e-Value Definition©

Author: Lars Olof Kanngard
Co-Author: Professor Bernard Lietaer, March 23, 2016

Prologue:

As we know, the invasion of mobile and online services to handle money and values is now a reality. e-Values come in many different shapes and forms.

How will this affect future governance by governments?

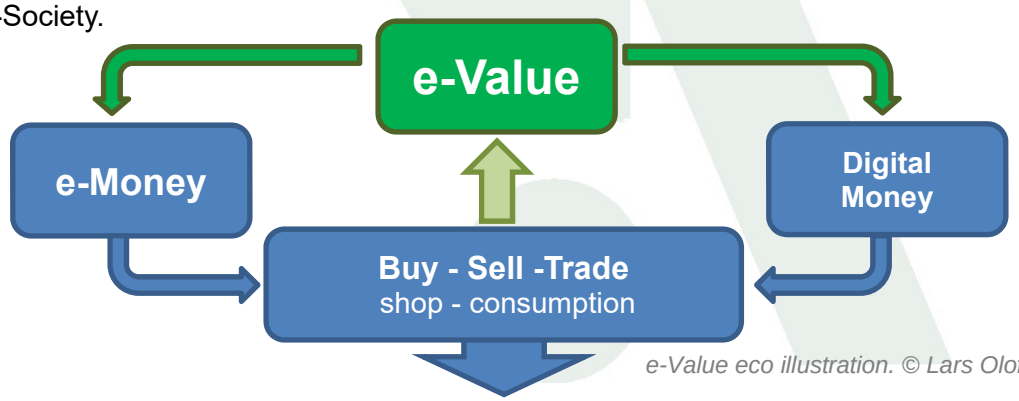
"What can governments govern if there are less coin and bills, or none, in circulation?"

This **White Paper** defines the word "**e-Value**" and develops this concept in order to assist e-entrepreneurs, governments, lawmakers and regulators to set common standards, thus enabling a better way to create guidelines on how to handle the new generation of future values. It will also explain why it's counterproductive to use money in its current form.

'e-Money' has become the catchall word for any money 'stored' and used with an electronic device, smart-chip cards, electronic tokens, vouchers, scratch-cards, or mobile phones. **Digital Money** has become the term for newly invented 'digital' currencies, excluding conventional currencies.

Early on, we could define things by how they are used. But today, all barriers between different technical domains are merging into a more complex world which offers a whole new range of problems and opportunities. There would likely be more complex fiscal rules, but, in the end, a comprehensive definition and a balanced solution would lead to a simpler world, empowering the e-Society.

There are already many examples of '**values**' which are not e-Money, not Digital Money, and not conventional money. By defining e-Values, everyone can easily grasp where different concepts belong, and how common rules and terms could help the new e-Society.



e-Value eco illustration. © Lars Olof Kanngard

This **White Paper** will elaborate on crucial and critical issues, which will, or have already become, the next 'nightmare' for tax authorities and where governments make decisions blindfolded in modern e-Societies due to lack of transparency.

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ViA Global Holdings AG

Headquarter: **Wiesenstrasse 8**, CH-8008 Zürich, Switzerland – Firma No: CH-170.3035.955-2

Phone numbers: INT + 41 44 586 1008, Info@viacard.com

Web Portal: **www.viacardgroup.com - www.viacard.com**

The Authors

First, a few words about the authors.

Lars Olof Kanngard (Sweden) has been a spearheading innovator, entrepreneur and a true free-thinker, born to see solutions, with focus within IT and Telecom since 1974, and has lived on more than 5 continents, building and exploring businesses. He invented his first transaction-based innovation in 1979, when he solved the problem on how to trace pirated video films to where each movie rental was recorded. In 1983, co-author Mats Engstrom (Sweden) joined forces and, from that day on, they have worked as a team to develop a number of solutions which later became industry standards.

In 1999, Lars Olof Kanngard presented to the first e-Government Conference in Dubai, UAE, the concept of creating a **d-dollar,** as a digital currency concept, which later became the e-dirham. The d-dollar was meant to be a global digital currency, while the e-dirham became a tool for paying fees only to the local government. At that same time, Mr. Kanngard also proposed the concept of establishing a WORLD NON-BANK as an institution for governing and exchanging both digital money values, as well as e-Values and e-Money, which later developed into a modern concept in which Governments can operate an autonomous open-source based solution as a National e-Value Hub or, as we also have come to call it, the Digital Central Bank™ More about the background here: www.Lars.Kanngard.com and www.viacard.com

If you thought that the $ sign was created for the dollar you would be mistaken.

The $ sign was created and based on Sterling.

So why not create the

₫-dollar?

The ViA team learned more about complementary currencies when an advantageous relationship was formed with **Professor Bernard Lietaer**, who has, on an academic level, been very entrepreneurial in promoting monetary innovations. He is the author and co-author of several books on this subject, and more than 20 articles in peer-reviewed journals. The books include: *The Future of Money* (1999); *Creating Wealth: Growing Local Economies with Local Currencies* (2011); *People Money: The Promise of Regional Currencies* (2012); and *Money and Sustainability* (2012). He is an internationally recognized expert in the design and implementation of currency systems. He has studied and worked in the field of money for more than 30 years in an unusually broad range of capacities, such as Central Banker, Fund Manager, University Professor, and a consultant to governments in numerous countries, multinational corporations, and community organizations. While at the Belgian Central Bank, he co-designed and implemented the convergence mechanism of the single European currency system (the ECU), and served as president of the Electronic Payment System. He co-founded and managed GaiaCorp, a top performing currency fund whose profits funded environmental projects. He is also a member of the Club of Rome EU Chapter, a Fellow of the World Academy of Arts and Sciences, the World Business Academy, and the European Academy of Sciences and Arts. More information about him is available at www.lietaer.com

Key Definitions

'Value'

Value is defined as anything that can be used to barter, trade or exchange for something else.

'e-Value' (Electronic Value)

e-Value is any electronic record of value **that belongs to the user**, therefore enabling him or her to barter, trade or exchange for something else.

‘e-Money’ (Electronic Money)

Electronic money (e-money) is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer. The device acts as a prepaid bearer instrument, which does not necessarily involve bank accounts in transactions.

e-Money products can be hardware-based or software-based, depending on the technology used to store the monetary value[1].

'Digital Money'

Any means of payment that exists purely in electronic form. Digital money is not tangible like a dollar bill or a coin. It is accounted for and transferred using computers. Digital money is exchanged using technologies such as smartphones, credit cards and the internet. It can be turned into physical money by, for example, withdrawing cash at an ATM[2].

