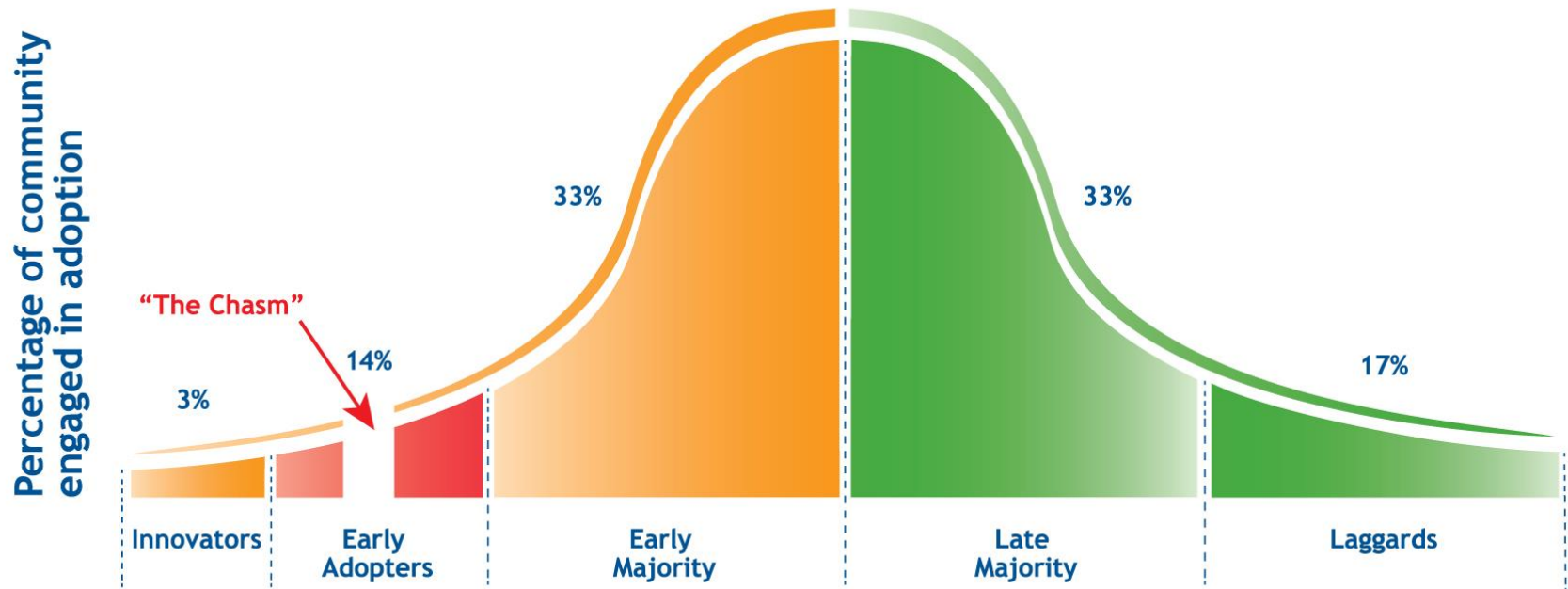
Adoption Groups	Technology Stage
Innovators	Bleeding Edge – Any technology that shows high potential but has not demonstrated its value
Early Adopters	Leading Edge – A technology that has proven itself in the marketplace but is still new enough that it may be difficult to find knowledgeable personnel to implement or support it
Early majority	State of the Art – Majority believes the technology is the “right” solution.
Late Majority	Dated – Still useful but a more effective version is available
Laggards	Obsolete – Maintained but no longer implemented technology.

But Why?

Broadband's Applications are **Technologies**, not **Utilities**



And when people buy, adopt, and utilize technology
they buy benefits, not features

Technology Adoption

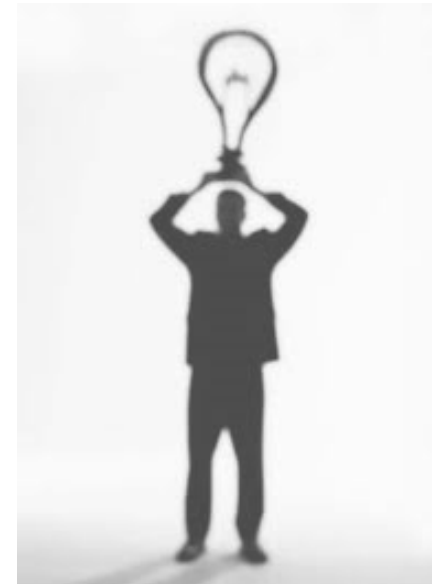


... so driving awareness and utilization is the next challenge

2 Simple Steps (But Not 1)





-  Education – driving understanding of the benefits of ultra-fast broadband
-  Close – getting the household, company, organization to actually signup

So how do we do this????



And to the Nurture...

The theory of “Diffusion of Innovations” tells us that you can **NURTURE** a person’s nature by doing the following...

