The Impact of the State Obstacles on Containment and Progress of Bitcoin

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Abstract: This virtual currency is paramount in a strong economical situation of any country in the future, especially the countries that try to lead the world with its economy, this currency has been created to replace the traditional currency of the countries that can be issued by any central bank and put a value for it, but the virtual currency is a currency that no one can control and manipulate its value and no one can use it to control any country economical situation (c.f. Selgin, 1988). The virtual currency helps poor countries to develop its economy because it will have the same currency that any developed country has with the same value.

But the virtual currency will face a lot of problems before entering to market (Gandal, N., & Halaburda, H. (2014) and will face a lot of barriers that will stop the development of the state economy, some of those problems are: the culture of the country and the government laws and policies, plus there is an important problem that it will face and it represent by the economic agreements and the Unified Banks Network (e.g. Jerin, 2014). To solve those problems the research will use the qualitative method with an interpretive research philosophy, that helps the research to use specific case study that have similar situation to collect the second data and use the interview to collect the primary data. The interview that is made with experts will show some solution that answer the research question and it can be applied and the step to apply it to receive to needed solution to let the virtual currency be accepted in the market (Gandal, N., & Halaburda, H. (2014).

Therefore, the government started to encourage the citizen and the companies to use this new currency, and they created an environment that helps those users to trust and accept it. This currency will face a lot of obstacles and problems at the beginning, the government will try to put plans and long term strategies to solve these problems before they occur, starting from creating and issuing new laws and policies arriving to create a large and strong educational advertising to let the citizen know this new currency and its benefits. Also, the private sectors are responsible too, especially the bank sectors because they have the principle relation with this field and they have to motivate their customers to use it (Gans, J., & Halaburda, 2013). From this research, we will try to find some solutions that the concerned sector need to apply to let the virtual currency enter the market and let the citizen trust it and start trading with it (Gandal, N., & Halaburda, H. (2014).

Introduction

During the continuous evolution of our world not only in technology but also the economy, the management start to develop very fast, the idea of virtual currency came. This currency will help people to exchange currency between each other through a unified system which does not require a central bank to print currencies, and from that the Bitcoin currency was the most important currency that has succeeded in this field (c.f. Samuelson, 2011). But this system will face a lot of barriers and the most notable barrier is to obtain the confidence of citizens and this goes back to the human nature, following Thomas Hobbes’ first arguments on the state of nature in the 1650s, who prefer that everything is tangible, which is not provided by virtual currencies such as bitcoins.

After applying certain techniques like issuing laws by governments and encouraging investments using this currency and educating citizens about the benefits of this currency, this leads to confidence between people and this currency. For example, several services and products that were not acceptable in society, later became among its basic needs. For instance, nowadays, ATMs are very useful and give virtual currencies a chance to be internationally recognized.

Therefore, this study will give some solution to let the virtual currency specially the Bitcoin currency to be applicable in Lebanon and on other countries that have the same governmental and social situations. So, as noted in a similar study by Malala (2013), it will suggest some critical steps to let this currency be recognized and which policies the government should use to protect its citizens from virtual attack and finally the study will clarify the impact of this currency on the market and on the state finances plus it will mention how to change the virtual currency from indignation to a blessing (Gandal, N., & Halaburda, H. (2014).
Problem Statement
The virtual currency is the evolution of the economic and this currency will face a lot of problems and barriers before it will be acceptable in the market and between citizens and to let this currency be accepted there are some step to do and some strategies to plan (Gandal, N., &Halaburda, H. (2014).The main problem of the virtual currency is laws and the policies that the government should create to let the currency be applicable and to let it be safe and win the trust of the citizens. The second problem is represented in the banks sector where the banks should play an important role by changing their policies from the traditional work to the modern and technical work plus they need to build a worldwide bank network to let the users send and receive this currency all around the world. Furthermore, the virtual currency will face the educational and cultural barriers where the citizens will not accept immediately the change in their currency and are afraid of losing their wealth value, plus the culture plays a big role as a barrier, so the responsible sector should find a solution for this problem too.

