"On-Site Technology Training for Small, Rural Michigan Businesses"
Presented by Eric Frederick

https://connect.msu.edu/p7tg9izx253/

Jennifer Bruen: So, I am Jennifer Bruen and this is a federally-funded program - REI, Regional Economic Innovation. We're actually called MSU EDA University Center for Regional Economic Innovation. The project was established in fall of 2011 by the Department of Commerce Economic Development Administration (EDA). And it's designed to support innovative economic development strategies that may yield high-growth entrepreneurship, job creation and economic innovation in distressed regions in Michigan. The webinar you are about to view is a collaborative effort between our network partners working to strengthen Michigan's economy. Today, I have Eric Frederick, the program manager of Connect Michigan here in Michigan, which is a part of a larger group called Connect Nation. He's going to present on an on-site tech assistance or hands-on technology for adoption and use of broadband and various technical types of software or tools. And this is for small businesses. His research paper or his co-learning plan on this tool and talking about how to implement it will be on our website and will also be presented at our summit on September 6th. That's next Thursday here in Lansing, East Lansing. If you have any questions throughout the webinar you can type them in the chat box. And please, also, you can call on the phone and we'll just keep the phone line open. Otherwise, we'll start with mute buttons so we don't have any feedback or background noise. So, without any further ado, I'd like to introduce Eric.

Eric Frederick: Alright, thanks Jen. Do I need to stop sharing this and share the other document?

Jennifer Bruen: Yep.

Eric Frederick: Alright, and here we are.

Good morning everyone. As Jen said, my name is Eric Frederick. I'm with Connect Michigan and I'm a state program manager based here in Lansing with the Michigan Public Service Commission. Connect Michigan is a nonprofit organization and we're partnered with the Michigan Public Service Commission and our task is to facilitate the expansion of broadband access adoption and use throughout the state. We're not a broadband provider, we're not actually a technology provider of any kind. Our task again is to facilitate the expansion of broadband and technology use throughout the state. We're backed by Connected Nation** which is a nation technology-oriented nonprofit which has been working on expanding broadband and technology access, adoption and use for about a decade now nationwide. In Michigan, just to give you a little bit of background on what we're been working on here, we have three state staffers: myself based here Lansing and we also have two community technology advisers who are working out at the local level with communities throughout the state to assess the local broadband landscape and to develop technology plans, some of which you'll hear about today and what communities are doing.

We complete our task through three major programs: mapping, research and community planning and outreach. So, we map broadband. We research broadband and we also do broadband in community and resource planning. Today, we'll mostly be hearing about the researching of broadband technology, in particular the use of technology and broadband to grow small and rural businesses in Michigan.

So, what was the impetus for our research? Again, we're looking at on-site, hands-on technology training for small, rural businesses. So these are the three things that drove us to look at this topic in a little more detail. Eighty-six percent of Michigan businesses have fewer than twenty employees in the state. So, a vast majority of businesses are small businesses. Small businesses provide thirty percent of total jobs in Michigan, so approximately one million jobs or so. That was observation number one - the large economic impact of small businesses with fewer than twenty employees. Second, as the rise of the knowledge economy over the past two decades or two has become more prevalent, technology, information and knowledge have become the major factors controlling wealth creation. We're moving further away from a resource-based economy - not that that will ever go away - obviously, Michigan is a resource-intensive industry state with our history in manufacturing and the auto industry, and that won't go away - but, more and more we're seeing the importance of information and knowledge and sharing of those two things being a major driver in the economy. Thirdly, through the research that Connect Michigan and Connected Nation has done, we've found that small businesses, particularly in rural areas adopt broadband at a lower rate than non-rural, larger establishments. And we'll talk a little bit about that research and the foundation for this research a little bit more. So, our purpose of this collaborative learning plan and this webinar today and some of the other efforts that we're doing - we want to establish the current state of broadband and technology adoption in Michigan, particularly in rural areas. We're going to present a review of training models' literature. So, what have we found is the best way for small business to learn new techniques, new software, new technology. We'll explore technology training models that are available to small businesses in Michigan currently and we'll also looks at some models of technology training from across the United States. What other states are doing well? Where can we look for examples of models to train and show small businesses how to use technology? And finally, we'll curate technology training best practices and establish a framework for local implementation.

