

Driving Broadband's Impact for Economic Development



Bringing Our Best Practices Forward: Investing in E-Infrastructure
Appalachian Regional Commission Conference
Somerset, Kentucky – October 15, 2015

SNG – we are the “Broadband economists”

WE ARE a global leader in economic development through broadband

WE MEASURE broadband use and its impacts at a micro- and regional-level for benchmarking and planning

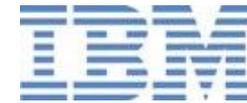
WE DELIVER strategies for economic development and community innovation through broadband



Some of our clients:



KANSAS CITY
MISSOURI



Canada



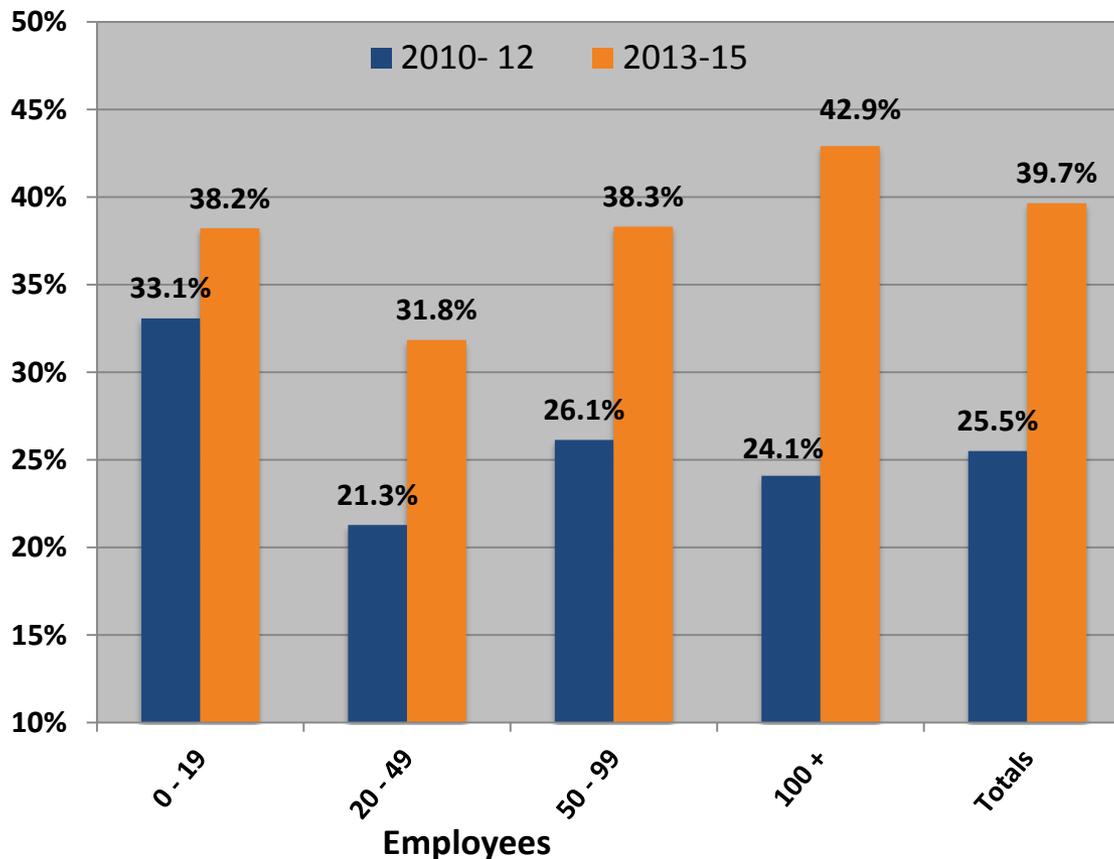
UK Department of Trade and Industry



Blandin Foundation™
STRENGTHENING RURAL MINNESOTA

Broadband Means Jobs

Broadband enabled 39.7% of all new jobs from 2013-15, up from 25.5% from 2010-12

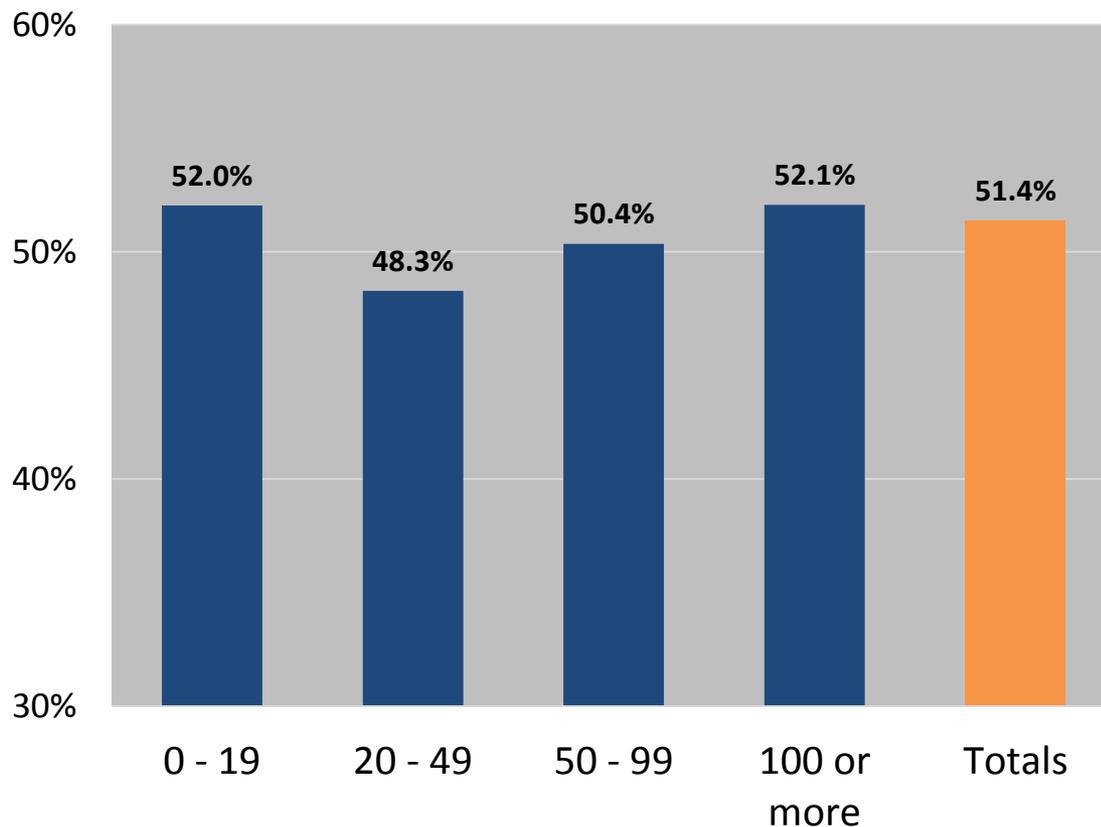


Impact of Internet on job creation has accelerated in the last five years

Internet Enabled New Jobs as Percent of all New Jobs Created by Businesses
By Size of Employer Group

A Shift to the Knowledge Economy

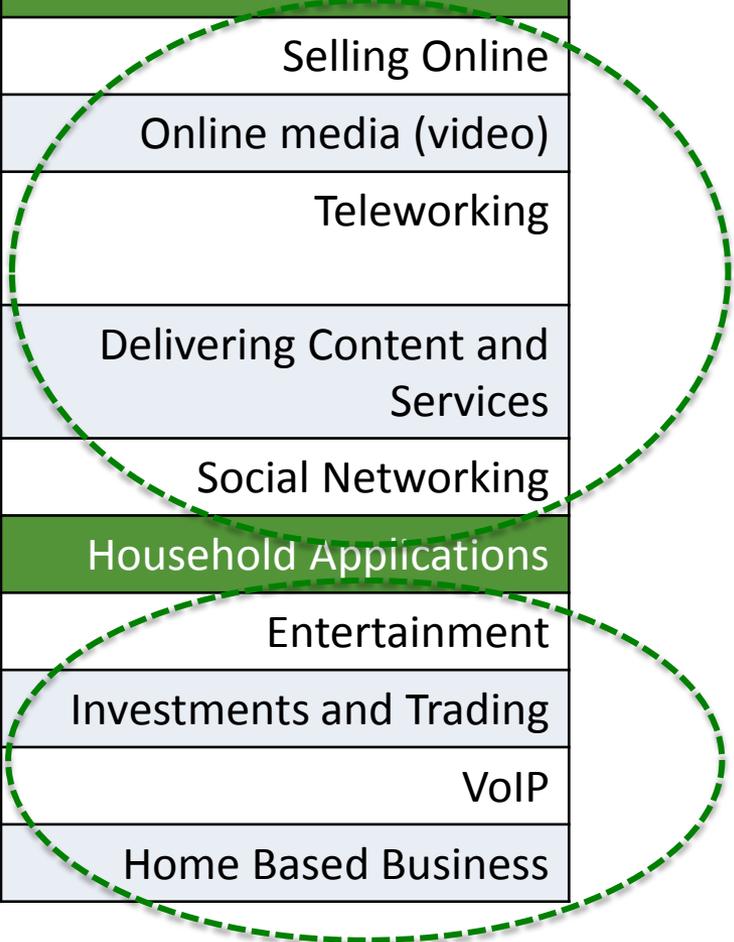
When job losses are subtracted from job creation, the impact of broadband on job creation is even more evident