Also, the way of trading with the virtual currency should be solved because without determining the place and the way that the currency is allowed to trade with the users will be confused and don’t have the spirit to try it or invest in it, and this should be done by the government by taking into consideration the traditional currency of the country to protect its value and give this currency exclusive right in trading in some field (c.f. Malala, 2013). All over, there are small technical barriers that can be solved easily with each domain aside, to get the best environment that lets the virtual currency be the first choice to trade with, without being afraid from the future.

Purpose
The objectives of this study are both (1) to investigate the barriers facing the virtual currency, and (2) to find some solutions that help the virtual currency to enter the market (Gandal, &Halaburda, (2014). Whereas, following Gandal, &Halaburda, (2014) the research question, this research addresses is as follows: “What are the obstacles facing the Bitcoin in Lebanon and how to facilitate its entry into market?” The sub-research questions that will be investigated in the course of this study are: (1) What are the problems that will face Bitcoin in Lebanon? (2) Where are the major barriers (Jerin, 2014) in Lebanese government? (3) What is the impact of virtual currency on citizen’s life? (4) Why policies and laws help the virtual currency to be active in society? And, (5) which recommendations that help citizens to overcome the currency trading changes?

Significance
The research will try to know the exact problem and the barrier that will face the bitcoin in Lebanon and in what field, and the actions that need to be taken to facilitate the new currency market entry (Gandal, N., &Halaburda, H. (2014). It will let us know who are responsible to let the virtual currency enter the market and motivate the citizens to use it, plus this research will let us know more about this new currency and how it works and what are the needed laws and policies to let it become efficient in the country economic cycle. (Gandal, N., &Halaburda, H. (2014).

This study will also let us know the benefits of the virtual currency in life of the citizens and how it will let their life easier and safer, without being afraid from the currency exchange rate and from the banks policies, plus the research will find how the users of the virtual currency will save a lot of money because they will reduce the cost and the fees of the transaction (Chiu, & Wong., 2014). After processing all data that help the citizens get the needed confidence towards virtual currency, it becomes easy to get this currency spreading and here we quote the first stages of the banks entry to the community where the government played a very important role and we cannot forget the role played by the media in persuading citizens about the importance of bank usage (c.f. Vandervort et al., 2015).

Scope and limitation
One of the main obstacles facing us in the idea of virtual currency is still new, because it is not spoken about much as well as the virtual currency companies don’t provide any information or assistance in this regard. I will overcome these obstacles through research and personal experience. All over, there are no laws and policies about virtual currency in Lebanon and this lets us to stimulate some US laws that have the same political situation as in the Lebanese country and that we can apply with taking into consideration the culture and the environment. Finally, the obstacles were overcome using the interviews made with experts that have a large experience in this field.

Literature Review
Of all the issues facing the paper currency and the talking about the economic deterioration and its disastrous results and in the absence of finding appropriate solutions to avoid dangerous glides that may occur in the future, a virtual currency appeared on the 31st of October 2008 that was mined by Satoshi Nakamoto. It changed all the economic policies and hit all countries strategy that try to enforce their currency because it is hitting the official currency of that country (c.f. Nakamoto, 2008). This virtual currency is the “Bitcoin”, it is an online currency that took an untraceable form, and is a currency that no one can control (Samuelson, 2011). So, no one can estimate an exchange rate; its value only changes through supply and demand (Weiss, 1980; Selgin, 1988). Meaning, that this is the best way to protect the economy of all countries because through this method countries no longer need to establish currency reserves in central banks (c.f. Malala, 2013). Where, no country is obliged to support its reserves by foreign currencies or gold.
This virtual currency is both secure and reliable, because it uses a unique system that protect it from any attack, plus the server is virtually impossible to hack because it is incredibly busy with people attempting to mine bitcoins (Malala, 2013). “Bitcoin” currency is based on a cleverly devised mining system which keeps it secure. The “Bitcoin” work through people all over the world put their computers and graphic cards to work solving complicated algorithms, approximately every ten minutes, an algorithm is solved and the computer or group of computers who solved it are awarded a small number of bitcoins called “Satoshi” and this refers to the person who create this system, and after those algorithms being solved they will be replaced by a new harder algorithm, so to solve more algorithms, miners put the powers of their computers together and mine as a group, this helps to solve a big number of algorithms which leads to more (Nakomoto, 2008).