So, before we get started, I want to make sure everyone is on the same page as far as some of the definitions we've been throwing around so far and we'll be later in the presentation. For the purposes here, small businesses are those that employ less than 20 employees. I know this is different than the definition the Small Business Administration has, which is 500 employees or less. But, in Michigan right now, we're looking at small businesses as those that are employing 20 employees or less. Rural areas are going to be those that are defined as rural by the census. Those are counties and places. When we say rural, that's what we're referring to, which is quite a bit of Michigan. Not that this model couldn't be applied to businesses in suburban or urban areas, but because small businesses in rural areas adopt technology at a lower rate than others, that's what the purpose is today.

And I want to make sure everyone is on the same page when we're talking about broadband. For this research, we're talking about broadband internet connections as well as technology in general, but just in case you're not familiar with the term, essentially it's high-speed internet connection and anything that's not dial-up. We all remember the days of dialing up the modem to get on the internet. And the speeds, the basic speed for broadband definition is at least 768 kilobytes per second. But more realistically as more online applications become available, they're more robust and people demand more of their internet connections, that base definition of broadband keeps creeping up and right now, we're looking at a more realistic definition of three megabytes per second Broadband is delivered by various platforms including cable, DSL which is digital subscriber line that comes through your phone connection, delivered by satellite, fixed and mobile wireless, fiber and whatever else happens to be developed in the next few weeks or so with technology that keeps evolving all the time. This research is also focused on small businesses that can utilize technology to enhance and support their primary activity, not necessarily technology-oriented businesses. We want to make sure that all of our businesses are able to capitalize on technology to sustain and grow themselves in the state. So, we're looking at businesses such as an antique shop in a rural, small town that can use e-commerce to sell their goods online. We're looking at a mom-and-pop restaurant that can put their daily specials on a social media website. Those are examples of the types of businesses that we're looking at – not necessarily those that are already technology-oriented.

So, let's take a step back and look at some of the benefits of technology adoption for small businesses. We found this in our research. We found this through some of our primary studies that we've done at the state level and the national level. But, there's three primary areas where small businesses can benefit from technology. One, is increased revenue via more thorough connections with existing customers while also accessing a vast marketplace of potential customers at a state, national and global scale. Another way they can benefit is from decreased expenditures from operational efficiencies such as automated inventory, automated accounting, automatic tax preparation, things like that that can really cut down on the time and energy spent in some of those operational, back office operations. They can also benefit from information sharing. That's what the internet was designed to do was to share information at a global scale. Small businesses can benefit from sharing access to the collective knowledge and experience of others at a global scale. They can find similar businesses in other countries and other parts of the state that they can share information and best practices back and forth. And, some examples of the actual application of these benefits include social media, teleworking or telecommuting, website development and e-commerce, automated accounting and inventory, again. Off-site file backup and security which is becoming quite prevalent now since everything is moving to a digital form. And then, of course, point-of-sale applications for retail establishments.

So, where are we in Michigan as far as technology adoption among small businesses is concerned? This table shows how small businesses are currently using technology in their everyday operations. So, starting at the top, a lot businesses in Michigan purchase or place orders for products online, they communicate with their current customers, they research ways to make their businesses more efficient, which technology can enable that. They market and advertise their products or services.

And they also do automatic billing and bill payment. And there are a number of other things here that really jive with the three ways that small businesses can benefit from technology adoption.

So, this is currently how Michigan small businesses are using technology. Let's look at the adoption of technology. So, this graph, which is quite colorful, shows the percent of businesses that adopt certain technologies. So, starting with the colored bars, the dark blue is all Michigan businesses, the light blue are Michigan businesses with more than 20 employees, the green bars are all small businesses in Michigan – again, those with less than 20 employees – and the red is rural small businesses, and rural small businesses with less than 20 employees.