**Net New Jobs Enabled
by Internet as Percent
of Net New Jobs
Created by Businesses
2013 to 2015**
By Size of Employer Group

Utilization of Internet Applications – where to focus?

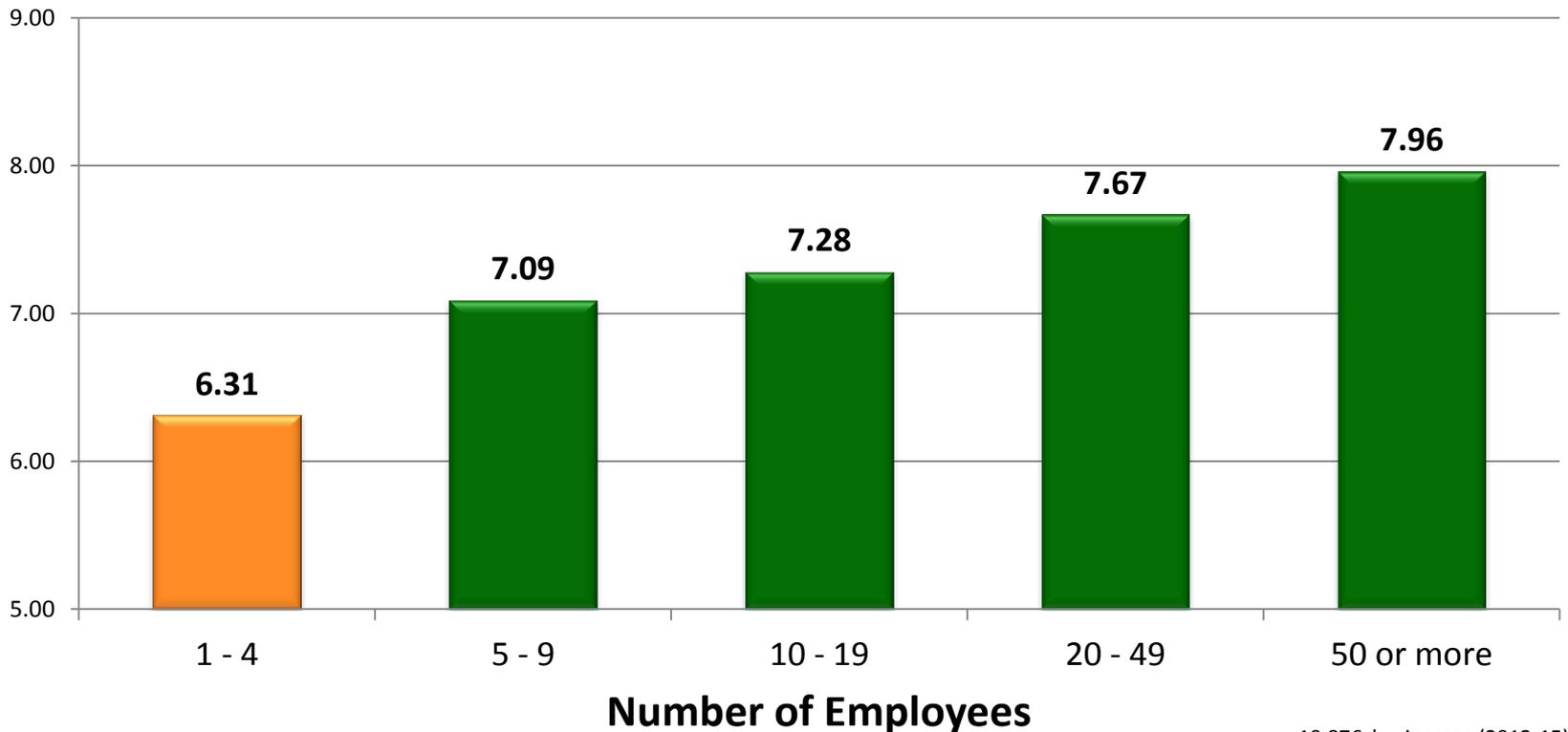
Quick to Adopt 'Laissez-faire' approach	Slow to Adopt Need awareness and support
Business Applications	Business Applications
Buying Online	Selling Online
Basic Website	Online media (video)
Research and accessing information	Teleworking
e-mail	Delivering Content and Services
Document transfer	Social Networking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