'e-Scrip' - Electronic Scrip

In contrast with e-Value, we will define as e-Scrip any electronic record of value that is **owned by the provider or the issuer**, and that allows the user to barter, trade or exchange for something else.

The easiest way to distinguish between e-Value and e-Scrip is to check what happens when and if the issuer goes bankrupt.

If the value of the record vanishes with the bankruptcy of the issuer, we are dealing with e-Scrip. If the issuer has protected the user against such a loss through some form of custodial function, we are dealing with e-Value.

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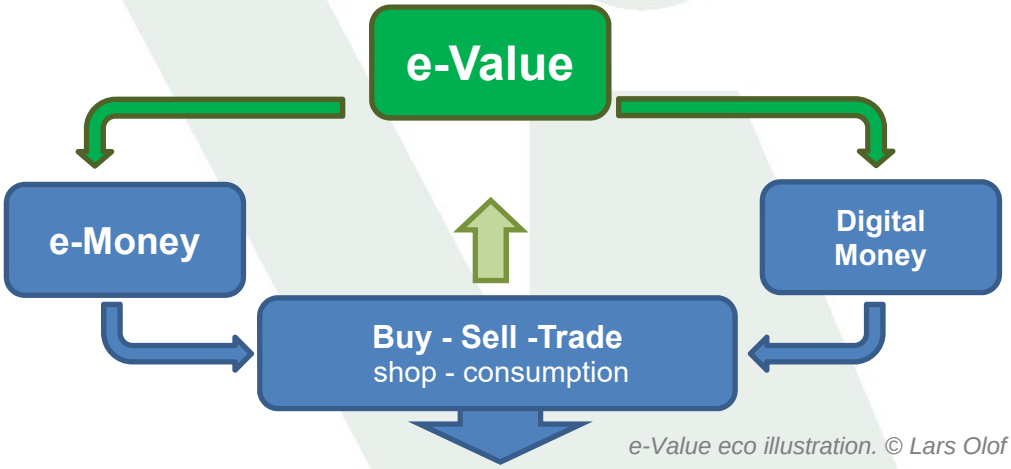
[1] https://www.ecb.europa.eu/stats/money/aggregates/emon/html/index.en.html

[2] Digital Money Definition | Investopedia http://www.investopedia.com/terms/d/digital-money.asp#ixzz47rLDfpI

In this White Paper any e-Value example may also be an e-Scrip, depending on the way the value has been secured.

An **e-Value** is, therefore, any electronic **record** that expresses a value, which can be kept (stored) and used at any time. The e-Value can be used in trade or barter for either another e-Value (or e-Scrip) of any type or exchanged into Digital Money, e-Money or exchanged to traditional Cash (Conventional Currencies), tokens, coupons, etc. and, if backed with Government custodian protection (eg. Tenancy Deposit Protection in the UK, Deposit Guarantee and Investor Compensation Act in Germany), otherwise, it is an e-Scrip.

e-Value can be anything from a prepaid subscription or service, registered handout (record/transaction) of a kilogram of rice, a blanket, time-units or a value of any type of complementary currency which previously may have taken the form of physical coupons or tokens or points, rather than an electronic record.



e-Value eco illustration. © Lars Olof Kanngard

e-Value can, for instance, be a prepaid subscription, a prepaid service or 'TIME' recorded in minutes, hours or units, and can be exchanged, bartered or traded between two users as time-units. Exchanging these e-Values without the ability to convert them to conventional currencies is a **closed-loop e-Value product or service**. When there is full convertibility, we will be talking about an **open-loop e-Value** system.

Today, there is confusion between e-Money, Digital Money, Digital Currencies, Cryptocurrency and Virtual Currencies. To our knowledge, there is no publicized definition, which makes it clear and useful on how to govern the future of values in a digitalized world (e-Society). The consequences can be huge.

In addition, in some countries, authorities grant licenses for companies to 'issue' e-Money but in reality, it is just a prepaid service or subscription.

If a regulator stipulates that only x% of sold e-Money (received 'deposits') shall be secured in 'assets' in the balance sheet, **but not necessarily** backed with 'real' conventional currencies or a bank guarantee, in case of a bankruptcy, such 'soft' assets may not be recovered as intended resulting in the user losing all or part of its value. This is why a good definition would be to use the term "e-Scrip."

It is also crucial to clarify from the start, the **real purpose of a transaction**.

Selling prepaid subscriptions for a mobile phone, for example, is a service, and it remains a service, even though the user can also use the pre-paid subscription to use (exchange to) game-time or even send part of its 'subscription value' to another user. If the 'value' cannot be cashed out (returned) as conventional currencies, it is, therefore, an e-Value.

Why use anything other than Money?

After reading this White Paper, or even before, one may ask, "Why not just use 'Money?' Why create different type of 'Values' in this new era of electronic shifting of values?"

Besides the many obvious facts that money is a huge source of **crime**, **germs** and **costly** to print, costly to handle and **easy to lose** there is an important difference when using e-Values as an alternative.

e-Values do not have a capital-cost, such as Interest.

Digital Money or e-Money as well as e-Values eventually could be affected by inflation, even a Time value can be inflated, but it does not have an interest cost, by its very nature.

> *"Perhaps banks, in their need to feel more relevant with the modern use of e-Values, and in an effort to be more innovative, could lend you 'Time' and they could charge you interest to borrow such Time . . " . - LOK from an address to a group of bank executives in India.*

The many benefits of using modern solutions for Digital Money, e-Money and e-Values with proper global adopted definitions and guidelines will have a profound impact on the modern e-Society, but, without it, the users/consumers will be the ones to pay a costly price.

In the absence of a proper understanding and governance of e-Values at large, governments will not be able to base decisions on the real financial transaction and will find themselves blindsided.

Moreover, a Government that does not understand the financial marketplace will lose the opportunity to police and tax and only create a greater gap between the educated and uneducated, the poor and wealthy.

Money Administrated by a Computer = e-Money

One of the many reasons for confusion is the fact that a normal debit card used in an ATM or being used in a point of sales terminal (POS/EDC) would be considered as e-Money today (in 2016).

All the money that banks handle in their electronic systems (excluding cash) is also e-Money, which means that all conventional money administrated with a computer is actually nothing else than e-Money, so that everything we do using a card, mobile phone, mobile based device or a transfer, if we handle money-values, it is considered e-Money.

