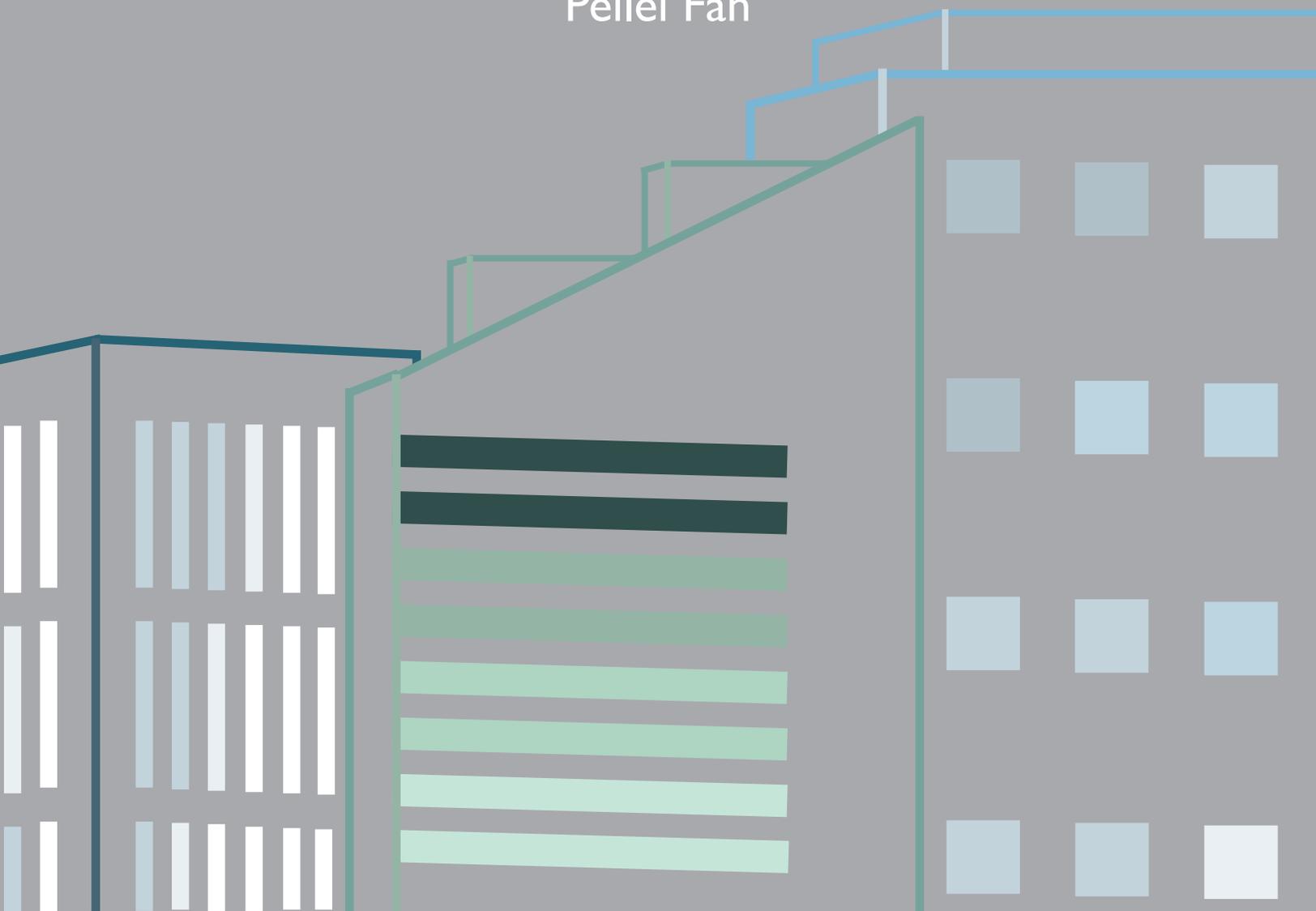


# Integration of Online Market Place and Main Street in Michigan Communities: Drivers, Impacts, and Policy Implications

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Michigan State University  
EDA University Center for  
Regional Economic Innovation

**2019 Co-Learning  
Plan Series**

**MICHIGAN STATE**  
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# Integrating the Online Market Place and Main Street in Michigan communities