BIGGEST BENEFITS

The Challenge: The Smaller the Business, The Lower the Internet Utilization

Median DEi Score



10,876 businesses (2012-15)

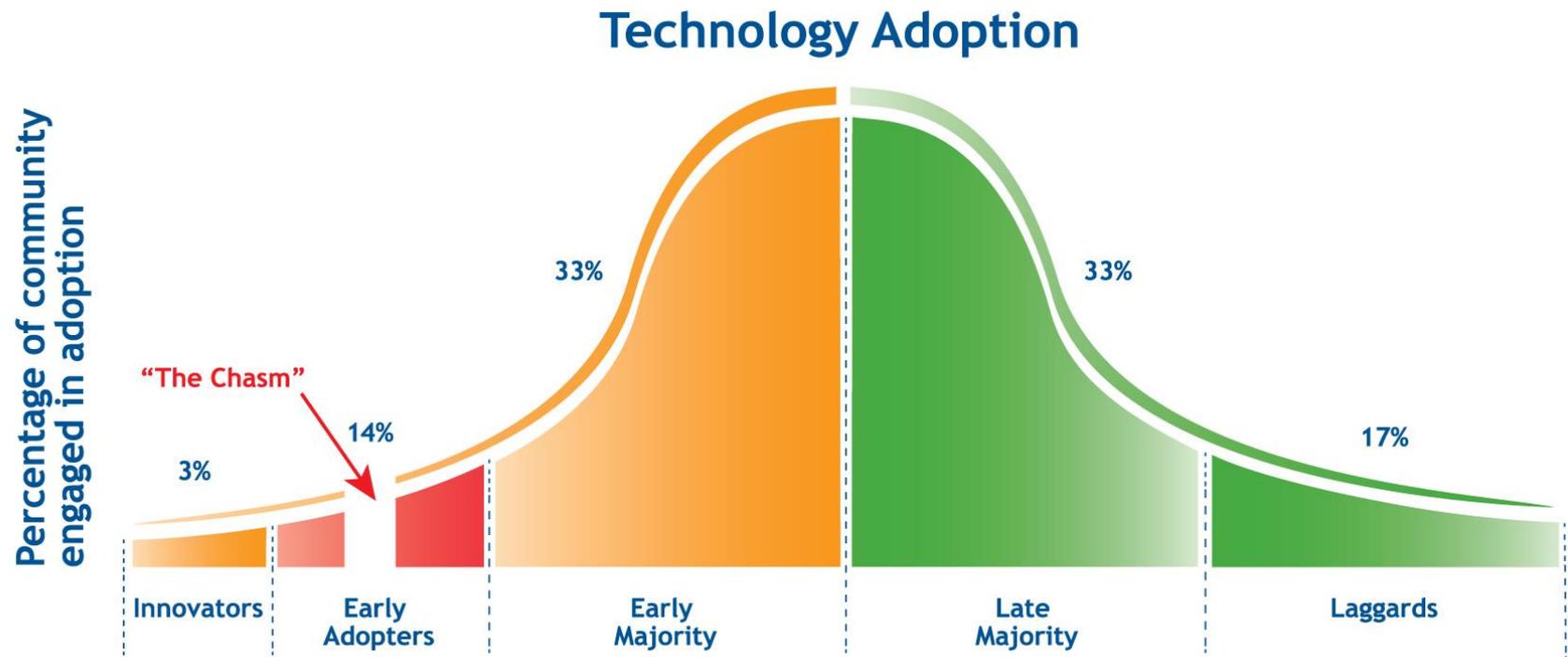
Scores are based on SNG's Digital Economy index (DEI) which tracks use of 17 different Internet solutions. A score of 10 = use of all 17 Internet solutions.