That was not the original idea about e-Money, when it all started in 1995.

At that time, money in a bank account, accessible via a card or device, was simply named 'debit-card account'/'current account' because everything was, at that time, handled with only standard bank products, and the user's money was held in a bank account and it was deposited in the bank account before it could be used. Each user had his or her own bank-account and for convenience as well as for safety, many customers did not want to mix their savings account with the use of a 'debit-card.

Origin of e-Money

e-Money used to be defined as a '**Pre-Paid Money** value' (1994/1995), exchanged or converted into the e-Money-Brands and was 'stored' in a NON-Bank Account, for the users. The user could see his or her transactions online, in a 'virtual-account' while the e-Money Brand provider/Issuer kept the bulk balance in their companies' commercial accounts.

The idea was that e-Money users/consumers were **non-bankable customers**, customers who fall below the line for whom banks cannot or will not provide commercial services ~~towards~~, at that time in 1994/1995.

> **Note:** Today 2016 there is only less than 30% of all global consumers who is so called 'bankable customers'. Bankable Customers would have normal bank-facilities in form of deposit and saving account, cheque account, overdraft facilities, loan and to whom the banks can offer other commercial services.
>
> The 'OLD' way to define users, has been based on a statistical 'standard' defined as the age group 15-65. The Author; Lars Olof Kanngard did distribute documents in as early as 1999 pointing out that there will be a shift in how services will redefine the industry at large and pointed out that there is **one more billion consumers** to be added to the traditional way of defining consumers by also adding the e-Kids to the reality of future consumers which starts at age 5 to 105 years of age.

The original concept of e-Money also related to values issued as, what has become known as, a 'complementary' currency that complements or supports a conventional currency/economy.

Today, in 2016, the borders between prepaid cash cards, gift-cards or printed vouchers, a token or a one-time pre-loaded credit card number are disappearing.

We are witnessing the emergence of a monetary world without geographical borders.

In the past, some governments and regulators did not grasp the magnitude of e-Money. They allowed companies then, and still do today, to record/book e-Money as SALES. In some cases, there is not even a record of the fact that the issuer has an ongoing liability to fulfil the service to the buyer/ end customer

If there is no business risk taken on the Face-Value of an e-Value, such sales should **only be recorded based on the margin** (earning) the intermediary seller makes.

> For example, today if an issuer, issues electronic vouchers/records for a pre-paid subscription and those vouchers/records were being bought and paid for by a distributor for the amount of the face-value, minus an agreed discount and the issuer is recording it as a sale, then the distributor would be the only one in a value chain who has an actual business risk. This is because the distributor has paid the issuer but, as yet hasn't re-sold or received value for the prepaid subscription.
>
> But if the distributor could facilitate a payment (face value minus a discount) to the issuer at **the same time** the end-user activated a prepaid value then the business risk shifts to being between the **issuer and the end-user**, which is where and how it should be conducted and structured.

Thus, if a mobile phone operator allows users to buy any other service, like game-time, and such service only becomes activated after the user activates what he or she has purchased, such sales between the customer and the distributor can only be recorded based on the margin, not the face value and an outstanding service is still recorded against the issuer (not the distributor).

The latter definition is crucial to grasp due to the very large risk that companies around the world might create a 'bubble' effect, which could very well burst.

Consider the MCI WORLDCOM case, where potential capacity was booked as an 'asset' rather than recording the margin . . .

Common sense

To use the definition, e-Money, the concept and the purpose should be based on the concept of 'money,' which, for consumers, **means a value one can use in electronic form or withdraw as cash in a conventional currency**.

Custodian and Non-Custodian

In banking terms, a custodian is usually a financial institution that holds customer securities or deposits in trust as part of a specific agreement so as to minimize the possibility of loss or theft.

Typically, there are three parties to a custodian agreement being; the legal owner of securities or deposit; the intermediary manager whose role is to invest or move securities or funds within the owners instructions and the custodian who is responsible for control of disbursements, ensuring the intermediary managers instructions are within the terms of the custodial agreement, and the provision of record keeping and safe custody of the assets.

In some countries there are specific Laws and Acts governing custodians who may be either registered with the Central Bank or both registered and licensed. Whilst custodians have been around in the financial services industry for centuries the role and responsibility of a custodian in the e-Money world is less recognized or practiced.

Perhaps that's an outcome of the fact that e-Money transactions have traditionally been one-off or of lower value than those in Banking; but, with the advent of much broader services and larger providers coming on line, the risk of loss from fraud, theft or negligence in the e-Money world is increasing, not decreasing.

The concepts around security are not indifferent, however. Where a third party entity sets itself up to manage e-Values or e-Money on behalf of an owner, it has an equal duty of responsibility to ensure that those assets are protected from theft or loss and that any movement of those assets is strictly in accordance with the customers instructions. Central Banks also have a role here to ensure ~~also~~ that those funds are protected and it can be expected that as losses inevitably evolve, the regulation between digital money providers and banking will come closer together.

One of the biggest risks apparent, at the moment, is the custody of third party values or funds. In an unregulated or semi regulated world it's not uncommon to see e-Money booked in the Companies ledger as sales and as a debt to the users.

This, from an accounting point of view, looks good, but, in reality, if the company goes bankrupt, such value could be used to offset the company's debt with creditors.

The company could also use such funds for its own gain, such as risky speculation.

Looking at a company with $1,000,000,000 in sales but just a 'real' margin of 0.3% = $ 3,000,000 can mistakenly make the bubble ~~to~~ look much larger than it is in reality.

Custodian agreements are adaptable and have a purpose in protecting consumer e-Values. Perhaps it's time responsible e-Value and e-Money companies to take the lead and differentiate themselves by taking a greater focus of responsibility towards the consumer.

A Custodian arrangement can be implemented simply by agreement between the issuer and the bank or banks, whereby the issuer, as an example, agrees to hold the money in trust and not as a registered asset of its own.

Such terms and conditions could easily be incorporated into an account opening authority and by submitting a highly protected data file once per day where each user and each balance ~~is or~~ can be identified, a third party such as a Central Bank could be the 'SAFE KEEPER' of such data files as well as have the ability to audit the total values.

Separately a third party registered auditor could also be engaged as part of either a secondary or primary check.

Such arrangement for data and value security could be made very secure. All information doesn't need to be stored in traditional manners as one data-file and one data-record per users/account; it can preferably be made in 'block' and made in layers in such way that even if the best hackers in the world might 'crack' one file, they would not be able to make out any relevant data.