**Drivers, Impacts, and Policy Implications**

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*EDA University Center for Regional Economic Innovation*

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# INTRODUCTION

Sears Holding, once the largest retailer in America, filed for Chapter 11 bankruptcy protection and announced the closure of 122 stores nationwide on October 15, 2018, including eight stores in Michigan, by the end of the year. The fall of this American retail giant, as well as others such as Macy's and Younkers, is standing in stark contrast with the rise of electronic commerce superstars such as Amazon and e-Bay who are increasingly expanding their business empires. Because of the reshuffled retailing landscape and the decline of traditional retailers, a hybrid strategy of combining online market place with Main Street, referring to the physical built environment in particular but not exclusively to down town areas, dubbed *click-and-mortar* has gained increased traction as a local proactive strategy due to the benefits of cost-saving, improved differentiation, enhanced trust, and market extension (Steinfeld et al, 2002).

This CLP examines how retailers might synergize the online marketplace and Main Street in Michigan communities. The overarching research questions are:

- (1) How have local businesses integrated e-commerce with the physical marketplace and reaped the benefits of such integration? How has the built environment transformed, either through a change in function for Main Street stores or the growth of fulfillment centers and logistics operations?
- (2) What are the key drivers and barriers that have affected the realizations of these benefits? What strategies may increase the integration?
- (3) What are the implications of exogenous factors, such as globalization, trade regime change, and tax regulations?

To address the above research questions, a review of literature on the integration of click-and-mortar e-commerce, major benefits pitfalls, and strategies was conducted. and, secondary data on e-commerce was analyzed. In addition, interviews with Michigan businesses and communities were conducted to identify drivers, barriers, and strategies in the integration of online and physical structures of businesses.

## LITERATURE REVIEW

This section highlights the main issues related to click-and-mortar integration (1) the process of e-commerce and physical marketplace integration, (2) synergistic benefits and pitfalls of integration, and (3) the key factors affecting click-mortar integration or e-commerce success in general.

### *PROCESS OF E-COMMERCE AND PHYSICAL MARKETPLACE INTEGRATION*

Two different models of e-commerce adoption by businesses have been emphasized: the Adoption Ladder approach (Martin and Matlay, 2001) and the Publicize-Interact-Transform (PIT) model (Foley and Ram, 2002). The Adoption Ladder model highlights the sequential and progressive engagement of the technology (Dixon *et al.*, 2002; Taylor *et al.*, 2004). It suggests that business engagement with

information and communication technology (ICT) and the Internet technology shall follow an order that starts with the usage of email for efficient communications, then progress to the following in order (Martin and Matlay, 2001):

- (1) adoption of the website for marketing and introducing the business,
- (2) e-commerce to order and pay online,
- (3) e-business to integrate supply chain so manufacturing and delivery become seamless,
- (4) to transform organizations with open systems information for customers, suppliers, and partners.

In contrast, the PIT model suggests that there are diverse approaches to adopt e-business techniques for small and micro enterprises. ICT and the Internet can be used for three increasingly sophisticated activities, i.e., to publish and *publicize* information on a website, to *interact* with customers and suppliers, and to *transform* the way a business undertakes its activities. E-business sophistication can be applied to some or even all areas of business activities, such as, logistics and delivery, finance, purchasing and procurement, operation, processing, and assembly, marketing and sales, and after-sales services, although at different rates and at different times (Foley and Ram, 2002; Taylor *et al.*, 2004).

In addition to the above-mentioned models, researchers have examined different degrees of click-mortar integration. For example, based on an analysis of 18 Dutch firms, Adelaar *et al.* (2004) summarized four degrees of click-mortar integration that are increasingly sophisticated:

- (1) a loose connection between on-line and off-line that can yield either positive or negative effects, such as local in-store pick-up and return services that are not offered for on-line purchases;
- (2) a simple click-and-mortar approach that cross-promotes on-line and off-line channels;
- (3) a sophisticated click-and-mortar e-commerce hands-off service, such as in-store pick up and a retail outlet finishing transactions initiated online;
- (4) the most sophisticated integration approach that supports e-commerce activities usually involves the redesign of data, IT, and organizational structure.