And then, the different indicators that we're looking at when it comes to broadband or technology adoption are here along the bottom. So, at the statewide level, we're looking at about 82 percent of businesses use a computer in their everyday operations. Larger establishments use them more prevalently than smaller businesses. But that number drops quite a bit for rural, small businesses. Stepping to those that subscribe and use broadband or high-speed internet connections, we have about 70 percent of businesses in Michigan as a whole subscribe to broadband. And when we look at rural, small businesses that number drops to 60 percent. And that's a pattern that we're seeing across the board, that rural, small businesses adopt technology at a lower rate than all businesses in Michigan as a whole and those that are larger.

Another interesting point is those that have a website. Obviously a website is your gateway to accessing customers and having an online presence. About 70 percent of all Michigan businesses have a website where only 43 percent of rural, small businesses have website. So, this is what we're seeing as far as technology adoption goes at a statewide level.

Because Connected Nation works in states all across the country. I wanted to give a little bit of perspective on how Michigan's rural, small businesses compare to rural, small businesses on the whole at the nationwide level. And I chose Iowa as a comparative state. They have a concentration in agriculture just like we do here in Michigan. And, as we can see rural, small businesses in Michigan here in the green bars still adopt technology at a lower rate than those at a national level and in Iowa as a comparative state.

So, why does it matter? Why should businesses adopt technology and use them, particularly small businesses? One of the questions that we ask in our survey is annual revenue for the businesses that we survey. And while there's a little bit of fuzziness in there because it is self-reported annual revenue, we're seeing a trend that for Michigan rural, small businesses that don't adopt broadband, their median annual revenue is about $70,000. When a rural, small business adopts broadband and related technologies that revenue jumps substantially and when they adopt and use a website to put themselves out on the internet, that revenue jumps even more. So, while these numbers do change from year to year, that pattern stays the same. That broadband-connected rural, small businesses and then those that go further and actually have a website and use the internet, there's a pattern emerging for increase in median annual revenue. Earlier this year, we released a white paper on small business technology adoption. Twenty-nine percent or so of small businesses in Michigan earn at least some of their revenue from online sales, so about 30 percent, and on average,

those businesses earn 34 percent from online sales, or approximately $190,000 a year. When we extrapolate that to a statewide level, this represents almost $7 billion in revenue for Michigan small businesses, even though only 30 percent of them are earning their revenue from online sales. So, there's great potential for small businesses to increase their revenue and sales by participating in electronic commerce.

So, what are the barriers to technology adoption for small businesses? This is probably the most important question we ask on the surveys. If you don't have broadband service at your business, why not? Why don't you have it? What is stopping you from subscribing to that service and benefitting from those technologies? The number one reason is "we don't need it or we are getting by without it". When I came to this position just over a year ago, I was shocked by this fact. That it's not cost. It's not that it's not available. Availability of broadband is still the number three factor for businesses not subscribing to broadband. But, overwhelmingly, the number one reason is they feel that they don't need it or that they're getting by without it. And in a digital age that we're having and the tough economic times that we're seeing, finding ways to expand and make your business more efficient through technology is almost imperative. So this barrier, this we don't need it or we're getting by without it, really speaks to the awareness of what that technology can do for you. Obviously, there are businesses that don't have computers. That's another step backwards. And then of course availability of broadband in rural areas, that's another issue, but again, not even close to the number one issue for businesses not subscribing to broadband.

So, in summary, rural, small businesses adopt technology at a lower rate than larger, non-rural businesses. There's a clear pattern that exists between annual revenue and technology adoption among small businesses. And, the awareness of broadband's benefits is the number one barrier to technology adoption. We want to make sure that businesses see how they can benefit from it, see how they can use it and then want to adopt.