Finally, by introducing licensing together with policies and procedures, a Central Bank can drive improvements in the management of risk within these providers.

New, innovatve and highly secure 'ideas' will create a smooth-functioning e-Environment in which the e-Kids can enjoy e-Services and the e-Governments can lead the way to a pleasant e-Society simply via a better way.

e-Scrip – Non-Custodian

"A certificate indicating the right of the holder to receive payment later in the form of cash, goods, or land."

By introducing the definition of **Non-Custodian** stored e-Values, as **e-Scrip**, it will be clear for users as to what they have and how it may be ~~exposed~~. understood?

In emerging markets and developing countries, the percentage looks much different when those users/consumers start to trust electronic solutions. It is imperative that this important difference be emphasized.

The Criminals e-World

Criminals have taken and will continue to take, huge advantage of any loophole in legislations and put into motion well-orchestrated multitudes of fraudulent schemes to rob users and governments.

Today, they do not need to be physically present to commit the crime of stealing or using values illegally. ***They could very well be in a country that may not even recognize what they do as a crime!*** Millions of people worldwide are at risk of losing their life savings and daily values. The outdated 'physical' world, in which a bank robber needed ~~his/her physical presence~~, to do his misdeed in person is now part of our history

and ~~what~~ we can tell our children about how it was when we were young. Such crimes could affect one banks customers, but not a global community or hundreds of millions of users.

The most notable and recent example of a criminal environment supported by digital technologies and cryptocurrency is ***Silk Road***.

Silk Road was an online black marketplace used to facilitate the sale of pornography, illicit drugs and other underworld activities such as weapons, etc. Users accessed the website using a VPN and Tor service to both browse and purchase anonymously without the risk of authorities and law enforcers tracking their identity and location. Bitcoin was a primary facilitator of settlements in this marketplace ensuring again that transactions couldn't be tracked to the user.

Launched initially in February 2011 it was shut down by the US Federal Bureau of Investigations in October 2013 with its founder arrested. Despite the dark net existing for several decades, it was only after a very public article about Silk Road that political pressure forced law enforcement in the US to close the site and prosecute its founders. Since then many copycats have tried to replicate Silk Road.

The answer is not to wait and let the industry 'clean-it-up,' This happened in the telecom industry in the late 80's, when the 800 and 900-service industries were hijacked by thieves called 'cowboys,' at which time huge frauds were perpetrated, and governments and consumers lost billions of dollars. If Governments are to fulfill their role in the economy and community they need to understand the digital economy better, become proactive and create rules and enact laws to enable new, healthy growth, rather than to chase after what has already happened. They must put an end to fraudulent practices.

Scratch Cards – Hidden 'Payoff'

A scratch-card in the Telecom world is a small card made of waxed paper with an opaque covering that can be scratched off to reveal a unique PiN allowing access to prepaid airtime, gaming or other services. These cards have been around for a number of years and, although they have generally served their purpose well, in some countries a small percentage of the cards are being used for a purpose that was never intended. These activities could be either on the edge of or outright criminal.

As an example let's assume that someone wishes to distribute 'money' to a group, perhaps for some kind of temporary or one-time job, as in say a political demonstration. Handing out money in cash is the most common way it is done, but that median can raise suspicion and is subject to audit.

Another scenario might be to purchase scratch-cards in bulk from an airtime provider (say for as little as seventy percent of their face value) and distribute them to demonstrators. Under this mechanism the organizer of the demonstration shows a payment to a Teco provider (maybe over a period of time, thereby reducing suspicion), the organizer has received a discount (normal activity for a distributor of airtime) and the demonstrators have received a value equal to what they would have received if the organizer paid them cash. Furthe,r as in cash, the transfer of value to the individual demonstrator cannot be easily traced and appears as business as usual.

Other cases of cross-border movements of 'money' carry the same structure. The perpetrator buys a box of pre-paid scratch cards in Country A, crosses the border to Country B and sells the cards for cash in Country B. This transaction, which can be sizeable, is outside day-to-day monitoring of potential money laundering activities.

Further, as prepaid subscription cards are intended to be used for a service, if the scratch-cards were activated in Country A they would have been subject to sales-tax and VAT, but because they are being activated outside the country, **no sales-tax or VAT applies.**

Authorities Nightmare - The Invisible Economy

Many parallels to what now is common has its ancestors from earlier developments.

The origin of offering more than just a 'call' to mobile phone users, derives from those entrepreneurs who ~~did~~ developed Value Added Services (Voicemail, Audiotex and IVR Solutions) for telephones in general back in the early 80th, which also become known as 800 and 900 services.

According to GSMA Intelligence (a mobile operator data, analysis and forecasting association with over 800 members) the global subscriber penetration rate now stands at 63%[3] (end of 2015) with regional penetration rates ranging from 43% in sub-Saharan Africa to 85% in Europe[4]. By the end of the decade GSMA estimate that the global subscriber base will reach 5.6 billion by which point over 70% of the worlds population will have a mobile subscription.

Initially mobile phones were simply used for communication but as people have both become more familiar with technology, and the functionality of those handsets has become smarter, they are now being used for a wider range of activities including shopping, banking, directions, gaming etc.

And increasingly a larger percentage of the poor or populations in developing countries are taking advantage of these low cost activities. GSMA Intelligence also estimate that the number of smartphone connections globally will increase by 2.6 million by 2020 and around 90% of that growth will come from developing countries[5].

This poses a challenging dilemma for Governments. If these activities are increasing and are operating in a virtual environment, where a person's identity is invisible and the transaction is outside the 'normal world', how do regulators and policy makers capture this information when they compile statistics and monitor and steer the economy?

Without complete data on all of the economy (real or virtual) Governments become at risk of making decisions that are biased on the traditional world and, in doing so, may unknowingly penalize emerging groups such as the increasing number of mobile users

[3] One card = one subscription. Two cards with the same person = one subscription
[4] GSMA Intelligence — Research — The Mobile Economy 2016. (n.d.). Retrieved May 16, 2016, from https://www.gsmaintelligence.com/research/?file=97928efe09cdba2864cdcf1ad1a2f58c
[5] GSMA Intelligence — Research — The Mobile Economy 2016. (n.d.). Retrieved May 16, 2016, from https://www.gsmaintelligence.com/research/?file=97928efe09cdba2864cdcf1ad1a2f58c

in developing economies. As was evidenced above it's not difficult today to convert an e-Value to e-Money or cash and thereby hide money trails that would have been captured in the past. And, if regulators allow the usage of e-Money as services, the line between when sales tax and VAT should be paid becomes even more blurred. And the more untaxed production and consumption that is undertaken in the virtual world the greater the tax burden on existing taxpayers.