-  **Explain the technology** – Distinguishing the difference and the promise of the new technology
-  **Create a communications plan** to reach target audience(s)
-  **Reduce the time it takes to realize** benefits by ratcheting up Knowledge of ROI, benefits, etc.
-  **Use the social system** (Influencers) to tout the technology’s advantages



strategic
networks group
the broadband economists

Driving Utilization

Technology is not enough

Broadband ...

Availability



Adoption



Utilization

Take a Comprehensive Look at Broadband

In the Broadband equation,
the quality of each input affects the outcome





Adoption and Utilization Is Key

How SNG Helps Drive Utilization

With BB Coverage, is the job done?

The situation in North Georgia

- Government investment of \$43million in 2009 to support FTTH network
- Needed for local economic development in rural region north of Atlanta

BUT

- 18% had taken up the service by Q2 2012
- Network not sustainable by November 2012 – need closer to 30% take-up
 - **Hired SNG to raise awareness and drive utilization with customers**

“Traditional marketing to customers wasn’t going to get our network to sustainability.”

Bruce Abraham, President, North Georgia Network

Impact of Driving Utilization

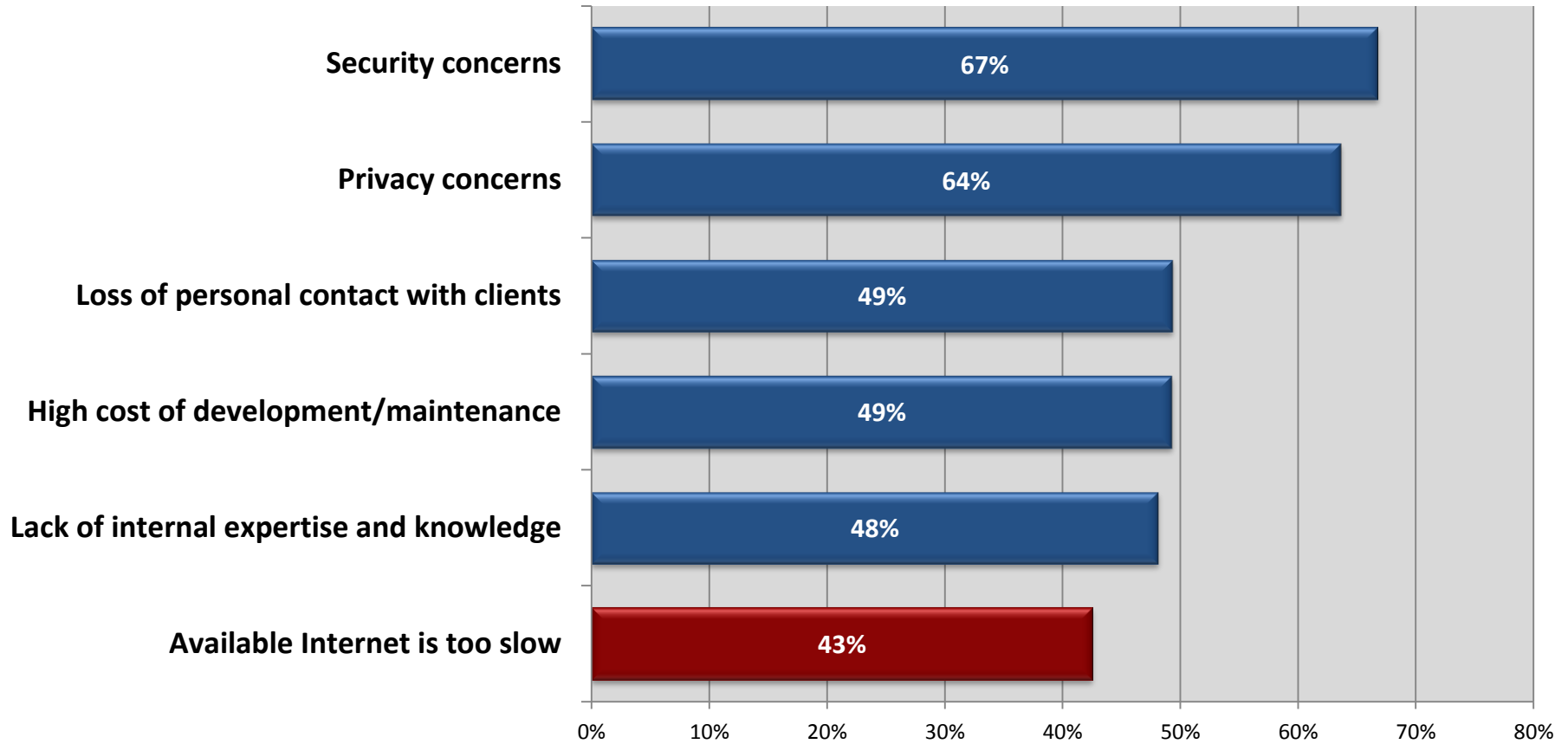
**Network operators are typically*
not sustainable with a “build it and they will come
approach”**

	Laissez-faire (A)	Driving Utilization (B)
Year One	10% uptake	12% uptake
Year Three	18% uptake	35% uptake
Internal Rate of Return (IRR) at year 3	5%	24%

* Financial profile of typical fiber network build. Source: Ventura Team LLP, www.venturateam.com

The Biggest Barrier is Not Knowing

Fear of the unknown overrules slow Internet as a barrier



Percentage of Establishments defining above barriers to using the Internet as "Very Important"

N = 19,586

Active, Actionable Data Is the Key

The right metrics and data help you:

- Understand the local market demand for broadband
- Assess potential socio-economic impacts (community ROI)
- Develop an action plan for regions and individual businesses/organizations that will achieve desired results





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What is important to measure for driving adoption?