So, let's look at how small businesses best adopt this technology or are trained or exposed to new ways of operating their business. We conducted a literature review that pertains to various training methodologies among small businesses to see what small business owners are saying about how they learn. What is the best way to get them new information? Some of the themes that emerged include ease of use or making technology less daunting. They were concerned about geographic isolation and the distance to centralized training events or activities. They were concerned about flexibility in time as well as delivery methods. And making sure that the topics training are industry and topic-relevant, that it's directly related to their business.

So, let's look at each of these fairly briefly. So ease of use, training that makes technology less daunting is key to increasing adoption among small businesses. This was seen throughout the literature. It's something that small business owners kept saying over and over again that technology needs to be made less daunting. Small business owners are some of the hardest working people I know and they have to deal with every single step of their operation. So, however technology can be made easier and less daunting, they'll be more likely to adopt. And not only making sure that technology is easier to use, but that it's perceived as easy to use. If that perception of ease of use is there, they'll be more likely to look into training for that new technology. And this ease of use doesn't only apply to owners, but to employees as well. Sometimes rural, small

businesses are a one person or two person operation, but oftentimes they might have more employees. So, if we can make it easy for owners and employees to use, the better. And technology training may also help create a more digitally literate workforce in rural areas in general. So making sure that you have a workforce in a rural area that's digitally literate is important for small businesses that are looking to expand because if a business adopts technology and they can't find the workers that have those skills to use, it doesn't do them much good. So, we need to make sure the rural workforce is digitally literate.

Geographic isolation, obviously we're talking about rural areas. Widely-dispersed businesses or small concentrations of establishments in rural areas lack access to conveniently-located training facilities or programs. If training programs are offered in a centralized location, businesses are going to have a tough time getting there. Business owners, like I said, are, it's often a one or two person shop where they have very few employees and sending them away for training is downtime for that business. So, in a survey of rural business owners in Great Britain, 30 percent cited distance and transport as a constraint for participating in training activities.

Flexibility, the U.S. Small business Association's Training Program Survey found respondents valued training programs that were customizable and had flexible times, delivery methods and locations. So that flexibility is key for small business owners. They can't afford to have that downtime to have the owner or the employees go to training in a centralized location. The times have to flexible. If an emergency comes up while you're in the middle of training at your business, that takes priority over that training activity. And this is supported by the research. Fifty-six percent of rural, small business owners in Great Britain stated that releasing staff from work was the main constraint to providing any type of employee training, technology or otherwise. So, flexibility is key. And then, industry and topic relevance. Programs must meet the specific needs of the business or be industry-specific. That technology also has to be related to how it can improve your business. So, saying that a business should adopt social media doesn't do any good if they can't see exactly how that adoption will improve their business. It has to be explained in a way that social media will help you connect with existing customers. It will help you find new customers out there in the marketplace. So relating that technology and making it relevant to their businesses operations is key to technology adoption.

So, we take these four themes: distance to training site or geographic isolation, flexibility in time and delivery method, the comfort level and ease of use, and then industry and topic relevance. And, when we put all of those things together, we're really looking at a model to do on-site technology training for rural, small businesses

When I say "on-site", I mean actually having somebody go to the business and show them how to set up a Facebook page. Get connected on LinkedIn. Set up an e-commerce website. Set up a computer system and get them broadband connected. There's lots of businesses we've seen from our research that don't have those, even in the basic level of technology adoption for using a computer and having a broadband connection. There's a whole continuum of need with rural, small businesses that on-site technology training can really help. So, again research shows that small business owners prefer one-on-one training. On-site demonstrations and hands-on activities result in the successful and sustainable implementation of new methods and operations. If you can show a small

business owner on their own machine how to do certain activities, they're much more likely to continue and have sustainable adoption of that technology. Training activities are popular due to convenience. Obviously, coming to the businesses as opposed to having business owners and employees leave is much preferable. It's ability to tailor training needs. So, if it's an antique shop that wants to get an e-commerce website or a mom-and-pop restaurant that wants to get into social media, you can tailor those training programs to that specific need. It also provides a social learning environment. So, not only are you sending only one employee to an off-site training, but now you're able to train all employees who then have this social learning, collaborative environment where they can learn from each other. Maybe one employee picks up a little faster than others, they can show them. So, again you're creating sustainable method of technology adoption.