#### *SYNERGIES OF CLICK-AND-MORTAR INTEGRATION*

“Click-and-mortar” integration as a business model can bring benefits of cost-savings, enhanced trust, improved differentiation, and market extension (Steinfeld *et al.*, 2002). First, cost saving in labor, inventory, and delivery can be realized when retailers can combine physical and on-line channels effectively to shift activities, such as product look-up and order filling, towards the consumers. In addition, cost saving can be achieved when retailers have less need to maintain substantial stock of the infrequently purchased goods in a local physical outlet and when retailers can use physical outlets as pick-up locations. Second, the click-and-mortar business model has the advantage and ability to build trust

through their physical presence in the local market, which makes customers feel more comfortable when a return is needed or other issues arise. Third, products can be differentiated without increasing cost when physical and virtual channels are combined effectively. Finally, market extension is made possible as the click-and-mortar model brings in customers from new geographic areas and extends the product scope or depth. When focusing on the geographic market and the customer values, click-and-mortar not only strengthens relations with existing customers in geographical markets where firms are already active, but also serves relocating consumers and reconnects with customers who moved away. The business is thus, more convenient and less costly for customers, increasing new customer attraction (Adelaar *et al.*, 2004). Additionally, reducing the working hours of owner-managers has also been highlighted as a real business benefit (Simpson and Docherty, 2004).

#### *KEY FACTORS AFFECTING CLICK-MORTAR INTEGRATION OR E-COMMERCE SUCCESS IN GENERAL*

Based on research 46 high-growth e-commerce small and medium enterprises (SMEs) in the United Kingdom, Feindt *et al.* (2002) summarized 11 key success factors for e-commerce: 1) content, 2) convenience, 3) control, 4) interaction, 5) community, 6) price sensitivity, 7) brand image, 8) commitment, 9) partnership, 10) process improvement, 11) and integration. While Simpson and Docherty (2004) compiled a comprehensive list of reasons and barriers to adopt e-commerce, the need of SMEs support and the UK government's current failure to support SMEs are highlighted. Ignorance about the technology and limited resources appear to be the main barriers for Internet adoption (Timmers, 1999; Jutla *et al.*, 2002). It is interesting to note that internal pressure from family and friends rather than external competitive pressure was a major factor in adopting e-commerce interests. While SMEs in the UK were found to be in need of support and advice for e-commerce, the effectiveness of assistance and guidance from the public sector is poor. One study found that academic theory on e-commerce was generally of little practical value to SME owners and managers, who would rather rely on their instincts or intuition (Simpson and Docherty, 2004).

While these models have their virtues to describe the processes of click-mortar integration, in the real business world, companies may select different models or switch from one to another when they feel fit.

## DATA AND METHOD

In order to understand the click-mortar integration in Michigan Communities national status and trends in e-commerce must be looked at for context and direction. Annual national data on E-commerce released by the U.S. Census Bureau, *E-Stats Report*, is based on data collected in four separate surveys of manufacturing, wholesale, service, and retail businesses, and can provide a national trend. However, there is a lack of data on the click-and-mortar e-commerce of Michigan local businesses and communities at the county level or local level despite the efforts of this research.

One critical approach is to use interviews with local businesses and communities to examine the three research questions mentioned above, i.e., to identify drivers, barriers, and strategies in the integration process of the online and physical structures of a business. Based on the literature review, interviews were conducted with planning staff and business owners of three selected communities on the process of integration, synergistic impacts, and key factors for successful adoption in May/June 2019. Selected

communities cover a range of urban/suburban areas in Mid-Michigan, from a legacy urban communities , to urban communities with an internet savvy youth population, to family-oriented suburban communities (Figure 1). These communities are:

- one urban community: Old Town in City of Lansing
- one urban community with internet savvy youth: Downtown East Lansing
- one suburban community: Commercial area at the intersection of Jolly Rd. and Okemos Rd., in Meridian Township

#### *OLD TOWN OF CITY OF LANSING*

Located at the northern end of Lansing, The North Lansing Historic Commercial District, otherwise

*FIGURE 1. LOCATIONS OF THREE SELECTED COMMUNITIES IN MID-MICHIGAN*



*Source: Author marked community locations based on Google map.*

## *DOWNTOWN EAST LANSING*

Located directly across the street from the campus of Michigan State University, Downtown East Lansing