Wallets and Values

Around the turn of the new millennium, Telecom and mobile phone companies began to see a new way to increase revenues, and when game companies saw pre-paid sales of usage time as a systematic strategy, the market was quickly flooded by **wallet-solutions** in all shape and forms.

> **Example:** When a user buys a top-up for his gaming platform, his or her money is directly transformed into 'gaming-time', (prepaid) the amount of time that can be used to play a game, which plays the same role as air-time for a mobile phone provider. Both examples are nothing more than a **pre-paid or pre-sold service**.

When the top-up becomes a 'value' in a wallet, and that value cannot be cashed out (returned in cash) in conventional cash, it has become an e-Value. If the value remains in a currency and can be cashed-out in conventional cash, it is e-Money. If the 'value' can be used to buy something online but only within that provider's platform or group of platforms, then it remains an e-Value.

It is crucial to understand how values are being recorded and who the owner of such values/records actually is, before the value is consumed in a transaction.

> **Example:** Assume you buy a scratch-card to refill your mobile phone subscription, but you lose the scratch card. Would the amount still belong to the issuer? If so, when and how can the issuer claim that such value belongs to him or her if some lucky person finds it and picks it up?

In some countries "Government Consumer Protection Agencies" stipulate that unused prepaid values must be transferred back to the Government, following which those revenues are used to settle consumer compensation claims. Another idea could be to allow the original issuer to direct the funds to a recognized local charity of their choice or to allow the Government to use those funds for a lucky number lottery, thereby placing such funds back directly into consumer hands.

e-Money or Prepaid Services e-Value

Around the world, the largest user groups pay their mobile phone subscription and usage upfront, before they can make a call. This is known as a PREPAID subscription.

This approach dominates the Asian market, India, China, Africa, Latin America and other developing or emerging markets, and has expanded to all sectors where such services or products as Game-usage, TV-Subscriptions, Utility Services, Entertainment and Software Products are sold.

When a user buys 'credit' or Top-Up, this value goes directly to the mobile phone subscription as 'money that can be used;' It is nothing else than prepaid-airtime a prepaid subscription of a service and cannot be seen as e-Money. It's an e-Value.

If the 'Top-Up' value can be cashed out, i.e., returned to conventional cash, it can then be used to pay other services outside the mobile phone operator-offered services. In such case, it would be e-Money. Similarly, if the top-up value was actually paid originally with a wallet (mobile wallet), and the user from such wallet could decide how much should be used for using his or her phone (airtime), and how much for other purposes, then it is e-Money. If no custodian act was involved, a better word to be used is e-Scrip.

When a mobile phone top-up or credit to your phone is being sold, it is simply prepaid subscription, and, in those countries where any type of sales tax or VAT (Value Added Tax) exists, VAT should be applicable on such a transaction, when it is being sold (sale of pre-paid subscription and usage) equates to e-Value.

Critical thought: Assume that Service Providers, such as mobile phone providers are the ones who will administrate e-Money and e-Values and ONLY report/declare how, when and if a value were transacted.

> **Questions**: What happens if there is a technical problem in their system that maintains the records supporting tax payment: as simple as a virus; or a hacked system where those records are being deleted or manipulated; or a disc-crash occurs?
>
> And what if that Service Provider handles a sizeable percentage of the national consumption values and does not declare the adjusted time and makes a 'deal' with the Government to pay less?
>
> Who ultimately pays in the end?

Scope of e-Values vs e-Money:

e-Values can have the scope of a closed-loop adoption, or a semi-open implementation, or can be made on a national scale 'open' solution. The latter would require that any of the e-Values at any given time can be exchanged to any other form.

In contrast, e-Money should NOT have an expiration date, as money has no expiration date.

In our opinion, if an e-Money concept is marketed and has an expiration date it should be seen most likely as a **pre-paid service**. Any sold service/product can have an expiration date.

Let us further elaborate in depth different scenarios and suggested approaches.

e-Value in Reality

e-Value can have many shapes and forms, but it all boils down to a record, which is used up (changes-hands) when it later becomes part of a **transaction**.

We have already pointed out that e-Values can take the 'form' of values that are being exchanged without using conventional currencies. Many interesting aspects will become available on how to create a more resilient and sustainable society.

Here are a few examples:

Gift Cards – Prepaid Goods or Money

Gift Cards are a popular product, widely used around the world, and have become equivalent to the modern use of prepaid cash cards. If a Gift Card is sold for a specific shop or chain of shops, say, as an example, H&M, and you cannot get cash back, then it is a PRE-SALE of merchandise. And if the country has Sales-Tax or VAT, such tax would **be included** and such Gift Card would be considered as an e-Scrip.

To define a Gift Card as e-Scrip makes it clear to the buyer that the issuer holds the value and, if the issuer goes bankrupt, such value is lost.

If a Gift Card can be used in many types of shops, and those shops or those products and services have different types of tax-rates (sales tax or VAT), it wouldn't be possible to actually sell such gift cards with taxes included. This type of Gift Card would be considered e-Money normally, but, because the holder cannot get conventional currency (CASH) back, it would remain as an e-Scrip.

If the Gift Card is being sold with conditions that it can be 'sold-back' to the issuer and the holder actually can get CASH (conventional currency) back, then it is e-Money.

If there is an EXPIRATION date on a Gift Card, then, in our opinion, it should not be classified as e-Money.

Many countries have clear rules and guidelines on how to record and handle Gift Cards in the financial administrations and those definitions can, in most cases, also be used for defining future use of any type of **e-Value's**.

Time as e-Value

If one has earned or has been given a 'value' of, let's say **1 hour**, in electronic form, it then becomes an e-Value.

When one hour (60 minutes) is exchanged or given to gain something of value, neither digital money nor e-Money has been exchanged. If that hour was kept in an electronic form rather than a coupon, token or any other non-electronic form, what has been exchanged is simply an **e-Value**.

The result is the same as if we have a group of people or a community that has adopted a Time Bank using complementary currency represented by coupons or a membership booklet. When they transfer the system by using software to electronically administer this complementary currency, this would then generate e-Values.