What are Broadband Metrics?

Census Data - good to have	Active broadband metrics - need to have
Type of connection	Measure broadband speed vs. advertised speed
Broadband speed	Broadband satisfaction by end-users
Material resources	Utilization of Internet enabled tools and processes
	Benefits from broadband on daily operations
	Barriers to adopt broadband and to use Internet enabled tools and processes
	Quantified impacts from broadband on revenues, cost savings
	Quantified impacts on job creation
	Skills needed and preferred method of acquisitions
	Digital Economy index scoring at an individual level - industry sector level, regional level, etc.
	Special use and daily benefits metrics for Community anchors institutions
	Industry sector focus studies, comparison and benchmarking
	Regional focus studies and comparison



Need metrics to know...

.... where are we now?

... and how much closer are we to our goal?

So What Should You Measure?

Utilization

How businesses, organizations, and households are currently using, or planning to use broadband and e-solutions.

Gaps and Barriers

Where the gaps in the utilization of e-solutions are and which factors inhibit, or prevent adoption.

Drivers and Needs

Understanding the needs and preferences of end-users in order to raise awareness, to increase adoption, and to drive effective utilization.

Benefits

How things have improved and which e-solutions have benefitted businesses, organizations, and households.

Impacts

Quantify benefits in terms of new revenues, cost efficiencies, new jobs, quality of life, etc.

Profile Data

Internet connection type, tested speed, length of time using broadband, organization size, industry sector classification, demographics, etc.

How SNG Measures Utilization

We uncover Internet use at a micro-level and benchmark against peers

- 17 e-solutions¹ by businesses / organizations
- 30 e-solutions¹ by households

Utilization data collected² by SNG directly from **27,150** businesses / organizations And **12,400** households.

SNG has normative database with deep insights on Internet usage and impacts – over 110 metrics for each record.

Results shown use SNG's **Digital Economy index (DEi)**, a composite score between 1 and 10 to reflect level of Internet utilization.

Your DEi score: **4.6**

Your Industry Sector	Sector DEi
Manufacturing / Processing	6.2

Statewide DEi Distribution for your industry



Driving Utilization Pays Off

Driving utilization using the right data ...

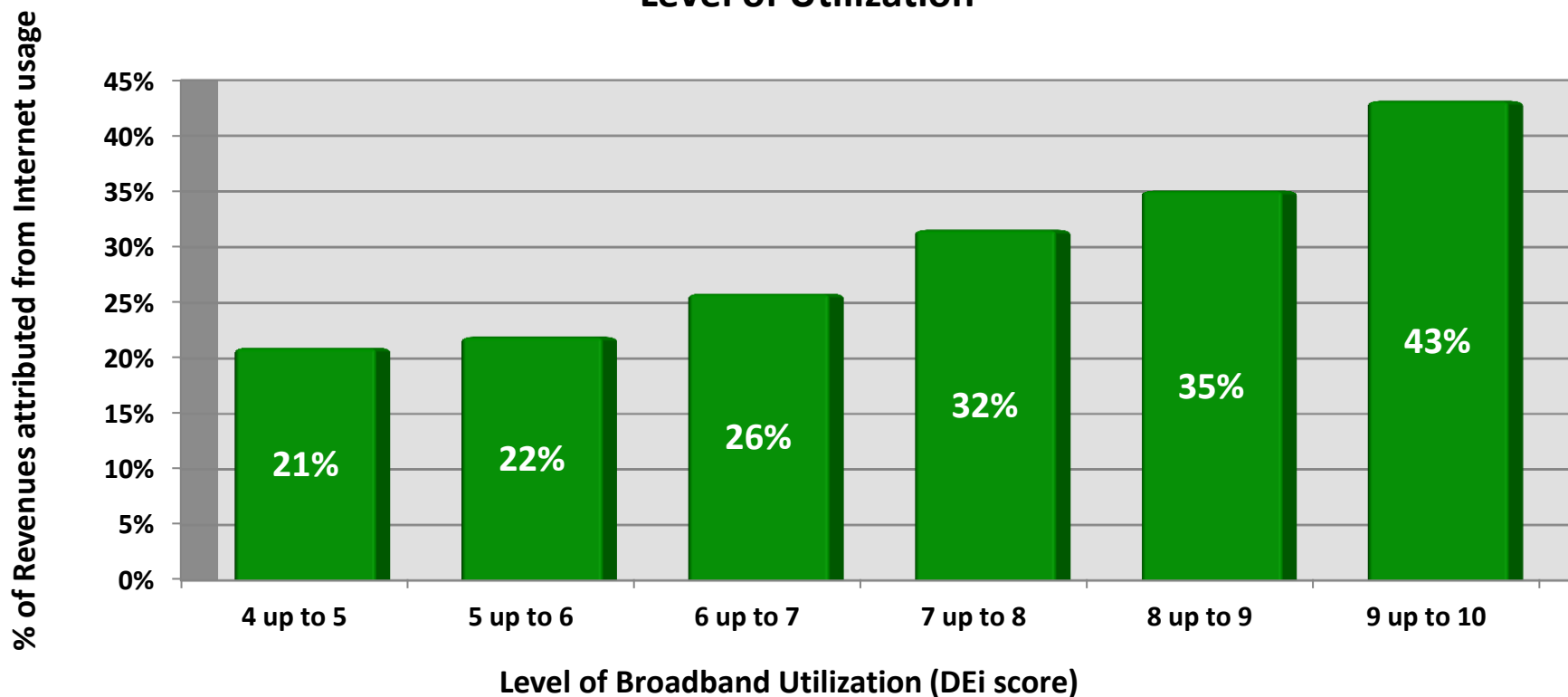
Driving usage of e-Solutions	Selling goods or services online; Website; Customer service online; Deliver services and content online
Target industry sector	Professional & Technical Service firms*