The Okemos and Jolly Road intersection in Meridian Township is a typical suburban commercial area

For each community, the planning/economic development director of the city was interviewed as part of this study. They provided an overview of the area's economic development and planning issues related to click-and-mortar integration, such as overall trends of business opportunities and challenges, development hot spots and the built environments, and economic profiles of the selected communities. In addition, 2-3 businesses that have already begun click-and-mortar integration were targeted for interviews in each community. While some of the businesses targeted for interviews were in the sectors (subsectors) that are on the quick rise of e-commerce, a variety of other businesses are also included (Table 1). Most interviews lasted 30-60 minutes and were conducted at the locations of the organization or business.

Table 1. Profiles of interviewees

Interviewee	Title, Organization/Business (sub) sector	City / Community
Interviewee #1	Planning Department Director, City Government	Lansing
Interviewee #2	Planning Department Director, City Government	East Lansing
Interviewee #3	Economic Development Director, Township Government	Meridian Township
Interviewee #4	Business owner and manager, a general merchandise store (NAICS 452 general merchandise stores)	Old Town, Lansing
Interviewee #5	Business owner, accommodation business (NAICS 72 accommodation and food service)	Old Town, Lansing
Interviewee #6	Business owner and manager, retail trade (NAICS 451 sporting goods, hobby, musical instrument, book stores)	Downtown East Lansing
Interviewee #7	Business owner and manager, restaurant (NAICS 72 accommodation and food service)	Downtown East Lansing
Interviewee #8	Business owner and manager, specialty merchandise (NAICS 453 miscellaneous store retailers)	Jolly Road and Okemos Road Intersection Business Area, Okemos
Interviewee #9	Business owner and manager, restaurant (NAICS 72 Accommodation and Food Service)	Jolly Road and Okemos Road Intersection Business Area, Okemos
Interviewee #10	Business owner and manager, educational services (NAICS 61)	Jolly Road and Okemos Road Intersection Business Area, Okemos

## FINDINGS

### *NATIONAL TREND OF E-COMMERCE ADOPTION*

Since the release of the first annual report on e-commerce by the U.S. Census Bureau, e-commerce has become a key sector of the US economy. This can be exemplified by the statistical data of E-commerce revenue as a percentage of the national economies, illustrated by the North American Industry Classification System (NAICS). NAICS classifies business establishments by type of economic activities and utilizes a five or six digit code at the most detailed industrial level for each establishment. The first two digits of NAICS indicate the business sector and the third digit refers to the sub-sector. The fourth, fifth, and sixth digits designate the industrial group, the industry, and the national industry, respectively. The governments of US, Canada, and Mexico use NAICS.

E-commerce revenue as a percentage of each of the four major economic sectors has grown significantly, from 18.1% in 1999 to 64.8% in 2016 for manufacturing, 7.2% in 1999 to 32.4% in 2016 for wholesale trade, 0.6% in 1999 to 4.2% in 2016 for service industries, and 0.2% in 1999 to 8.0% in 2016 for the retail trade sector (Table 2). Leaders of e-commerce in the manufacturing sector, measured by the percentage of e-commerce of total shipments/sales/revenue of that respective subsector, are transportation equipment manufacturing (NAICS 336, 83.6%), beverage and tobacco product manufacturing (NAICS 312 74.9 %), and paper manufacturing (NAICS 322, 70.5 %). Leaders of e-commerce in the wholesale trade are drugs and druggist's sundries (NAICS 4242, 72.8%) and motor vehicle and motor vehicle parts and supplies

(NAICS 4231, 52.9%). In the service sector, travel arrangement (NAICS 5615, 38.2%), air transportation (NAICS 481 (30.3%), other information services (NAICS 591, 29.2%), and publishing industry (except Internet) (NAICS 511, 27.7%) are forerunners. In the retail trade sector, non-store retailers (NAICS 454, 59.6%), especially electronic shopping and mail-order houses (NAICS 4541, 68.2%), is particularly distinguished as leader of e-commerce. (Please see details of e-commerce statistics of manufacturing, wholesale trade, service, and retail trade sector from *US E-Stats 2016*, particularly Table\_1a.xlsx, table 2.0.pdf, table\_3.0.pdf, table\_4.0.pdf.)