Businessmen liked this currency because they would be able to trade the currency in secret and without anyone knowing it, they also began to trade in a professional manner, and because of that some countries were affected by this currency and started trying to disable this currency under the pretext of tax evasion, but on the other side some EU countries are based on the principle of abolishing trade borders started to support this currency and not only to support but they started to deal with it like Estonia, Denmark (in 2015), and Sweden (in 2013), as well as many other countries. If we take Sweden as an example, after the Swedish Financial Supervisory Authority legitimized the use of “Bitcoin”, the industry started to grow fast and there were a lot of small and large companies starting to accept this currency, plus the Sweden government supported some financial market like “Safello bitcoin exchange” in July 2013 and “Stockholm-based KnMiner” at Stockholm in 2013 to help citizen trade with this currency and start trade with it. Those decisions should be followed by applications on the ground to motivate banks and companies to focus their investments on it, plus those decisions should focus on the problems and barriers that face “Bitcoin” on the policies and laws issued by government (e.g. Jerin, 2014). The Lebanese government should teach their citizen about the benefits of using “Bitcoin” and that they will be safe and protected when they use it and their money will be safe too (c.f. Malala, 2013; Chiu, & Wong., 2014).

After doing all the steps that break all barriers, the use of this virtual currency will be easy and lead to an economy growth, plus this currency will help small investors to start their business without thinking about the economy situation and about the currency that they trade with and worry about this currency if it will lose value or not because they already know that the “Bitcoin” does not depend on political and economic conditions (). But, "you can't stop things like Bitcoin. It will be everywhere and the world will have to readjust. World governments will have to readjust" (c.f. Nakomoto, 2008).

Figure 1: What is Bitcoin? (Source: )
**Evolution towards virtual currencies**

To know the reason of interest in the virtual currency, we first need to know the historical development of currencies ranging from gold to the virtual currency and as a motive to know the history of the evolution of currencies is that people prefer safe currencies, so all users prefer to conduct operations within a stable system, flexible and easy to use which are provided by “Bitcoin” (Nakamoto, 2008). The virtualization of decentralization is far from the gold coins that are often used on the comparator scale because the virtual currencies have no material appearance and no intrinsic value and their value is not supported by most governments (c.f. Jerin, 2014). The gold coins have been used as a store of value, a unit of account and an intermediary of exchange since at least 700 years before Christ and the gold coin has many desirable characteristics because it has value in the cash markets, but the value alone does not allow any material to become money (c.f. Chiu, & Wong,. 2014; Gandal, & Halaburda, 2014). Gold supplies were abundant in the world and were abundant for use as currency (Bernstein, 2004; p.24).

Although gold and silver coins can be provided by the government, but their value depends on weight and purity. As a result, the enforcement of a certified currency does not necessarily require the intervention of the central authority. Over time, most countries have converted their currencies from those based on commodities and gold coins into paper currencies. These currencies are official currencies issued by the central authority by decree to be legal currencies that have no intrinsic value (Procter, 2012). As a result, the value of paper currencies is based on the confidence of its users that the central authority will be able to maintain the value of the currency, and the stability of paper currencies depends on the economic policies of governments and may face large fluctuations and can lose the currency paper all their value (Bernstein, 2004).

Financial innovations have allowed people to conduct economic operations that go beyond the limits imposed by the currency such as gold, such as bills, checks and other things that facilitate the user's life. After this big shift, the virtual currency came to stand between the two previous currencies as a compromise that could deal with the two currencies in terms of value and decentralization. The virtual currency has become increasingly common in recent years but so far there is no official support for it. A way to exchange the virtual currency they started to use it in online gaming communities and presentation programs. The “Bitcoin” currency is designed to be used in the real economy and is exchangeable against government-issued paper currencies, and the virtual currency has many similarities with gold such as the exchange rate and other things, but it has an advantage, it is not available in gold and in paper currency and there are no obstacles for them to be transferred across the border and this supports globalization. (Frieden, 2006; Nakamoto, 2008).