In a normal Time Bank, everybody's time is considered equal in value, and the time units cannot be exchanged for conventional money. So, in a normal Time Bank's situation, we remain in e-Value. e-Values can be given as a 'grant' or be given as a charitable cause to another user.

Another situation would develop if there had been an agreement for a fixed tariff of the value in conventional money for an hour, and the option is given to convert these units (time) in conventional money. In this case, we would be dealing with digital money.

It's imperative to emphasize once more that the real purpose of a transaction shall be based on its 'final' disposition if it is in exchange for a service or product.

If a value is given in exchange for something, which is a service or a product, it must be treated as such.

If a product or service exchanges hands based on a bartered structure, its purpose is still to receive a product or service.

Tutor-Values

Assume that a government or a school or any other institution for learning would encourage students to help each other and tutor other students or children. It then becomes necessary for the courses selected to be paid for in the form of e-Money.

For example: say that a typical student in Sweden, or in any other country, would like to learn a new language and finds an Educational Institution that offers such a language course at a price of $1,000.00.

Let us further assume that the price for the course can be paid with up to 50% of Tutor-Values, and the balance can be paid in cash, e-Money or Digital money.

This same student has, for the last 3 years, been tutoring younger students in IT and History, and has earned in this process 50 e-Tutor (Tutor e-Values), with which he can pay for half of his course.

> e-Tutor values can have an exchange rate, which might be updated each day, each month or each year, where one hour of e-Tutor, as an example, would represent $10.00 as e-Money.

When and if the Educational Institute starts to pile-up e-Tutor values, they can use them to grant future Tutor programs.

Hence, e-Tutor values are an e-Value. The Education Institution can also exchange their 'pile' of e-Tutor values for Digital Money, and pay a supplier who accepts such digital money, or exchanges the Tutor-Value to e-Money, and use it wherever they want to use it for payments to merchants who accept e-Money.

If a Government wants to encourage learning, they can create different programs where, for instance, the Government gives educational materials in exchange for e-Tutor values, or the Government grants a school a number of e-Tutor values as a contribution to the school.

It could be argued that a Tutor does a teacher's work, but it can also be argued that, if a teacher provides Tutor services, the teacher would also earn e-Tutor values, which he or she eventually could grant to his or her own children.

However, some may argue that e-Tutor values should be part of a taxable 'income'.
The tax would then be based on the value for whatever the e-Tutor values have been exchanged.

Note: e-Tutor value, as the example described can, in fact, be any other kind of e-value created, invented already, or invented in the future. It is simply the name of an 'alternative' way of not using conventional money.

e-CO_2 as e-Value

We have heard for years, the debate about CO_2 levels and many ideas on how to encourage consumers and businesses to contribute to a cleaner world by not using so much fossil-based fuels.

Following is an example on how it could be designed:

Let's assume we have a country with a population of 100,000 people and a decision is made that the country will only allow an output of emission per year of 10 Mt:100,000 Kg, that's 1 Kg per person (1,000 gr).

The e-CO_2, is issued in such a way that 70% goes to the population and 30% is given to all businesses. Each e-CO_2 = 1,000 units.

So, the person who does not use his or her e-CO_2 and, just to make it even simpler, goes to his or her work by bicycle, that person could sell his or her e-CO_2 units to anyone who needs them.

There would be a 'trading-rate' and, if electric cars or alternative energy-based vehicles don't become popular, the price for e-CO_2 would go up as the demand would remain or even increase.

When fuel is being sold, the price would be a combination of conventional money and e-CO_2 or, in the extreme case, if a holder of e-CO_2 has so much he may even pay all the fuel with only e-CO_2 values, based on the exchange rate at the given moment.

Later, when everyone is walking or using transportations with no emission, the price, the traded price for the e-CO_2 would go down, not being 'hyped' anymore and, at such time, the city or the country in question for sure wouldn't have any more pollution!

Creating - Issuing and Administrating Value

At this stage, it is likely clear that our e-Society is far more complex if we concentrate on comparing what we are accustomed to and what it has become and towards what direction the e-Society is going.

There are really only **four** (4) different categories for all those variants and innovative concepts:

1. **Blockchain** – Crypto Currencies anonymous environment, no central system, based on a 'Data record'.
2. **Closed Loop – user group environment.**
3. **Semi-Open Solutions Co-Branded.**
4. **National e-Value Hub – Centralized transparency.**

Blockchain – Anonymous 'values'

Blockchain-issued Digital 'money' is where the data-record of how such value has shifted hands, is kept as a final entry on each growing record, and NO central systems are needed or used.

Blockchain or Crypto Record Based values, which do not have some kind of centralized gateway or validation point (at the time a record is being used) is nothing more than a solution where values can shift hands anonymously. Shifting values anonymously is a booster for a new dimension of what in the past were defined as 'money laundering' or 'black-market'. Which now needs to be redefined as e-laundering and 'e-black-market', with a whole new set of game-rules and perhaps a few new huge government agencies to seek to catch-up with 'hidden' or already disappeared records in bits and bytes.

Closed Loop – User & Brand Solution

Closed Loop - Issuing e-Values or e-Money, can be operated without a centralized system. With central system, we should clarify, that a Closed Loop solution can be designed in a cluster of different systems and different devices and a main system would keep it all 'hanging' together as one Closed Loop Solution. When the expression Closed-Loop is being used to better define that the users can use such a service, if as an example a supermarket chain, creating their own Prepaid Cash Card and Bonus Card solution as their branded card and such card can only be used within such supermarket chain, then it is a Closed Loop Prepaid Cash Card.

The owner of the Closed Loop solution can make its own rules and set its own fees for different services and if such solution is also being used for making payments buying goods or services the owner can decide if they will apply to 'normal' standards and charge the merchant the merchant's fees commonly being used.

Semi-Open Solutions – Co-Branded

Semi-Open structures, are the same 'system' structure as was previously explained above as Closed Loop, with the difference that the Supermarket Chain, as in the example, decides to **Co-Brand their Pre-Paid Cash Cards.** Co-Branding normally is made together with a traditional card brand, such as Visa or MasterCard or any other card brand, which results in the cardholder being able to also use its Super Market card anywhere else such brand is being accepted.