Small businesses lag behind larger peers, particularly in certain sectors

Major Industry	Median DEi Score		Variation
	# of employees 1 to 19	20 +	
Retail Trade	6.80	8.45	1.65
Real Estate	7.28	8.45	1.17
Wholesale Trade	6.89	7.96	1.07
Finance & Insurance	7.48	8.45	0.97
Arts, Entertainment & Recreation	6.70	7.58	0.87
Professional & Technical Services	7.23	8.06	0.83
Information	8.45	9.22	0.77
Health Care & Social Assistance	6.26	6.99	0.73
Accommodation & Food Services	6.41	7.09	0.68
Construction	6.26	6.89	0.63
Transportation & Warehousing	6.60	7.18	0.58
Manufacturing / Processing	6.89	7.18	0.29

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

When people buy, adopt, and utilize technology – they buy benefits, not features



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

How many
people would
venture into
Mammoth Cave
without a
guide?
- or without a
lighted path?



The Digital Divide in 2015 is about Small Businesses

Traditionally, the digital divide has been about **individual use...**

- Availability
- Expense
- Connection Speed



The **digital divide** in 2015 is with **small businesses**

- There is a “gap in awareness and understanding” and the capacity / ability to implement

Business Case vs. Economic Case for Broadband

On-balance Sheet Business Case

Revenues from network subscriptions

- Investment, operations & maintenance costs

= PROFIT

Economic Case

Increased local productivity and competitiveness,
increased business revenues, good new jobs,
better quality of life, better Internet choice, etc.

- Investment, utilization programs and business support

= BENEFITS FOR THE COMMUNITY

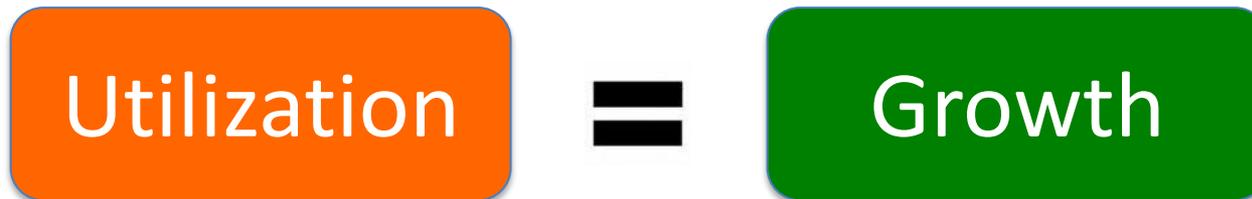
“Off-
balance-
sheet”

Community benefits > Network Profit

Broadband Availability is Often the Primary Focus, however ...



Economic Growth is Driven by Utilization



Small Businesses Don't Completely Understand Benefits

Target Market	Demand Drivers	Feature	Benefit	Result
Households	Netflix, Gaming, Multiple household users, and Devices	Speed	Enhanced lifestyle	Uptake
Large Businesses	Collaboration, Security and Backups, Cloud Applications	Speed	Competitiveness Collaboration	Uptake
SMEs	Email, websites, basic online tools, all accomplished with "basic" service	Speed	How does fast Internet impact my bottom line?	Limited Uptake

Broadband is for **Everyone**

No matter the business, the Internet can help drive...

- Awareness and interest
- Ability to reach and leverage new markets
- Feet into a store / location
- Efficiencies
- New offerings
- New ways of delivering goods and services



Bridging the Business Digital Divide

Where to go and how to get there?

How do we drive growth with broadband?



Help businesses understand **benefits** of getting online – not just ‘nice to have’



Develop a plan to help your small businesses utilize Internet applications



Support skills and training of Internet applications that increase business productivity and competitiveness

Driving More Effective Internet Utilization

Small Business Growth Program - to Drive Growth



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



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.

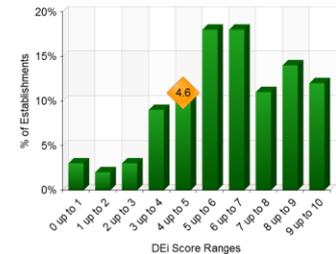
DEi Digital Economy Index Scorecard

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

Statewide DEi Distribution for your industry



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 -

Quantify 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

Detail potential revenues and cost savings by application

Estimated Benefits from Individual Additional e-Solutions

Type of e-Solution	Revenue	Cost Saving	Net Benefit
Advertising and promotion	\$ 45,100	\$ 120	\$ 45,220
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Online Learning Resources are Critical



eBusiness Modules



MODULES

ESOLUTIONS PLANNING

GLOSSARY

ABOUT

Kansas Department of Commerce: Smart e-Business Tactics

Helping Kansas small businesses utilize the Internet for greater productivity and economic benefit. The Kansas Department of Commerce e-business modules are designed to support small businesses in acquiring the knowledge and skills needed to take advantage of the potential of the Internet. These tutorials are all self-directed and include a broad range of information.