**How Bitcoin Currencies are Created**

New Bitcoin Currencies are generated using a competitive and decentralized process called mining (White, 1984; Gervais et al., 2013). This process involves people being rewarded by the network for their services (Figure 2). The Bitcoin process transactions and secure the network using specialized devices while compiling the new Bitcoin Currencies. The Bitcoin protocol is designed in a special way where new Bitcoin currencies are created at a constant rate. This makes exploring Bitcoin Currencies a very competitive business (c.f. White, 1984) When new prospectors join the network, it becomes difficult to make a profit and prospectors must then look for more effective ways to cover their operating expenses. No central authority or developer can control or manipulate the system to increase their profits (c.f. Vasek, & Moore, 2015). Each point in the world's Bitcoin network will reject anything that does not comply with the rules the system is expected to follow. So, according to Nakamoto (2008), Fung, & Halaburda (2014) and Fung et al. (2014), this is a peer to peer electronic cash system. Bitcoin currencies are created at a decreasing and predictable rate. The number of new Bitcoin Currencies that are created each year decreases by half until all Bitcoin Currencies are fully established and a total of 21 million coins are denominated in the whole existence. At this point, the exploration of Bitcoin is likely to be exceptionally supported by several small transaction fees.

**Lebanese Banks and their strategy**

Despite the remarkable rise in the number of Internet users in Lebanon, and the rapid development of communication technologies, and the expansion of banking technology, and the success of Lebanese banks in keeping pace with this development. However, in Lebanon, "electronic banking" still faces several obstacles of these services that prevent the maximum benefit from these services and from the large potential that it provides. “Culture” is the first thing that prevents this technology to come to Lebanese banks, this culture is based on the conservative mentality and adherence to banking traditions of many customers, in addition to justified security concerns.
All those reasons drive banks to play an educational role, and invest in technological knowledge to save material and time. The steady growth of information technology and the development of modern methods of payment that changed the global economy, forced banks to modernize their services in line with market requirements and customer’s needs (Gandal, N., & Halaburda, H. (2014). E-banking or online banking are banking operations that can be conducted electronically with the aim of withdrawing, paying and transferring funds without the need for the customer to move to the bank. These services are known as "Remote Financial Services", as they allow customers to manage their accounts and complete their banking business through direct contact with the Bank through the Internet, wherever and at any time.

Gillies and Cailliau cite that “when we have all data online it will be great for humanity. It is a prerequisite to solving many problems that humankind faces” (Gillies & Cailliau, 2000). In this context, Lebanese banks seek to maintain the leadership and excellence they have gained over decades by proving themselves in the field of electronic banking, just as they have proved and continue to be in the field of traditional banking. Through extensive efforts and long-term and well-thought-out strategies, many banks in Lebanon have successfully penetrated the world of electronic banking, offering their clients excellent services that keep them abreast of the huge technological developments taking place in the banking sector in the world. From here, the Lebanese banks should take in consideration the “Bitcoin” virtual currency to always keep them in the front and to try to have a high competitive advantage in Middle East countries (c.f. White, 1984). This virtual currency will let the Lebanese’s bank in a great position starting from the customer satisfaction arriving to the economic development, plus this step will let Lebanon in a good political situation with the European countries because they always try to work and share their idea with a country that is similar to them in terms of economic and social thought.

**Methodology**

The first step used to present data collected in this study and created a framework to understand the virtual currency by providing structured data to try to have an overview on the virtual currency. So, for that we used Saunders’ et al. (2003) Onion Research Method (Figure 3). The reason of this study is to provide information about the virtual currency and all that information will be collected and analyzed taking into consideration all the approach and the strategy that fit this study, plus it will take into consideration the size of the population and the location; furthermore, this study will manage the activities done to let the bitcoin flexible and let the currency accepted by people. Because of the difference and the variability of information and the contradiction of information, this caused the concept of bitcoin, to stay new, this study used specific information and data to provide and focus on the necessary objective and goal.

This study will be done by reviewing the data collected in a continually way and compare it with the normal currencies to know the force point of each of them. Plus all the reviewed data are distributed in a processed way to make the data analysis easier and have a systematic result. Furthermore, since the virtual currency has a different process from the traditional and the normal currency, and has a different way to market their product and currency, studying it gives the effort to the research by doing specific and systematic reports (Gandal, N., & Halaburda, H. (2014). This study focuses also on solving problems by finding an effective solution and answer on all the questions raised, plus this research fit with Bryman’s (2001) book which provide all the necessary information to provide a clearer picture and will help the reader understand the purpose of this research, plus this study fit with the theories proposed by Creswell (1997) to let the data attribute the objective. Finally, this study could help banks and businessmen use virtual currency because of the advantage that will provide them in management and financial situation. Bryman’s (2001) model is shown in Figure 13.