... generates network sustainability AND economic benefits

	Incremental increase from Driving Utilization
Network Net Present Value	14 %
Sales revenue growth* (aggregate of targeted sector)	\$ 6,450,000
Increase in GDP*	\$ 8,400,000
Increase in Tax Base*	\$ 888,000

Increased Utilization Directly Correlates to Revenue Growth

Contribution of Internet to Revenues by Level of Utilization



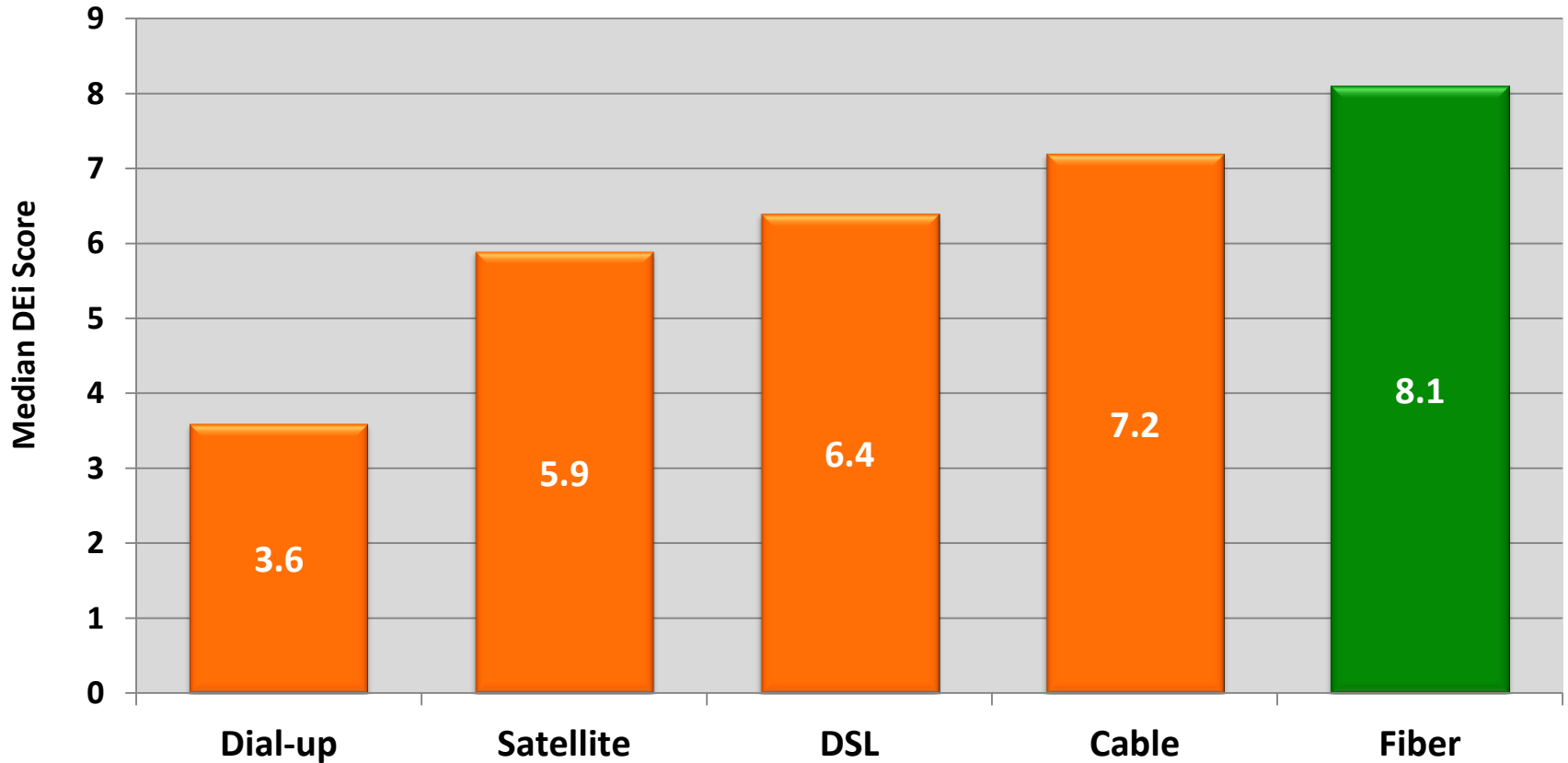
Source: Strategic Networks Group, Inc. 2014.