Selling Online



Selling Online increases your market potential and creates opportunities to increase your overall sales revenues. Sell your products or services locally and globally 24/7, 365 days a year.

Cloud



The "Cloud" is a network of servers that provide online services and data storage. By securely sharing resources, cloud services provide excellent economies of scale. If you receive email you use the Cloud.

Security



Our goal in breaking down the concepts of Security and privacy is to save you time and money in researching and applying Security measures.

Remote Work



We define Remote Work as work completed in an environment other than the employer workplace or simply working remotely on an occasional basis from anywhere, e.g. when on the road, salesmen out in the field, etc.

eMarketing



Using the internet for advertising and promotion of your business and products, can open up new markets and expand your customer base and increase your company profits.

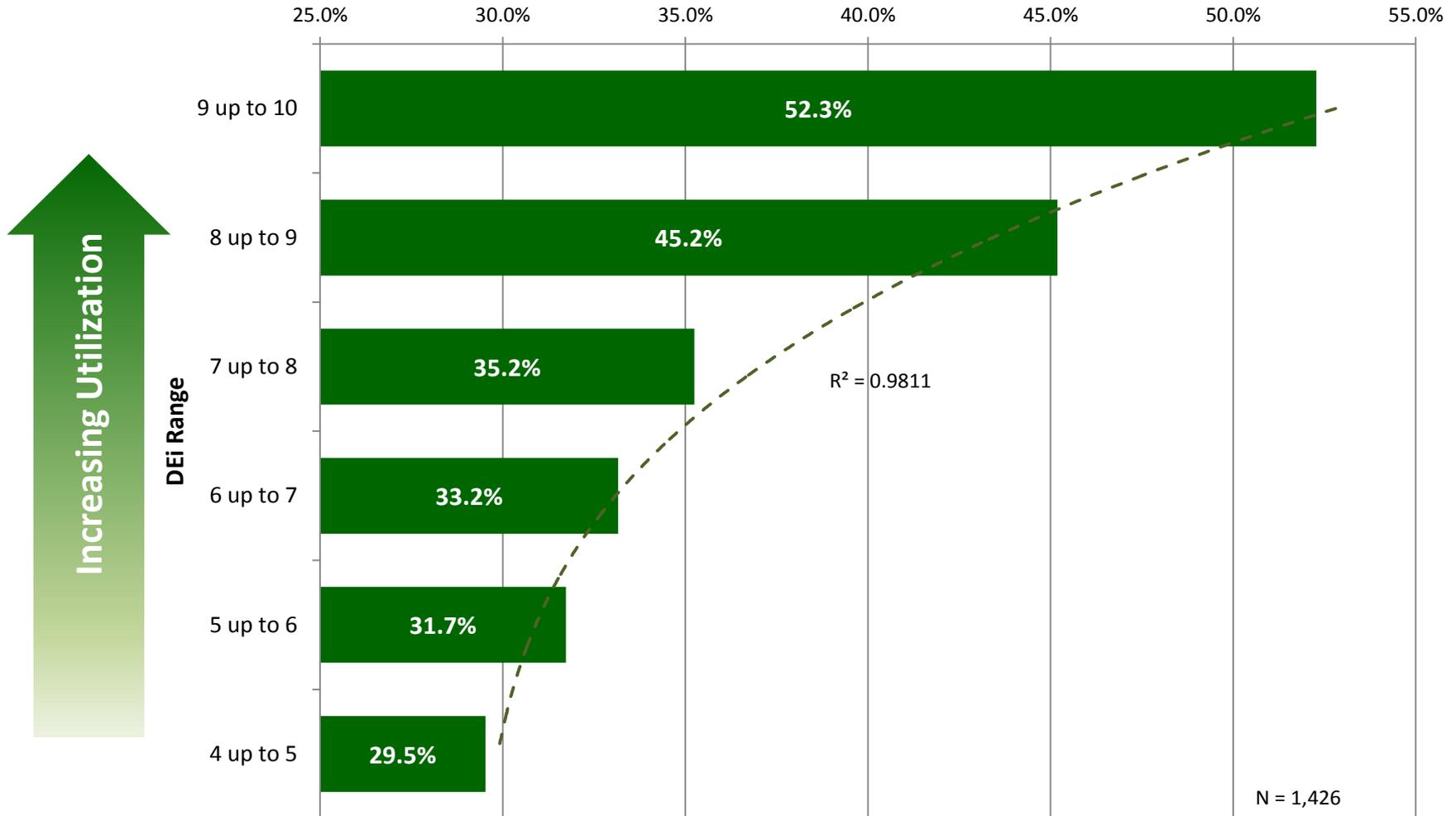
Customer Service



Customer Service can be impacted by doing business online, from the beginning of customer engagement to maintaining ongoing customer relations.