Table 2. Revenue from e-commerce and percentage of e-commerce revenue of major sectors in 2016 in the US

NAICS code	Sector	E-commerce total shipments/sales/revenue (million dollar)		% of e-commerce of the total sector	
		1999	2016	1999	2016
<b>311-339</b>	<b>Total manufacturing</b>	<b>729563</b>	<b>3469624</b>	<b>18.1%</b>	<b>64.8%</b>
<b>42</b>	<b>Total merchant wholesale trade</b>		<b>2324953</b>	<b>7.2%</b>	<b>32.4%</b>
423	Durable Goods		998982	7.2%	29.7%
424	Nondurable Goods		1325971	7.2%	34.7%
	<b>Total for Service Industries</b>		<b>608718</b>	<b>0.6%</b>	<b>4.2%</b>
22	Utilities <sup>1</sup>		4382		0.8%
48	Transportation and Warehousing <sup>2</sup>		113880		13.0%
51	Information		165237	0.7%	11.0%
52	Finance and Insurance <sup>3</sup>		142782		3.3%
53	Real Estate and Rental and Leasing		27987	0.6%	4.4%
54	Professional, Scientific, and Technical Services <sup>4</sup>		47009		
56	Administrative and Support and Waste Management and Remediation Services		31648		
61	Educational Services <sup>5</sup>		7508		11.7%
62	Health Care and Social Assistance		1828		0.1%
71	Arts, Entertainment, and Recreation		10931		4.4%
72	Accommodation and Food Services		40592		4.6%
81	Other Services (except Public Administration) <sup>6</sup>		14934	0.1%	
<b>441-454</b>	<b>Total Retail Trade</b>	<b>4984</b>	<b>389111</b>	<b>0.2%</b>	<b>8.0%</b>

Note:

1 Excludes government owned utilities.

2 Excludes NAICS 482 (Rail Transportation) and NAICS 491 (Postal Service).

3 Excludes NAICS 525 (Funds, Trusts, and Other Financial Vehicles).

4 Excludes NAICS 54112 (Offices of Notaries).

5 Excludes NAICS 6111 (Elementary and Secondary Schools), NAICS 6112 (Junior Colleges), and NAICS 6113 (Colleges, Universities, and Professional Schools).

6 Excludes NAICS 8131 (Religious Organizations), NAICS 81393 (Labor Unions and Similar Labor Organizations), NAICS 81394 (Political Organizations), and NAICS 814 (Private Households).

7 Excludes NAICS 8131 (Religious Organizations), NAICS 81393 (Labor Unions and Similar Labor Organizations), and NAICS 81394 (Political Organizations).

Source: U.S. Census Bureau, *E-Stat 2016*, *E-Stat 2000*, and *E-Stat 1999*.

With the decline of major national chain retailers due to the rise of e-commerce, communities have been affected differently. Planners in Old Town, Lansing and Downtown East Lansing have dealt with the decline of Main Street commerce since suburbanization began in the latter half of the 20th century. Over the years, they have adapted their structures and the composition of commercial areas. With the rise of e-commerce, these two communities actually experienced a comeback when locally-oriented and experience-based businesses started to rise. E-commerce has affected communities such as Meridian Township in which there is a regional shopping mall. However, the suburban commercial area in Meridian Township that we studied does not seem to be particularly affected and this may be attributed to businesses focusing on specialty products and services (restaurant and educational services) for local suburban communities.

Planners of the three communities have been quite optimistic about the current economic development of their communities and strategies regarding e-commerce. Lansing considers itself a comeback location for urban businesses and residents, with particular focal areas in Downtown Lansing, Old Town, and REO Town. Currently, East Lansing is experiencing the most conspicuous physical landscape change in its downtown area. Despite the challenges presented by the closing of several anchor stores, such as Yonkers, within its mall, Meridian Township has actively pursued a strategy of commercial areas from product-based merchandises to experience-based services.