So let's look at what's available for technology training in Michigan. We're focusing on technology training specifically as it relates to on-site delivery methods. We found through some of our research that technology training is primarily focused on three different activities: business plan development, marketing and financing. And these three areas are absolutely critical to starting and sustaining a small business in Michigan. And there's technology that's interwoven through these three elements. For example, you could come up with a social media marketing plan. You could look at adopting Intuit or Quicken to help with some of your financing. But, technology is not a primary focus of small business training in Michigan, when it comes to one-on-one on-site types of training. When it comes to technology training, formal technology-related training is conducted via centralized workshops and events and online webinars and videos. We've come to find several examples of this in Michigan, where they host a LinkedIn seminar where folks, where small business owners come in and learn how to use LinkedIn or Facebook or other social media. There is also a plethora of online webinars and videos from not only Michigan-based organizations, but national and international organizations as well where small business owners can go online and do a tutorial or listen to a webinar on different technology-related topics. We've found through our research, that anecdotally, business owners often seek technology advice or training from friends, family members or fellow business owners. We've heard numerous times about business owners who, they contact their grandson to figure out how to use Facebook or how to set up a new computer because that generation knows it a little bit better than we do. We've found that there's an informal network of technology training that goes on, but nothing formalized.

And there's several organizations in Michigan that support small businesses, primarily the Small Business & Technology Development Center here in Michigan, that's based out of Grand Rapids, but has regional offices throughout the state. They provide one-on-one counseling, again mostly in business plan development, marketing and finance. They do host workshops and events. Again, the social networking, Quickbooks, essentials, things like that, to help get businesses to adopt technology. They have a network of business resources throughout the state, mostly at local libraries and other related organizations where businesses can go and access different resources. And, they also partner with Google, Intuit and other statewide organizations in the Michigan Get Your Business Online Program, which offers free websites to Michigan small businesses, which is a great program. So the Small Business & Technology Development Center is the state's primary trainer and support network for Michigan small businesses. Other organizations that provide training and support include the Michigan Economic Development Corporation, the Small Business

Association of Michigan as well as Michigan's many regional and local economic development entities. These entities play a key role in supporting small businesses, particularly in rural areas.

So what did we find at a national level? I didn't list out all of the different models we found here because we found so many that are going on in other states. But, overall public-private partnerships are the favored model of training for technology for small businesses. Partnerships in New Mexico, Arizona and Tennessee provide technology training via off-site workshops and events, very similar to what the Michigan SBTDC does. Training in Vermont and Minnesota is provided by educational and economic development entities. And, again these models will be available through the collaborative learning plan that we've put together which is much more robust than the presentation today. Chicago's Business Resource Network, which was funded by a (?) grant a few years ago, helps make local businesses profitable and sustainable through free broadband access, business software and technology workshops, so it's almost a lifetime sustainable adoption method that they're implementing in Chicago to get small businesses access to the internet, the technology software tools that they need to get going and then the technology trainings workshops to help businesses learn how to use that software. And we're also found several private, for-profit groups such as New Horizons and KnowledgeWave, among many others, that provide workshops and training to customers. Michigan has several organizations and private, for-profit corporations that provide technology to customers here in the state.

So, taking all of this knowledge that we've gained through this research, looking at technology training and where we are as far as technology adoption for small businesses go, what small business owners are looking for, the models that are available in the state as well as nationwide, how can we do this in Michigan to provide on-site, hands-on technology training? Again, the models that are available here in Michigan and nationwide are based on centralized technology training on specific topics for small businesses. So what we're looking at is trying to find a way to do this at a local level. Just a few points before I get into the model that we've developed. It's a very loose model and it's definitely a work in progress. And we're hoping to hear from the REI Network on ways that this can be improved and their thoughts on how it can be implemented locally and so on. It's definitely a work in progress. It's based on a very basic planning model, planning process. You know, assess what you have, find the need and implement the plan to get it done. We want to leverage existing resources and I put the caveat, no one has money. In tough economic times, we've seen funding for various organizations and local governments decline, so we need to be able to leverage existing resources to get this done. And it really builds on creating public-private partnerships as we've seen the models of this type of implementation done in other states as well as here in Michigan. So, we're looking at assessing, cataloging, organizing and implementing. That's really the jist of the whole process.