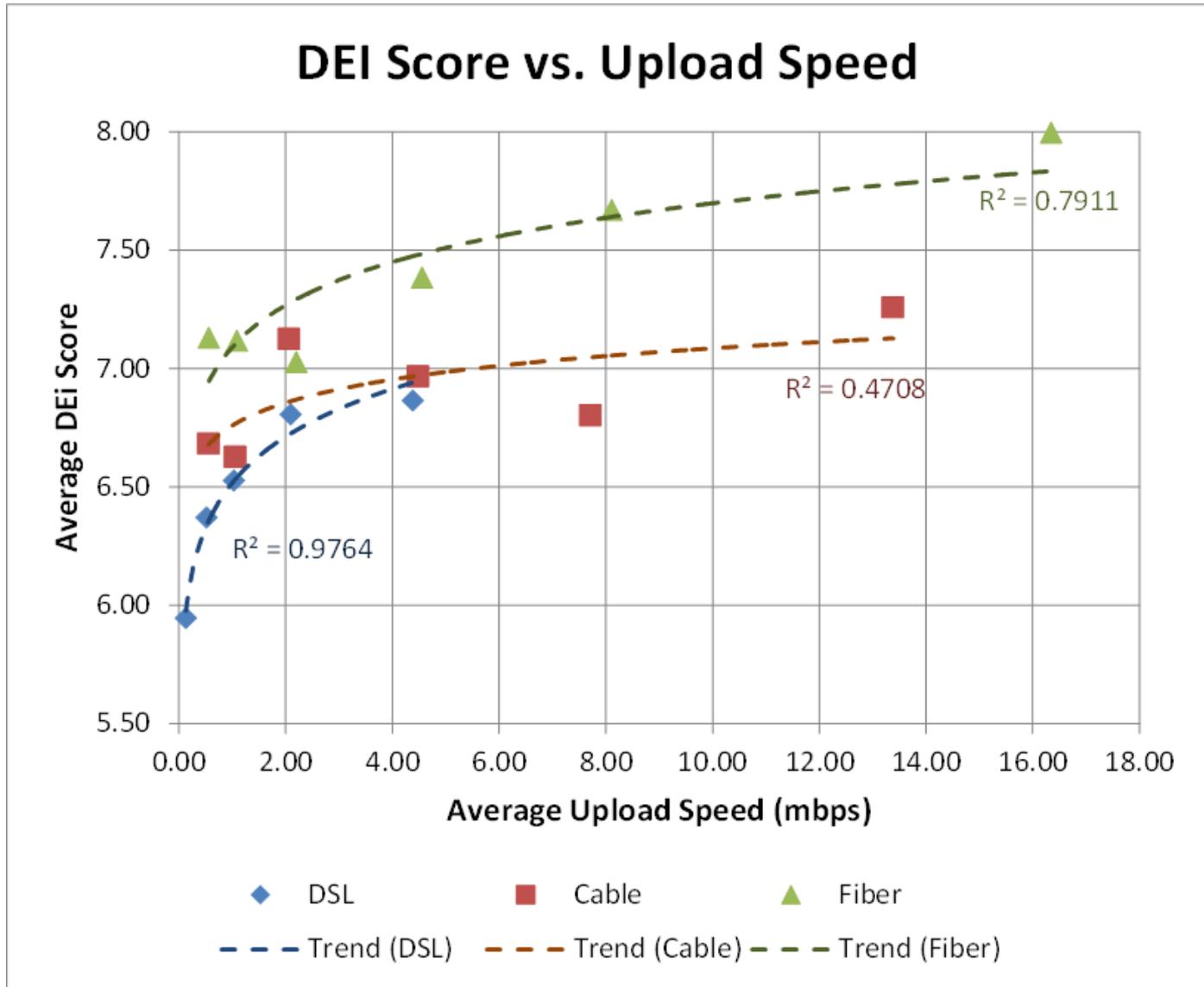
Increasing Utilization Increases Revenues

