

Local Trade - Supporting Local Economic Resilience in the Digital Age

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ABSTRACT

This paper discusses the importance of economic resilience in times of financial turmoil and presents the preliminary results of a study on a new approach to supporting regional and local economies by incentivising locally beneficial consuming and sourcing behaviours.

Keywords

Economic resilience, local communities, loyalty schemes

1. INTRODUCTION

The crisis that the global economy faced between 2008 and 2010 was reflected in austerity policies put in place by states globally in hope of restoring public finances. This has resulted to increased attention to the importance of resilience of economies in different scales – national, regional and local

Moreover, within the context of the digital economy, e-commerce websites still don't reflect the produce found at a local level, but rather reflect that of national and international chains, contributing to a relatively centralized, low-resilience trading model.

Resilience in an economic context refers to the ability of regions or states to respond to shocks or disturbances and return to a previous economic state [1]. Its importance in the welfare of an economy in the long term is highlighted considering that countries that suffer severe economic disruptions have lower growth rates in the future [2].

The resilience of an economy is defined by the behaviour of economic agents such as consumers, businesses and the public sector. Although changes in this behaviour happen constantly as part of the evolution of the economy, Setterfield [3] argues that severe economic shocks may alter such behaviours drastically setting the economy to a new trajectory of growth. In fact such changes are exemplified in the UK healthcare system where the way that value is conceived and created has changed driven by new types of collaborations between the public and private sectors.

The paper argues that approaching local resilience through a lens of behavioural change could be valuable, since new models of

exchange and value creation, driven by new ways of information delivery, could contribute to the creation of more resilient local economies. Although research around innovative ways of using new technologies to engage with communities and individuals in areas such as learning [4] and healthcare [5] has resulted to a multitude of new case studies and tools, the area of digital technologies in informing financial exchanges has been relatively underexplored.

The study presented below represents an attempt to explore a new model to support local sourcing and trading through the use of mobile technologies.

2. APPROACH

“Local trade” is a sub-project of the EPSRC funded Catalyst project based in Lancaster University, aiming to connect academics and communities in designing and building the next generation of tools for social change. The goal of the project which is currently in development is to explore new ways to inform sourcing and consuming decisions for local consumers and businesses in collaboration with the Lancaster's Ethical Small Trader Association.

The project draws from studies conducted by the New Economics Foundation [6] on the concept of “Local Multiplier 3”, an adaptation of the Keynesian multiplier used to measure how income circulates in an economy [3]. According to the study, spending locally results to the creation of value through an increased number of exchanges it allows among local businesses and consumers. In that light the project explores new ways to deliver meaningful information regarding local produce to consumers and incentivise buying locally, as well as to track and reward locally beneficial exchanges between businesses.

The first phase of the project involved understanding existing habits from the two main groups of interest, namely consumers and local businesses. A series of focus groups were conducted where 28 locals, among them 13 that represented local independent businesses, participated in an in-depth study. Two focus groups involved exclusively consumers or traders to explore group-specific issues while the rest brought together the two groups for a broader discussion. The semi-structured discussions allowed a wide breadth of issues to arise while covering key areas, presented below, in more depth.

With regards to the traders the discussion focused on existing sourcing habits and their drivers. This contributed in identifying the potential for collaboration with local suppliers as well as ways to motivate such a change. Another key theme was to identify new ways to track exchanges with consumers, suppliers and contractors, something necessary to evaluate any system based in the circulation of income. Finally the traders were asked to

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identify factors that would drive them to join a scheme to promote local trade.

Similarly, with regards to the consumers the focus of the study was on their perception of “local” in general and to what extent they do buy local already. Additionally key themes were what would motivate and engage them to participate in an initiative to support a local trade scheme and desired benefits from such a scheme.

These discussions contributed to the design of a system that aims to help both consumers and traders to make more informed decisions with regards to their sourcing and buying habits. The paper argues that designers of similar technological interventions can benefit from the findings below by understanding areas that are likely to affect the adoption rates for such interventions.

3. FINDINGS

3.1 The Role of Information

Both user groups highlighted the lack of information regarding local products as well as the importance of buying locally. The study suggests that delivering quality information on local produce in a meaningful way is necessary in changing user behaviour.

Participants stated that currently simple product information is hard to obtain about local products, with local retailers and word of mouth being mentioned as the best sources of such information, highlighting the lack of a central source of information. This reportedly affects the demand for local products and services and relates to the businesses ability to identify alternative suppliers in the area. Finally, traders mentioned that a system that would allow them to demonstrate their contribution to the local economy would motivate them to prefer local suppliers that are less competitive than national and international alternatives.

3.2 Motivations

During the analysis of the data a distinction was made between intrinsic and extrinsic motivations for existing habits. Extrinsic motivations reported include monetary rewards such as offers, price cuts or freebies, while intrinsic motivations included the need to “be part of something bigger” and “make a difference”.