So, the model looks at six basic steps. Finding and organizing entity at a local level to gather local stakeholders and resources. Step two, assessing the need. As we've seen technology adoption, we've assessed the need at a statewide level, but now we need to do it locally. We want to inventory community technology assets. Again, building on the resources that we already have in place, but putting them all in one spot to create an inventory of those assets. Again, creating technology partnerships. Taking the need, taking your assets and putting it together to find gaps and create

training partnerships. Building awareness and then, follow-up and support networks. So, we'll get into each one of these briefly.

So, the first step would be finding a group at a local level that wants to be the organizing entity for this type of project, implement some kind of hands-on technology training for small businesses. Collaboration and cooperation are key. Again, we want to leverage existing resources. Nobody has direct funding for this as of yet, so we want to make sure we're working together as a community, as a team and organizing around an entity that supports small businesses. So where can we find this organizing entity? Where do we look for stakeholders that support small businesses at a local level? Well, we're fortunate in Michigan to have a number of organizations that support small businesses and the business community in general at a local level. So, that organizing entity or champion for this model could be any one of these organizations from chambers of commerce, regional Michigan SBTDC offices, regional MEDC staff (Michigan Economic Development Corporation), local and regional economic development organizations, we have several throughout the state that overlap. Main Street programs, they're not necessarily a forgotten program, but they're a program that could be leveraged to help small businesses in rural areas. Downtown development authorities, corridor improvement authorities, local business associations, Michigan SmartZones, the Michigan Skills Alliances, Michigan Works! Offices. We don't want to just look at organizations that support small businesses, but those that support the workforce as well, that are working at these small businesses. Technology and business-oriented nonprofit organizations, community colleges, private-sector technology companies as well. So, there's a wide array of stakeholders that really help this cause at a local level. We haven't defined community in this process. Michigan has 1,856 units of local government, from counties to cities, villages and townships. So, we purposely didn't define community because often economic trade areas don't conform to political boundaries. So, if a local group is going to work on this effort we want to make sure they can organize themselves as they see best to support the small business community. So maybe it is a countywide effort in a rural area, maybe it's a city and the surrounding four or five townships. However a community wants to define itself that ultimately benefit the small business community will work best for this model.

So second, we need to assess the need. So just like we've done at a statewide level in looking at technology adoption for rural, small businesses, we need to do it at a local level. We need to understand the current technology adoption for local, small businesses within these self-defined communities. All of those organizations that we saw in the previous slide interact with small businesses in some way and that provides an opportunity to really assess their needs. The training team could develop a technology questionnaire with things such as: What types of technology do you use? Do you subscribe to internet service? How has technology improved your business? And these are just a few examples of the number of questions that could be asked to really gauge where local, small businesses are as far as technology adoption goes. The data gathering should be convenient for business owners. As we've seen through the research, business owners are busy people. They need to, I'll use the term "be catered to". If you can use existing, regularly-scheduled business roundtables or focus groups to gather this information, so you're not overburdening businesses owners. If you can do door-to-door or personal phone interviews for this information, whatever helps keep that small business running while you're gathering this information is best. And an individual assessment would be most useful. So maybe the chamber of commerce wants to

do a survey of all of its members to gauge their technology use. The more data you can gather on the current use of technology of small businesses in this community, the better so you can have a really great microlevel idea of how businesses are using technology.