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**Figure 2:** Diagram of a Bitcoin (Source: Nakamoto, 2008)
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Research Design
This study uses a qualitative method with an interpretive research philosophy, and uses the secondary data as data collection method and uses the case study as research strategy to take the necessary information with an exploratory purpose (Saunders et al., 2003; Walliman, 2010). The research approach will be inductive which helps to get a deep specific information to help understanding the location that we study it and to help find ways to introduce this currency in the markets and banks (Gandal, & Halaburda, 2014), plus this strategy helps us to understand all the point of view of all sectors that have a direct contact with this product like banks and organizations (Figures 4 and 5).

According to Helen Kara, qualitative research is a way to produce findings that are not available or cannot be provided by a statistic study or by other way of quantitative research (Kara, 2015), but quantitative research could be produced (c.f. Ron, & Shamir, 2013). Qualitative research has a unique characteristic and this seems in asking question that move the study where ever we need and its flexible and easy to solve any problem that you try to solve, plus it’s easy to achieve the objective and the goal of the study. These questions that are asked in the qualitative research can contain different answer and different steps of questions asking starting from asking of which, where, when, how and what and these questions will let the researcher understand all he need for the purpose of the question and all these are represented in the interviews, observations and other that can provide the necessary answer as Nicholas Walliman says in this book "The Research Methods Basic". qualitative research questions are made to understand the virtual currency’s and the utility of providing them on banks and their impact on the government (Walliman, 2010) which we haved recouped in Figure 4.

All data provided from the research questions has been developed and analyzed in a way to get a rich data to provide the necessary information. This study based on the sources of data from reviewing and analogizing in a depth interviews with specialists and these data are separated into two groups where every group has the same idea and point of view. The interview questions as an open-ended question were used to provide the full necessary information about the virtual currency’s and the way to let them penetrate the market (Gandal, N., & Halaburda, H. (2014). These two groups that they were formed from their opinion give the study the best way to work on it as “JosteinGaarder” said in his book "Sophie's World". He states when there are two different groups that have different idea son one field and discussed it, they will have a better understanding and better solution rather them two groups have the same idea (Gaarder, 1991). The Qualitative research approved is managed in a way to get the purpose of this study in an efficient way to implement it in Lebanese country and in countries that have similar situations and conditions.

Selected Research Strategy
Analytic induction is used to appropriate the case study to find the necessary explanation for the virtual currency barriers using a sample like the Lebanese country and other similar countries. The study also tries to identify the reason bitcoin was created for as well as the most important reasons of using it, and because there are different ideas and several opinions a cross case analysis is made. So, in this research,
The Case study method was used to provide the knowledge and the development of the study (Figure 6). This is the principle thing that the business is based on and gives a specific and clear idea of the economic situation of every country. This strategy lets the studier understand any situation and in an easy manner and it can be applicable on the real-life development, plus it provides the best way to get virtual currency to enter the market and let the problem easy to solve (Gandal, N., & Halaburda, H. (2014). Whereas, thematic analysis is shown in Figure 7.

**Findings and Results**  
Data analysis will be applicable on the interview participants to get the best analysis for this study. The interview takes into consideration the following: (1) Culture. (2) Age. (3) Gender. (4) Educational level. (5) Bank services. The data used in this study are divided to two parts, the first is the secondary data and the second data are from the interviews that are done with experts. All interviewed participants’ displays their point of view regarding their experiences and based on the secondary data collected and discussed with them, plus the interviewed participant discussed the way to improve the study and the way to enhance the virtual currency each on his major field. So, the data collection of this study is based on the semi-structured method for the interviews with an open-ended question, and the secondary data are collected from public documents and the personal observation.