The Semi Open solutions may cause dilemmas due to the fact that the networks of traditional brands has a merchant fee. This fee is being shared between many middle men (system and network providers) from ATM and POS devices and network owners/providers as well as networks which bring the transaction back to the Semi Open solution where it finally will be processed or processed. The good news is, that if a Government has adopted a National e-Value Hub, ***any such provider of a Semi-Open concept can also be a customer in such a national solution*** **- a Win-Win result!**

National e-Value Hub

Any Government that wants to be in the 'game', desires to make decisions based on reality or facts reflecting what's happening **today** and wishes to govern in the future e-Society, **must have a modern national centralized solution**.

The National e-Value Hub works as a centralized 'Transaction Hub' which can handle any type of transactions, any kind of e-Values, can Validate transactions, and can make instant settlements between users.

A National e-Value Hub would be interconnected with all national banks and all financial institutions in such manner that everyone in the market can utilize one common national solution.

A National e-Value Hub can, depending on the size of a country be distributed in a cluster of separate stand-alone systems, in such manner that efficiency and

geographical distances or concentration has as little impact as possible for natural disasters, when connectivity may impact modern communication infrastructure.

The National e-Value Hub would work as a centralized 'Wallet' where the user has its e-Values and any other Service Providers would 'get' values to their different services, on flexible terms which the user alone can master and change at any time.

A centralized autonomous National e-Value Hub empowers the Governments to make their e-Society open for everyone and creates a FREE – SECURE – FAIR market completion.

Blindfolded decisions are just one aspect of a dangerous future where Government would neglect the fact that we already are in the @-Age and we already are part of an e-World.

Establishing a preferred **autonomous National e-Value Hub** is actually a very logical and natural way of being part of the evolution of values at large and a simple way to regain the core principal of governing.
A National e-Value Hub would be preferable as a central solution and become the safe-keeper and validator of any approved e-Value or e-Money service offered in the nation.

To make a national OPEN and where FREE – SECURE – FAIR market competition would be a **proud national asset**, rather than a national hustle - having a centralized system, *without providing a large network of access points, point of Presence, and POS devices would simply make for a quickly failed strategy!*

Support and deployment of access points will be made together with the local Service providers, so that everyone is directly involved.

The Government would have access to FACTUAL STATISTICS on the fly; they would not need to wait a year later to see statistics published. With this solution, the Government would know how e-Values have changed hands and they can quickly follow trends and see how new innovations impact the economy.

The National e-Value Hub, as documented further on, will elaborate further and explain in depth different angles as well as the ease with which it can be implemented.

Broken link picture

Trust Chain

The last topic to be described, as part of dealing with and handling electronic values is, about the users, you and me and everyone else and how we can know who is who and how we can improve the chain of trust and create . . . ***a Trust-Chain.***

Many times the users, the consumers, are forgotten when these topic are discussed or implemented. This can be seen when a small shop owners lose their life savings due to a financial solution or product not working as it was intended, or that no one recognized that it was a well-orchestrated scam.

All technology and all systems have control over us as users, but how can we know that the system we have just inserted our card into is a real device?

So the question is; how do we really know who is who? When, in the worst case scenario, databases, having all our identity information, are being compromised and ending up in the hands of the e-Criminals.

How would it be possible, for example, for a card user to know that the ATM he or she is getting ready to use is a real ATM, not a compromised device or a fake device?

Identity thefts were, in the past, limited to a few simple things. Someone makes a false ID document by changing the picture, arrives at my bank, and withdraw all my money, as another example.

Such criminal acts would even pass the traditional KYC procedures at the bank, due to the fact that you have identified yourself with a proper ID card. Identity thefts have many 'faces' and the genius to invent new ones.

When one reads this, you may only look at things from the perspective of what you are accustomed to seeing or how things are so well organized in a modern country. keep in mind that the vast majority of consumers in the world do not see or have the same things at all. In some developing countries and the emerging markets, they still have strong family and society bands, which we in Europe lost already in the 50's..

In these societies, knowing who is who, is strongly traditional and everyone knows who you are and to whom you are related. This is a HUGE advantage, which they can now use to become as good or even better than any well developed country.

An important part of implementing a National e-Value Hub has one great advantage: The local shop, the shop-in-the-block, knows me, knows where I live, and sees me, or my family using the services on a daily basis. The local Merchant is given the very important role of insuring that when we use a card, or a phone or a wristband to pay, ***they know who I am*.** When I, as a user, need to enroll in a new service or receive an Instant Secure Message (ViA ISM) it will be printed on the POS device after I have identified myself and entered a PIN code or maybe even an extra OTP code. No other device in use anywhere today would print such a secure validated recipient message. (such as a registered letter)

The local Merchant or an Agent becomes the contact-point we in the past were accustomed to, or had hoped to have, if we were a bankable consumer or a bankable small business owner.

Man - HTM

Today, financial Services are 'only' offered to bankable customers, a group currently estimated in the world at only 20% of all consumers. It's a common reality, that you as a bankable customer, know the person who handled the services the bank has sold you.

In the new e-Society this history will not be repeated for the simple reason that it will be driven by what *you and I need and what is simple to do*. Not driven by the aim of the large brands, card-brands, system suppliers and consultant firms.

The old structure with the very high operating costs of bank branches, as an example, will hasten the shift away from the dying bank branches over to the 'Trust Chain.' This, then, will then become the 'duty' of the small Merchants and specialized Agents, who will visit you rather than you needing to visit a location.

The Author is also the patent holder of a very simple but ingenious solution on how future users would know that the ATM or any other devise are not a fake device, you can read all about the innovation on the website.[6]

e-Society in balance

What's and Needs

In many countries around the world there is an **imbalance** between what the business environment wants and what Governments archive; and often there are many times a lack of cooperation which results in Governments continually playing catchup with the reality of what already has happened, rather than becoming known as a springboard for the prosperous e-Society.

Creating balance within the e-Society guarantees success.

The National e-Value Hub concept and model, invented by the Author and his team, is the solution to empower everyone in the modern e-Society, where everyone becomes a winner.

The National e-Value Hub can be easily be understood by agreeing that one of the main purposes of Government is to design, build and implement services such as:

- ✓ **Water Supply**
- ✓ **Salvage**
- ✓ **Electricity**
- ✓ **Roads**
- ✓ **Transportation**

[6] ViA TAV Innovation www.ViATAV.com

What could be a better solution then the Government also provides a secure common National **e-Payment Solution** at a national level with a state of the art network of POS devices, e-Kiosk's, card-reading or NFC devices across the nation.

So the Government is by far the best operator of such a solution and the private sector is the best to teach the user to use the solution and also let every service provider or any mobile phone operator be part of handling the network of acceptance points, the POS devices.