N = 2,606

Businesses underutilizing the Internet miss significant revenue opportunities

Fiber Leads to an Increased Utilization

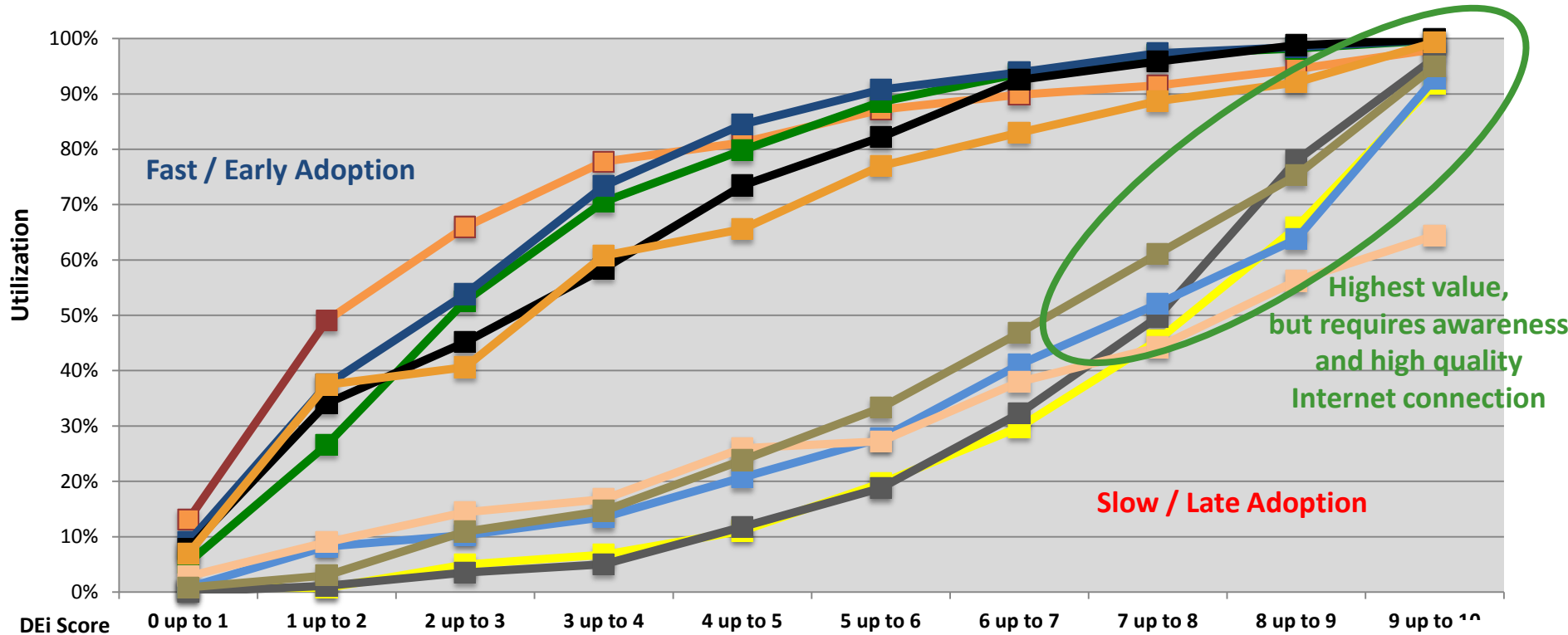
Median DEi score by connection type



N = 19,586

The Adoption Process for e-Solutions by Businesses

e-Solutions with greatest impact used by those
with most experience and skills (i.e. highest DEi Score)