Thirdly, we want to create a comprehensive inventory of programs, resources and organizations and individuals with the interest and skill to train small businesses. This inventory of assets can really occur concurrently or following the needs assessment, however the community team decides to go about it. But what we're really looking for is gathering a catalogue of these assets and resources available to small businesses. All of those organizations I listed previously support small businesses or have contact with small businesses in some way, but if we can pool all those resources together in a single location, now we can really create a catalogue again of what's available to support small businesses when it comes to technology adoption. And there may be resources that are outside that training team. A great place to look would be high school or vocational school technology students and teachers. We've had an example of a program in Northern Michigan where a graduation requirement for the high school is community service. The high school technology students have partnered with a senior center up there to train seniors how to use Facebook and LinkedIn. And while that's not a business example, that's a great way of leveraging those resources that you have to train businesses. So maybe technology students can gain their community service requirement by going to a business and showing them how to setup a social media page and training them how to use it. Another great example of a resource that may be outside of the technology training team that's been established are technology vendors themselves. Broadband providers, software developers, web designers that you might have in the community, even hardware sales and retail sales would be a great place to go. We've heard again, anecdotally, that, for example, when a broadband provider goes out to do an installation at a business, they don't want to just install that broadband and leave because if that broadband doesn't work after they leave, the business owner is going to shut down their service anyway so it's in their best interest to help businesses know how to use that broadband connection. So, that's already being done, but at a very informal scale. So, if you can work with those technology vendors in a community to identify folks that could go out and train businesses on how to use this technology, the better. So, definitely want to look at technology vendors in a community. And also libraries, libraries are a great resource. Obviously, they are a collection of resources for folks so making sure you know what libraries have available, even when it comes to the hardware and connections that they have from public computer centers to the Michigan SBTDC business resource centers that they might have, so you'll want to make sure those libraries are catalogued as well. You'll also want to inventory locations and facilities, anything from wi-fi hotspots, public computer centers, video conferencing facilities that might be available in the area, you'll want to make sure there's an inventory of those as well so you're getting a very comprehensive look at technology that's available to small businesses in the community. And then, after this you can identify the capacity and the gaps in local technology resources.

Fourthly, and this is slide where I like to say the magic happens. So, we've taken the needs assessment and take the asset of inventories, this catalog that you've created. Put them together, and find out where the gaps are and then create public-private training partnerships to fill those gaps in the needs assessment. So through this process you're really identifying topical experts that

can serve as on-site trainers, so again, maybe it's the high school students that can show businesses how to do social media, maybe it's the broadband provider that can help businesses discover new ways that they can use the internet to expand themselves, maybe it's a web developer that wants to give back to the community a little bit and set up e-commerce websites for small businesses. You're identifying these topical experts that can serve the small business community and creating a catalogue that's a go-to resource for small business when they're ready to adopt technology. So through the needs assessment you've found an antique dealer that you know, they've got a computer, they've got a broadband connection, they've got a website. They're doing pretty well, but maybe they can expand and use e-commerce. So now, through this process, you've identified that there's a web developer in town that knows how to set up an e-commerce website and wants to help the community and give back a little bit and set up those businesses up with e-commerce websites. You can facilitate the discussion between those two entities and create a public-private training partnership and put that business in touch with that resource. Through this process, you'll need to include hardware and broadband experts as well. Again, getting back to that continuum of need among rural, small businesses, you're going to have businesses that have zero technology adoption, and you're going to have those that are probably in the middle of technology adoption I'll say, and then those that are fairly sophisticated that just want to know a little bit more. So you're going to want to look at the whole continuum of need for rural, small businesses and that can be done in the needs assessment. You'll find exactly what kind of businesses they are that are in need and where they are on that continuum.