Average Pct. Revenue from Internet Use



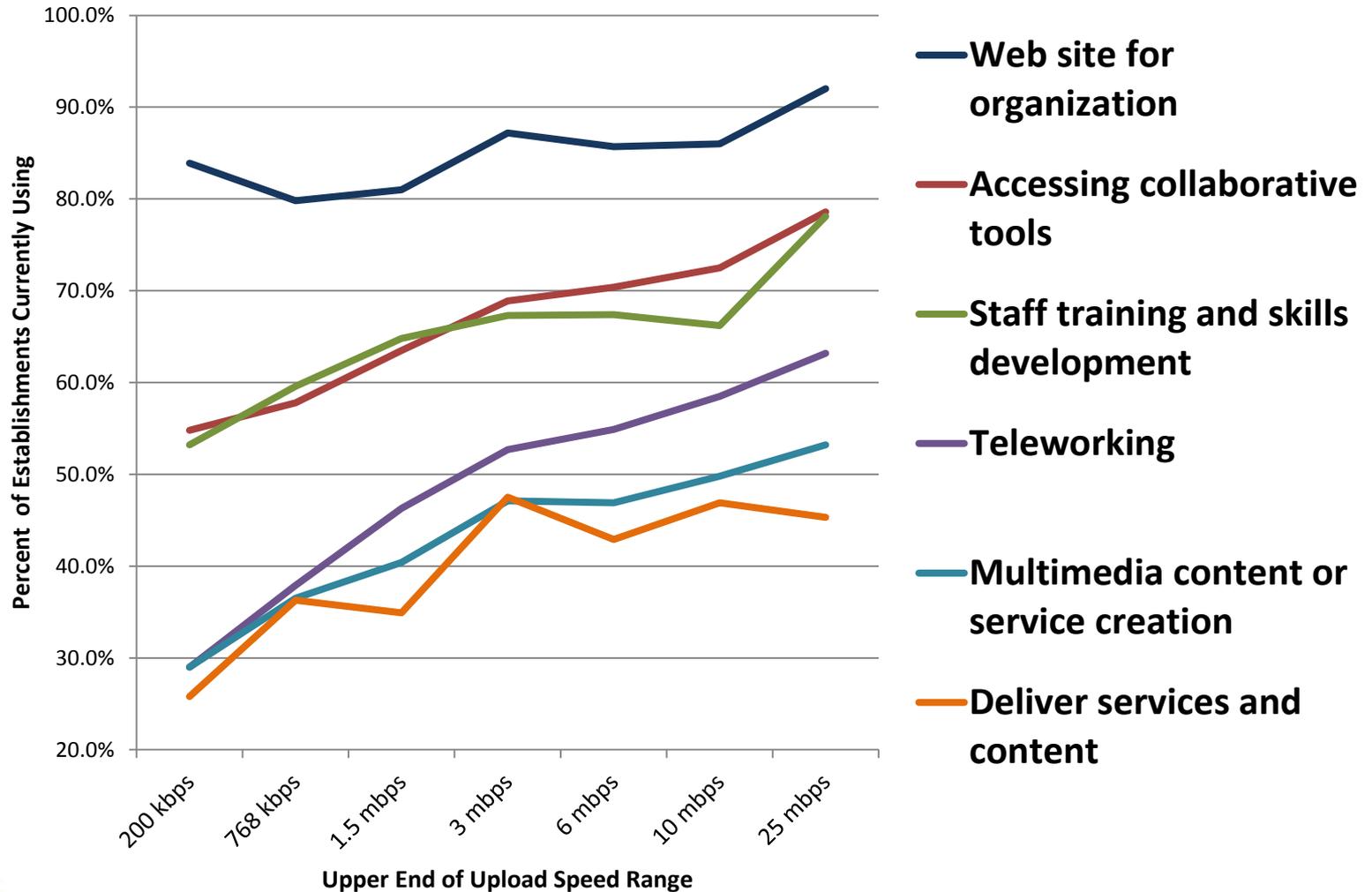
The Digital Economy index (DEI) measures how comprehensively a business or organization uses Internet applications.

4 Mbps Upload ... Digital Economy



Enabling Innovation ...

eSolution Usage Variation by Upload Speed Range



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**
-  **Grows markets for service providers**



Thank You



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Let's connect !

www.sngroup.com