Fast / Early Adoption

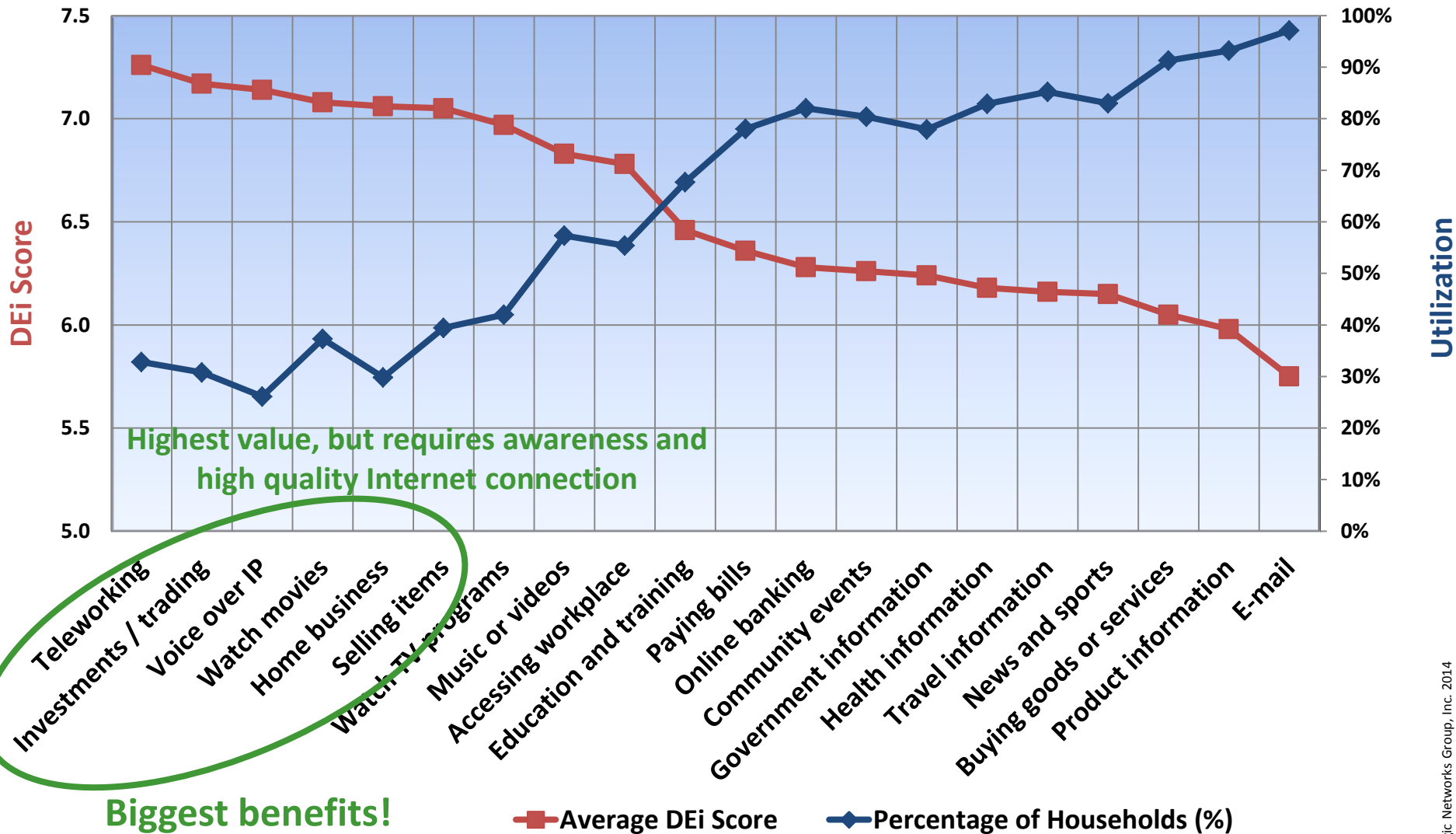
- Access government information
- Electronic document transfer
- Purchasing goods and services
- Research by staff
- Website for organization

Slow / Late Adoption

- Teleworking
- Selling goods or services
- Rich media or service creation
- Deliver services and content
- Social networking

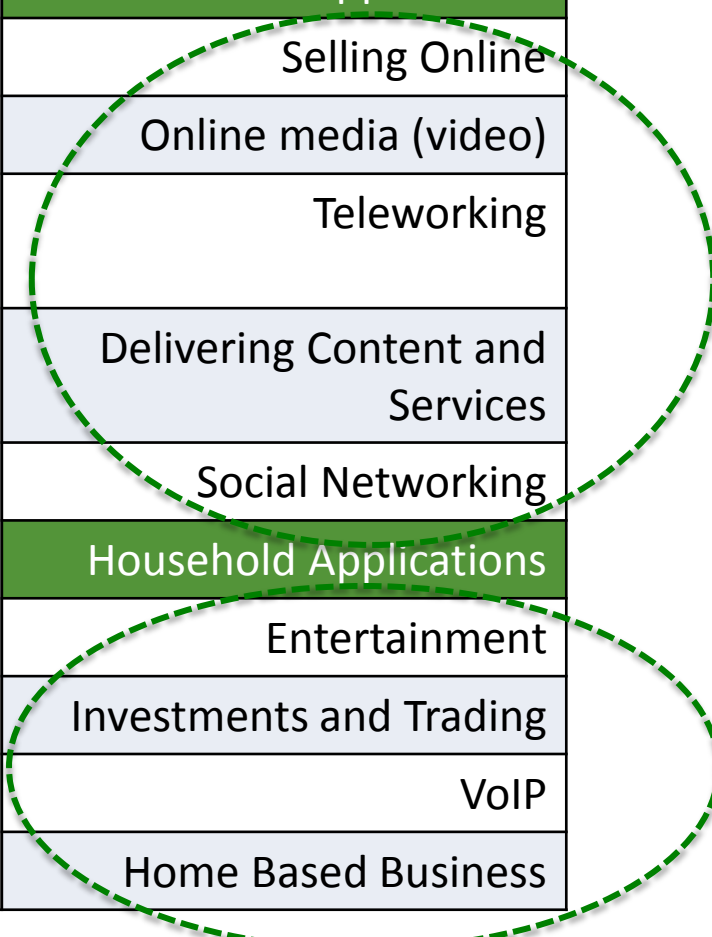
Broadband Utilization and Household Earning Power

Higher value e-solutions being used by fewer households



What's so hard about utilization?