So, building awareness. We've seen that most businesses in Michigan say they don't need it or they're getting by without it when it comes to technology. Small businesses respond best to technology when the focus is on how to achieve business results instead of solely technology for technology's sake. We don't want a business to set up a Facebook account just to have one. They need to know how to use it, how to sustainably adopt a Facebook account so they can achieve those business results and sustainably grow themselves. The best way to do this that we've found through our research and through our operations throughout the state is to gather stories. We want to provide local examples with local businesses on how they're using technology. So maybe through your needs assessment you've found a mom-and-pop restaurant that is using social media to push out discounts to existing and potential customers. Tell that story through a one-pager, through video, through posts on a website, through posts on social media. Tell that business's story to hopefully inspire other businesses to do the same thing. When a business owner can go to a similar business owner and say "Hey, how did you go about doing that? Who did you talk to?". That interaction really inspires them to get going and probably makes them feel a little bit more comfortable in adopting that technology if they see others in the community that are doing the same thing. It also fosters a little bit of friendly competition as well. So telling those stories, giving local examples, gathering before-and-after accounts for businesses that have gone from the needs assessment to participating in those private-public training partnerships. Tell those before-and-after accounts to give businesses a better idea of what they could be doing with technology. Building awareness is really, really key to the success of sustainable adoption.

Finally, technology adoption is not a one-time event in the life of a business. Social media needs to be updated, technology changes constantly, websites need to be updated. So, you really need to

create a network of support and follow for businesses in this local community. By transparently diffusing the needs assessment, the case studies from the needs assessment, the technology resource catalogue that you've created and these success stories, you're really creating an informal network of technology users and support. You have a go-to place for businesses when it comes to technology. They know which businesses are using what and where so they can go to each other and figure out to support themselves in the social media and other aspects that they might adopt. If the resources permit within a community, you could also create a more formal, facilitated roundtable of businesses to provide support to new adopters. So, maybe the chamber of commerce has a monthly business owner gathering or a luncheon that they already use, maybe devote half of that time for technology or tack on another half hour to that for businesses to ask general questions about how they're adopting technology. You could also set a good example or be good stewards of technology by setting up online forums on one of those organizational web pages or create email listservs where business owners can ask each other questions via email. You could also use social media or other technology means could be used to create a more formal network of support for rural small business adoption. So the follow-up and support networks are going to be key to maintain the adoption of technology. Again, the bottom line is inclusive and regular peer-to-peer assistance can create sustainable local technology adoption. Businesses talking to each other, businesses having access to those resources you've gathered through this process are going to be key to keep this going and getting more and more businesses to adopt technology.

So, in conclusion, on-site, hands-on technology training has the potential to increase sustainable adoption and use among Michigan's small, rural businesses. Again, we want to take those 43 percent that believe that they don't need technology or they're getting by without it, turn them into technology adopters and really allow them to sustain and grow themselves here in the state. We don't want small businesses shutting down because they couldn't expand or grow or find a market for their product. A great example of this, I have two great examples actually. Cops and Doughnuts, a doughnut shop in Claire which has become world famous for their business model, while they sell great doughnuts from their bakery right there, they also sell their coffee online now. So, because of e-commerce they were able to expand and bring a little bit more revenue through that operation. Another great example, just outside of Munising, Michigan there was a small business operation of one guy that does woodworking and sells beautiful and exquisite front doors. They're like nothing else you've seen. I actually drove by the operation a few months ago. His business plan was just selling to anyone who drove by his front door and saw his sign. So, a broadband provider actually went out, got the business connected and showed him how to do e-commerce. So now, you can access his business through a website. Shipping a door I'm sure would be quite expensive, but he sells other products as well so getting them connected, we're able to turn a product that was once advertised through drive-by connections now through an e-commerce website can actually expand and grow and hopefully increase the revenue for that business.

So we're looking at a local implementation model for this type of service. Again, it's a work in progress. Those six steps we saw are, frankly, very vague. So we're looking for input from local and regional economic development entities and the different organizations that we listed on the page on how this might work on a local level. That's where the "what now?" question comes in. What can

we do now to try to implement something like this at a local level, to increase technology adoption among rural, small businesses.

So, with that, we welcome comments, questions, examples, assistance and thoughts.

And, this is my contact information, our website where we would be happy to receive any of that feedback.