Although intrinsic motivations were identified as more appropriate, the study suggests that such interventions would need to offer a mix of intrinsic and extrinsic motivations for different phases in the user engagement cycle. In more detail monetary rewards would be necessary to incentivise certain groups of the population to join the scheme, while intrinsic motivations would be part of their education regarding the issue of buying locally, becoming a driver for long term engagement.

3.3 Routine

Another theme that emerged from the study was that for both participant groups maintaining a routine is very important. For consumers this meant that proposing behaviours that would require them to engage in completely new actions was less likely to attract attention or keep them engaged for long. This included the way they shop but extended to the way they receive information and engage with other applications.

The routine is even more important for businesses, since small changes in their daily operations could potentially increase their workload and operational cost significantly. For them, routine included the process of delivery of their service as well as the relationship with their suppliers and contractors.

3.4 Simplicity

Another key finding of the study was the necessity for simplicity. Both user groups highlighted that the new system should be simple in its function and presentation.

For consumers simplicity would include every interaction with the system from the information delivery to the functionality and the interface. For the traders this translates to simple ways of registering new users, tracking transactions and offering the benefits to the consumers.

Finally, simplicity extends to the user’s understanding of the function of the system. Both user groups stated that complicated, non-transparent systems would be less likely to be adopted.

4. IMPLICATIONS FOR THE DESIGN OF THE SYSTEM

The findings mentioned above will steer the development of the local-trade system branded the “ESTA Trading Card”. The final design for the prototype which is currently in development is based on the format of loyalty schemes.

The traders who take part in the scheme will be provided with an NFC enabled smartphone, and consumers after registration will be provided with an RFID card that will identify them personally. Each time the consumer makes a transaction with local traders it will be logged by touching the card to the device. The user will then collect points which will be redeemable to unlock offers from other businesses that participate in the scheme.

Additionally the traders can log transactions with suppliers and contractors directly through the mobile application, helping track locally beneficial sourcing activity.

The data gathered will help quantify and demonstrate the benefit of these exchanges in the local community, becoming a valuable tool for local consumers, traders and policy makers.

The framework of the loyalty scheme was selected as a response to the need for simple and familiar solutions. The study suggests that the majority of traders and consumers know the basic features of a loyalty scheme which will help communicate the functionality of the ESTA Trading Card lowering the complexity threshold for adoption. If adopted by the local community the system can create new revenue streams for local businesses which will in turn be incentivized to demonstrate their contribution back to the community.

5. PROTOTYPE DEMONSTRATION

An initial demonstration of the prototype was conducted in September 2012 where members of Lancaster’s Ethical Small Trader Association had the chance to comment on the functionality, the interface and the potential of the application.

In general the prototype was very well received. The interface was characterized as simple but effective by the traders who stated that the system would help them log transactions with customers and suppliers with a minimum amount of interference with their current routine. The use of NFC was especially appreciated since it would allow for quick and effortless transaction logging which would also add a novelty element to their interaction with consumers.

As a response to initial feedback from the traders, the system will also offer a web interface accessible from an existing computer that will allow traders to log transactions manually, reducing the cost of participation for small businesses.

6. FUTURE TRAJECTORIES

Future directions of the project are addressing the user's need for information, by including an online portal that offers an index of local businesses as well as new ways for local businesses to demonstrate their role in supporting the local economy. Moreover the project will build on the loyalty card framework to explore how it could be used to deliver intrinsic motivations as well as monetary rewards.

In this paper we have outlined some of the findings that emerged from the preliminary research on a new approach to support the resilience of local communities by incentivising local purchases. We hope that this approach informs further study on ways to use new technologies to deliver economic impact in local and regional communities.

Future studies could focus on exploring innovative ways to expand this model to offer intrinsic rewards contributing to the sense of community as well as on other ways to reinvent the role of technology in the value creation in local communities.

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8. REFERENCES

- [1] Reggiani, A. de Graff, T. and Nijkamp,P. 2002. *Resilience: An Evolutionary Approach to Spatial Economic Systems*, Networks and Spatial Economics, 2, pp. 211-229
- [2] Cerra, V., Panizza, U. and Saxena, S. C. 2009. *International Evidence on Recovery from Recessions*, Working Paper WP/09/183, International Monetary Fund.
- [3] Martin, R. 2010. *Regional Economic Resilience, Hysteresis and Recessionary Shocks*. Papers in Evolutionary Economic Geography 10.18, Utrecht University, Utrecht. DOI= <http://doi.acm.org/10.1093/jeg/lbr019>
- [4] Redecker, C 2009. *Review of Learning 2.0 Practices: Study on the Impact of Web 2.0 Innovations on Education and Training in Europe*. JRC Scientific and Technical Report
- [5] Freire, K., & Sangiorgi, D. 2010. *Service design and healthcare innovation From consumption to coproduction and co-creation*. Paper presented at the 2nd Nordic Conference on Service Design and Service Innovation, Linköping, Sweden.
- [6] New Economics Foundation 2005. *Public Spending for Public Benefit: How the public sector can use its purchasing power to deliver local economic development* Scientific Report