Quick to Adopt 'Laissez-faire' approach "Okay"	Slow to Adopt Need to 'lead horse to water'
Business Applications	Business Applications
Buying Online	Selling Online
Basic Website	Online media (video)
Research and accessing information	Teleworking
e-mail	Delivering Content and Services
Document transfer	Social Networking
Household Applications	Household Applications
e-mail	Entertainment
Banking	Investments and Trading
News and Sports	VoIP
Information gathering	Home Based Business






BIGGEST BENEFITS

Why Drive Utilization?

For an individual business or organization, increasing utilization by 10% means:

-  Increasing revenues by 24%
-  Decreasing costs by 7%

For a Region, it means :

-  Allowing businesses to be more competitive
-  Creating a demand for high-skilled workers
-  Adding fiscal revenues



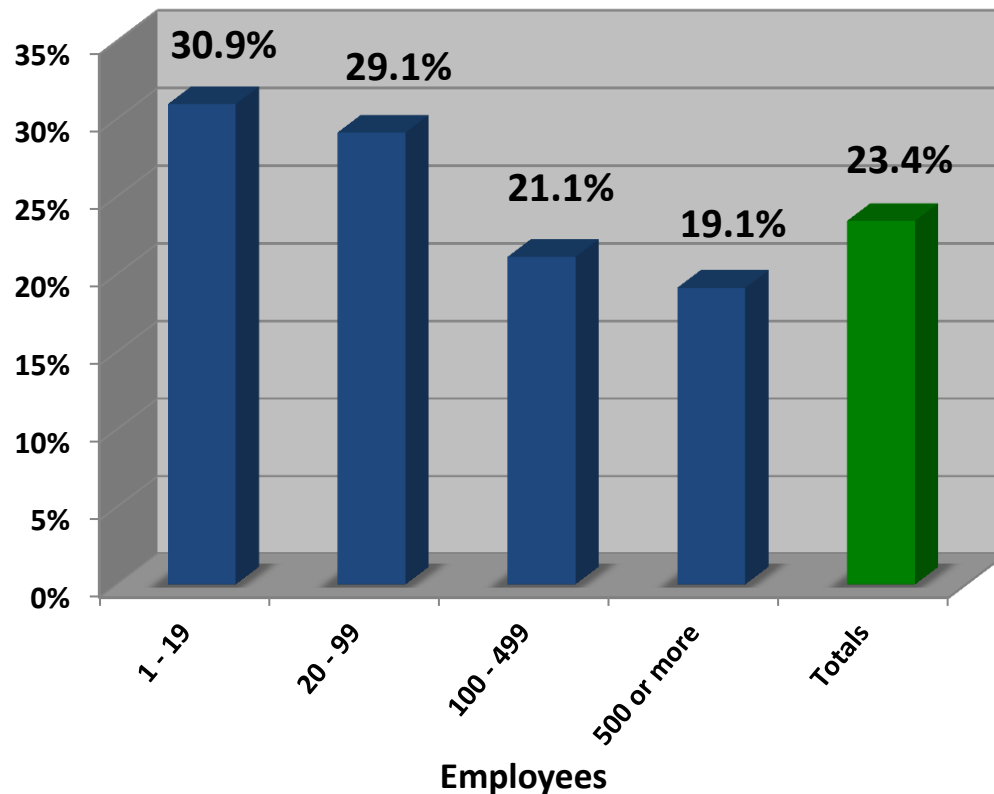


Identify Broadband Impacts

Benefits from the Digital Economy

...and Broadband Means Jobs

Broadband is responsible for 23.4% of all new jobs



**Percent of New Jobs
Related to Internet**
By Size of Employer Group

**Small businesses
create 12x more
Internet jobs
relative to large
firms**

Broadband and Communities

Broadband retains and attracts population and businesses

56% of households said they would definitely, or likely, relocate if broadband was not available

32% of households work from home or have a home-based business, with 14% planning to start in the coming year

72% of home-based businesses say broadband was essential for their business

56% of business and organizations said broadband is essential for remaining in current location



ROI from Broadband Networks

SNG projects have revealed common return on investment (ROI) multipliers from broadband investments*

Economic ROI from Public Investments in Broadband	
Contribution to GDP	10 x the initial public investment
Number of Jobs created and saved	Variable
Fiscal revenues increase	3 to 4 x the initial public investment

*Average multipliers identified from economic impact studies conducted by SNG.



Driving Network Uptake

Tools for Economic Development

Helping Businesses Take Action

Take stock



How is the business using esolutions?

- Measure current uses and benefits
- Create greater awareness



Review options



Where are gaps and opportunities ?