![Figure 4: Qualitative Research Design (c.f. Saunders et al., 2003; Walliman, 2010)](image1)

![Figure 5: Qualitative data analysis (Byman, 2001)](image2)
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Figure 6: Types of methods used to do qualitative research (see: Saunders et al., 2003)

Figure 7: Tools for Text Analysis. (c.f. Boyatzis, 1998; Bryman, 2001; Saunders et al., 2003)

Data analysis
The interviewed participants have reported with a lot of information and data that are based on their experience and those data can be divided into two parts: 1) how to skip the virtual currency barriers and consequences and 2) who are responsible for this change. Among analyzing and studying the data collected and formulating them with a formal structure to get the best solution for the problem stated, we discover that the party that is responsible for the transaction of the traditional currency to the virtual currency are the government and the banks and they should take radical drills to encourage people to use virtual currencies. After these steps are taken, the roles of companies arrive, where all these parties have to work together and join forces for the resignation of their economies because as we know that the future of the economy is the virtual world, which is trading the virtual currency (Redish, 1993). As the participants mentioned before, the governments should create systems to protect users and to create an environment, which help the companies start accepting the bitcoin as a payment method (c.f. Malala, 2013). The banks should remove their self-interest for a period to encourage bank customers to invest using virtual currency, plus they should build educational programs to educate clients about the benefits of virtual currency. Table 1 shows the codes as presented to participants (e.g. Boyatzis, 1998; Mason, &Reiniger, 2015)

Summary
The study showed us that if the government provides the necessary needs that lets the citizens be safe, where the virtual currency will enter the market faster (Gandal, N.,
Not only the government needs to create an environment of adaptation to the virtual currency to let the citizens accept to trade with it, the banks also will play an important role to by providing services that support the bitcoin and create the willing to discover the currency by the client and encourage them to use it. Plus, the advertisement is very important to let the citizens know the currency and know the advantage of it and its for their benefit to use. In order to do this, the government should collaborate with their neighbors to create an environment that accepts the bitcoin and encourages the companies to start selling and accepting the virtual currencies as payment methods.

**Conclusions**

The virtual currency is the best innovation for the economy by making life easy and the trade and the investment will be faster and the cost and fees will reduce, to let this currency enter the market it should follow all the mentioned steps to achieve the goal of this currency (Gandal, N., & Halaburda, H. (2014). The government and the banks have the initial role in enhancing the virtual currency to enter the market by applying the laws and regulation to motivate the citizens to trade with it, plus those parties are responsible to solve most of problems that the currency will face (Gandal, N., & Halaburda, H. (2014). After solving all the problems facing the virtual currency and move the barrier aside that let it difficult to enter the market, the virtual currency will be the principal currency that people trade with, because it will let their life easier and they will reduce the cost and a lot of fees in every transaction they make (Gandal, N., & Halaburda, H. (2014). These transactions will keep the privacy of the sender and the receiver secure and no one can access it even the governments, giving the citizen motivation to use it.

The most important problem that was facing the virtual currency was the laws and policies in the privat sector as banks and in the public sector as the government because the issuance of laws in countries like Lebanon will take a lot of time and it usually waits for the necessary political situation to create laws, and for banks the policies are hard to change because they are related with a worldwide bank network where no bank can change its policies without the agreement of the other banks connected on the same network.

As the study shows, if all these problems can be solved, the new currency will have a big chance to enter the market and be the main currency to trade with, plus the concerned sector should not stop on these problems because the future can bring a lot of bigger and more complicated problems and they should always try to solve them by doing research and studies on each problem that they will face (Gandal, N., & Halaburda, H. (2014).

**Table 1:** Codes as presented to participants (c.f. Boyatzis, 1998; Mason, & Reiniger, (2015)

| Data                     | Initial Codes                | Initial Codes          |
|--------------------------|------------------------------|------------------------|
| Problems that will face  | Bank sector                  | Geographic regions     |
| Bitcoin in Lebanon       |                              | Future                 |
| Barriers in Lebanese     | Government sector            | Cost                    |
| government               | Banks sector                 | Transaction            |
| Impact of virtual        | Bank                          | Trust                   |
| currency                 |                              | Security                |
| Policies and laws        | Government sector            | Motivation              |
|                         | Banks sector                 | Encouraging             |
| Recommendations          | Government sector            | Network                 |
|                         | Banks sector                 | Relations               |
|                         |                              | Collaboration           |
|                         |                              | Cost / Fees             |
|                         |                              | Faster / Easy           |
|                         |                              | Advertising             |
|                         |                              | Introducing             |
|                         |                              | Learning                |
|                         |                              | Facilitating            |
|                         |                              | Manufacturin g          |
|                         |                              | Economical change       |

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