While all three communities have not offered direct assistance in technological support of e-commerce to small businesses due to limited capacity, there exist various kinds of indirect supports for these communities. For example, through the close relationship with the City of Akron in Ohio, Lansing worked with eBay on the Retail Revival Program, a 12-month eBay pilot program launched in 2018 to revitalize small businesses by providing technology power and global on-line market space. The program has identified small businesses that are interested in utilizing workable websites for e-commerce. In East Lansing and Meridian Township, while city officials have helped businesses find suitable locations, they usually direct businesses to other organizations, such as Michigan Small Business Development Center (<https://sbdcMichigan.org/>)<sup>1</sup>, for technical help or business plan formation.

It is worth mentioning that all three communities are clear about their positions in the capital region and have plans for their own centers and sub-centers. Lansing focuses on its role as the host of the state capital, East Lansing, as the college town, adapts and evolves with the campus of Michigan State University, and Meridian Township serves as an ideal residential community with highly rated schools and park systems. They collaborate closely in improving the physical built environment, such as the corridor project that links all three communities through the skeleton of Michigan Avenue/Grand River Avenue.

#### *STATUS, PROCESS, FACTORS, AND STRATEGIES OF E-COMMERCE OF THE BUSINESSES*

Overall, with the exception of an accommodation business, the online business has not been a significant portion of the interviewed businesses. The percentage of on-line businesses to the total business ranged

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<sup>1</sup> Michigan Small Business Development Center provides consulting, training, and market research for new business ventures, existing small businesses, and advanced technological companies.

from the most significant portion as 20% for one retail trade business in East Lansing to less than 1% of a specialty merchandise business. For the accommodation business that was interviewed, most customers find the business through the webpage then called the business owner. The extent of e-commerce adoption was also differentiated by age groups of most local customers. For example, for to-go orders, most families in the suburban commercial area of Meridian Township will call the restaurant to order food, whereas, half of the to-go orders for a restaurant in Downtown East Lansing are ordered on-line in general, with most orders originated from college students on or near the campus.

The businesses have also used e-commerce to different degrees, from websites for information only (customers need to call to order), to websites allowing on-line orders with either pick-up at the store or home delivery, to business owners performing online procurement for a great portion of certain supplies. The adoption ladder model can be applied to the E-commerce adoption to classify the related activities. All the businesses interviewed have on-line presentation such as a website mainly for marketing purposes. While some businesses have achieved e-commerce to interact with customers to order and pay on line, other businesses intentionally did not use online payment. Some businesses have also used the online platform for supply management and achieved an integrated supply chain, i.e., monitoring their supply and automatically or semi-automatically managing their inventory. However, it is probably more appropriate to use the PIT model to view the ICT and the Internet use for three increasing sophisticated activities, i.e., using a website to publicize information, to interact with both consumers and suppliers, and to transform how the business is operating.

The interviews have confirmed that click-and-mortar integration can bring benefits of cost savings, enhanced trust, improved differentiation, and market extension. In addition, it was found that first, the physical presence of local stores are still considered important, as online businesses only account for less than 20% of transactions. Second, however, it seems it is unimaginable not to have an online presence as websites and social media have been effective in attracting new customers both within and outside of the region as well as maintaining the interest of existing customer bases. New potential customers usually first browse the websites of local vendors, then some will directly make a purchase on line, some will visit the stores to see and feel the products. Market extension has been particularly significant for some specialty boutique businesses and those with special local products as illustrated by the general merchandise store that particularly focused on Michigan local products in Old Town Lansing and the specialty merchandise in Meridian Township.

Technology and resources seem still to be the main barrier for e-business adoption. For small business that have 6-10 employees, they usually do not have a dedicated information technologist (IT) and usually sign up IT service subscriptions by paying an annual fee so that they can ask for help in the case of a technical problem. Many asked friends or neighbors for assistance, or simply built their website themselves. However, the local businesses sometimes can overcome this barrier through enablers such as eBay's Revival Main Street Program and delivery companies advocated mobile phone apps for food delivery. In Old Town, the technological assistance from eBay's program has been considered particularly helpful. While the support from public sector has not been expected as resources are especially limited, general business help from organizations either at the local or state level, such as previously mentioned Michigan Small Business Development Center, or sometimes from the headquarters of the franchised company, have been considered very helpful.