- Motivation
- Compare to peers
- Reveal financial benefits



Evaluate benefits



What guidance does the business need?

- Engage and advise
- Run financial impact scenarios
- Choose esolution priorities



Take action


How will businesses take action?


- Learning resources
- Choose the right tactics
- Develop a plan




Personalized Incentives: DEi Scorecard

A DEi Scorecard is delivered to each business and organization

-  Individualized **'broadband assessment'** that:
 - benchmarks competitiveness against peers (by size and industry sector)
 - estimates ROI from increased utilization
 - provides links to local advisors and support

-  Data based on the individual's current broadband utilization against industry average

-  Shared with local economic development agencies so they can raise awareness, increase adoption, and drive utilization



This scorecard compares your current level of Internet use to other organizations of similar size in your industry sector. The Digital Economy index (DEi) is a score based on the Internet-enabled applications (e-solutions) that you use.

By using this scorecard you can uncover additional e-solutions that can bring the greatest potential impact to your organization through improved efficiencies, innovation, and increased profitability.

Acme Parts Supply
MANASSAS PARK VA

Industry sector: Manufacturing / Processing
Organization size: 20 - 49 employees

Opportunities to improve your score

Increasing use of e-solutions (and your DEi score) improves your organization's productivity, competitiveness, and bottom-line - and how you rank against your peers.

Below are the top three e-solutions identified for your organization where the opportunity to drive new revenues and/or cost savings are the most significant.

e-Solution	Annual Impacts*	
	Percent	Amount
Selling goods or services		\$ 561,880
New revenues	8.1%	\$ 560,640
Cost savings	0.03%	\$ 1,240
DEi increase		0.78
Advertising and promotion		\$ 345,460
New revenues	4.9%	\$ 343,370
Cost savings	0.05%	\$ 2,090
DEi increase		0.58
Customer service and support		\$ 278,400
New revenues	3.6%	\$ 253,750
Cost savings	0.56%	\$ 24,650
DEi increase		0.78

Total annual impacts from NEW e-solutions \$1,185,740 per year

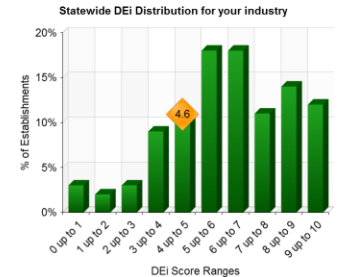
* Based on averages for your industry and size. Actual results may vary.

DEi Digital Economy Index Scorecard

The Digital Economy index (DEi) measures your current use of Internet-enabled applications (e-solutions) on a scale from 0 (none) to 10 (maximum).

Your DEi score: 4.6

Your Industry Sector: Manufacturing / Processing
Sector DEi: 6.2



Percentage of organizations in your industry sector with a higher DEi score: **81.0%**

Getting started

To get started now, please contact **Ann Mills** your business adviser with our partner **Northern Region**
email: a.mills@northern.org
phone: (888) 555-1267

For 'actionable' background information on how you can benefit from e-solutions, please follow the link below:

Actionable Information

To take the next step please follow the link below and an advisor will contact you.

Request for follow-up by an advisor

DEi Impact Calculator

- choose e-strategy based on ROI -

1. Select your organization characteristics

Select your characteristics

Industry	Employment Size	Annual Revenue	Annual Operating Cost
Professional & Technical Services	1 - 4	500,000	400,000

2. Select your actual and needed e-Solutions

Select your e-Solutions

What are you currently using?	What e-solutions would you like to ADD?
Access government information	Rich media or service creation
Accessing collaborative tools	Selling goods or services
Advertising and promotion	Social networking
Banking and financial	Staff training and skills development

DEi Impact Calculator

- choose e-strategy based on ROI -

3. See your potential benefits from increased utilization

Estimated Benefits from New e-Solutions

New Revenue	New Cost Savings	Annual Net Benefit	Add to DEi
\$ 127,800	\$ 9,640	\$ 137,440	4.09

4. Details of potential revenues and cost savings

Estimated Benefits from Individual Additional e-Solutions

Type of e-Solution	Revenue	Cost Saving	Net Benefit
Advertising and promotion	\$ 45,100	\$ 120	\$ 45,220
Web site for organization	\$ 40,150	\$ 1,920	\$ 42,070
Selling goods or services	\$ 33,850	\$ 320	\$ 34,170
Social networking	\$ 5,600	\$ 240	\$ 5,840
Supplier communication and coordination	\$ 0	\$ 5,720	\$ 5,720
Accessing collaborative tools	\$ 3,100	\$ 1,320	\$ 4,420

North Georgia example

Economic Impact for **every 100 businesses trained** in North Georgia who adopt eSolutions:

Industries	Aggregate additional revenues (annually)
All Industries	\$7.2 Million
Manufacturing	\$17.5 Million
Professional and Tech Services	\$2.7 Million
Tourism	\$4.8 Million

The Elements of Success

TO ENSURE

Economic Growth and quality of life from broadband



YOU NEED



Reliable, affordable BB



Responsive Customer Service



Meaningful utilization



Local ownership to drive economic development



Thank You

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