Local business generally considered both physical and social environment important, even though they may not be directly related to the e-commerce. For example, access to easy parking is always a concern, especially for urban communities of Lansing and East Lansing. Furthermore, leniency towards small

business regarding built environment regulations such as sidewalk signs and flowerbed decorations can send a supportive signal of local government for small businesses. Interactive social environments have also been appreciated particularly by small businesses. Old Town seems to have the highest level of social/business network among the three communities as it also has the most independently owned businesses. In East Lansing, long-term businesses are very involved, whereas other small businesses do not possess the same level interest due to the constraints of resources of small businesses. Small businesses in Meridian Township expressed hopes of building the similar social network as those in Old Town. However, with numerous national chain stores with business managers that are not locally tied, it seems difficult to achieve. Local governments/planners may specifically target locally owned business for social networks and community engagement.

## CONCLUSION

This report examines online market place adoption of Michigan communities through studying three case communities in Lansing, East Lansing, and Meridian Township. National data indicates that e-commerce has increased significantly in the last two decades but there are great variations in adoption rates among sectors. At the community level, despite the various impacts of the decline of major national retailers affected by e-commerce, the three communities have been quite optimistic and positive of current economic development of the three communities and strategies dealing with e-commerce. Even though none of these communities offer direct technical assistance due to limited capacity, indirect support does exist through various programs and organizations, such as Michigan Small Business Development Center, eBay's Revival Main Street Program, delivery companies who advocated mobile phone apps for food delivery.

On-line businesses have not been a significant portion of overall business for business owners and businesses have also adopted e-commerce to different degrees. The benefits of the integration of an online market and physical stores, such as cost-saving, enhanced trust, improved differentiation, and market extension, have been confirmed, particularly market extension for specialty boutique business and those with special local products. The main enabler of e-commerce adoption seems to be easy accessibility to technology and resources, particularly for small local businesses. Both physical environment and social networks have been considered important for locally owned business. Rather than viewing the online market place as a threat to Main Street businesses, this project considers it as an opportunity. It is hoped that the community and business strategies and policy implications found in this report can help local business and communities embrace the online market place, take advantage of the benefits brought by synergy, and revitalize local and regional economies in a network society.

## REFERENCES

- Adelaar, T., Bouwman, H., & Steinfield, C. (2004). Enhancing customer value through click-and-mortar e-commerce: implications for geographical market reach and customer type. *Telematics and Informatics*, 21(2), 167-182.
- Dixon, T., McAllister, P., & Thompson, R. (2002). The value of ICT for SMEs in the UK: a critical literature review. Report for the Small Business Service Research Programme, The College of Estate Management, Reading.
- Feindt, S., Jeffcoate, J., & Chappell, C. (2002). Identifying success factors for rapid growth in SME e-commerce. *Small business economics*, 19(1), 51-62.
- Foley, P., & Ram, M. (2002). *The use of online technology by ethnic minority businesses: a comparative study of the West Midlands and UK*. SBS Research Directorate. monograph, De Montfort University, Leicester, available at: [www.sbs.gov.uk/content/research/EMB\\_IT.pdf](http://www.sbs.gov.uk/content/research/EMB_IT.pdf)
- Jutla, D., Bodorik, P., & Dhaliwal, J. (2002). Supporting the e-business readiness of small and medium-sized enterprises: approaches and metrics. *Internet Research*, 12(2), 139-164.
- Martin, L. M., & Matlay, H. (2001). “Blanket” approaches to promoting ICT in small firms: some lessons from the DTI ladder adoption model in the UK. *Internet research*, 11(5), 399-410.
- Simpson, M., & Docherty, A. J. (2004). E-commerce adoption support and advice for UK SMEs. *Journal of small business and enterprise development*, 11(3), 315-328.
- Steinfield, C., Bouwman, H., & Adelaar, T. (2002). The dynamics of click-and-mortar electronic commerce: opportunities and management strategies. *International Journal of Electronic Commerce*, 7(1), 93-119.
- Taylor, M., & Murphy, A. (2004). SMEs and e-business. *Journal of small business and enterprise development*, 11(3), 280-289.
- Timmers, P. (1999). *Electronic Commerce: Strategies and Models for Business-to-Business Trading*. John Wiley & Sons, Inc.

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