The ViA model is based on a unique Business Model Innovation and a Financial Revenue Model Innovation (created in 1998-1999) where the existing Service Providers become part of the National solution as active partners.

The existing mobile phone operators have, in most cases, a vast network of service outlets in a country and they would ideally become the distribution point for the POS or any other devices.

A unified Task-Force of well-educated ViA Agents will become all Service Providers front-representatives, who educate and visit the shops, the outlets, SME's and businesses on a regular basis.

The Wheel, goes around and around……

Picture of a wheel

You can visualize the ViA Model as a Wheel, where the National e-Value hub is the hub of the wheel, the spokes are each a Service Provider or a company offering its products or values and the outer and largest part of the wheel, the rim, representing the users, coordinating the resources, meeting the needs and building a secure national solution in which everyone plays a role *ViA . . . a Better Way!*

Implementing a National e-Value Hub

To be able to create an **open and free competition market**, governments can now take a leading role and create a springboard for the future e-society by adopting and implementing a centralized autonomous national e-value hub as a new **Digital Central Bank**™.

The implementation of a National e-Value Hub is a compliment to every existing financial institution, such as banks as well as a perfect solution for all Service Providers including all mobile phone operators, internet providers and media companies.

Operation of a ViA National e-Value Hub (eHub) are mainly focused on day-to-day transactions and micro transactions.

The best base for getting the National e-Value Hub to become broadly accepted and used by everyone is that the Government imposes a PAYROLL solution as an obligatory way on how wages shall be paid and distributed. That gives the Government many advantages to collect taxes and fees. A Payroll implementation also makes the source of funds clear for the vast majority of users.

Implementing the ViA Card as an embedded function in a National ID-Card solution is even better than distributing a specific payment card, such as a ViA Card and or in combination with secure wristband NFC solutions.

When the Government arranges for the Custodian arrangement ALL banks in the nation should preferably be involved, in such manner that as little of funds as possible are being sent in-between the different financial institutions. The National e-Value Hub will handle the settlement and the netting at a national level.

All Service providers including Mobile Phone operators who may even have their own 'Wallet' services, preferably approved, would use the National e-Value Hub as a gateway going in and out. Such strategy will result in preventing sales or VAT taxes being avoided.

Pros & Cons of the National e-value Hub

- All transaction well recorded, including both the remitter and the receiver. However, a government typically might allow a small threshold for other 'wallet' providers where identification of the parties is not required. This becomes more feasible with a National e-Value Hub..

- If the Government does NOT dictate and enforce its position, electronic payments can avoid a centralized National e-value Hub solution. This eventually would, become a larger source of illegal transactions than what is possible to achieve with cash. Recording of transactions assists in preventing tax avoidance and terrorism.

- International requirements for improving abilities to monitor, trace or see early moments of e-Values for a non-proper purpose, such as money laundering and anti-corruption.

The community may be skeptical about why the Government wants to own the e-Hub, citing the ability to collect more taxes and delve into information that the community might consider private or not in its interest. There will need to be good communication of all the positives at the outset and respect for, and/or implementation of, privacy rules around the information in the e-Hub.

- Some smaller transactions are now without taxes (VAT, etc.) but due to the fact that small shops, merchants and street sales business, in the developing and emerging market, suddenly become part of tax-collectable transactions, the overall tax-level likely **can be reduced as a result**. When a vast number of transactions, maybe even more than 60% of sales transactions, cannot handle VAT, the tax rates go up.

- As the owner of an e-Hub a government has a stake in controlling the cost of transactional services in the nation and it can subsidize and promote the provision of services to the unbanked or less fortunate.

- Banks will, at first, see it as an erosion of their business and fear and possibly be anti-implementation 'voices'. (Banks are only a part of the e-Society. And yes the Government will have the ability to price or subsidies fees as it sees fit).

- As the owner of an eHub the Government can ensure more cost efficient and timely delivery of its own services such as the payment and delivery of social security benefits and pensions or the receipt of payments for services such as licenses, rates, taxes, etc.

- National implementation will take a few years and it needs investments from the Government. ***With the ViA National e-Value Hub is being implemented, the low cost and broad assistance from the ViA Group and their Government-Taskforce will quickly turn the initiative to a new revenue stream for the Government.***

- An e-Hub owner can ensure the integrity and authenticity of data.

- If dominant market players 'master' the data they can, if it serves their interest either manipulate or only give public knowledge of segmented information or, in the worst case, manipulate data to improve their gains.

- Some may argue that the Governments will know too much. Implemented correctly where the users will profit from sharing information, the larger number of users likely will applaud and approve the new secure way to handle their values.

- Sharing resources also brings down investment costs, for everyone in the society. Think of ATM or credit bureau monopolies where some credible participants are locked-out purely for the commercial interests of the monopoly.

- Data captured in the e-Hub can provide quality information to Governments on the state of the nation, its people and the state of the economy, today.

- Data can also be provided Instantly and on a daily basis, if needed.

- There are groups in society who may be against consumer-data collections. To solve such claims, the user will be able to turn detailed data capturing on or off. If values are returned to the user as a contributor, they will more than likely subscribe and approve data-capturing.

- As the owner of the e-Hub a Government can add to the efficiency of data exchange and payment transactions in business instead of going to several multiple points, systems linked via a single gateway.

- If future data does ***not*** include transactions made in the new e-Society and its e-economy, the government would make decisions blindfolded.

- An efficient payments network attracts business and opens opportunity both locally and internationally.

- A National e-Value Hub reduces the cost of doing business by making it more efficient to pay and collect.

- Effective payment network creates many new job opportunities.

- Traditional existing payment solutions may think they will be left aside. Proper implemented as an e-Value Hub everyone can deploy new services, so an initial 'negative' reaction can quickly be turned around.

- A service provider using 'old fashioned' papers may, at first glance, think in terms of needing to reduce staff, where in reality, they can shift staff to new and larger opportunities.

- Introducing new values in the form of e-Values will bring the society to the forefront of modern technology and save huge administration costs.

- Allowing market dominant players to operate solutions without centralized transaction Hub will cause the society to be left behind.

ViA Global Holdings AG has developed an open source, resource-based software and system solutions as an **autonomous** concept, which a government can implement as a centralized transaction Hub, where a Free – Fair – Secure and truly open market competition can flourish.

Suggested definition of e-Money – Digital Money

The definition for e-Money found on the Internet, may need to be updated to a clearer definition. Following is our suggestion:

E-money is defined as ***electronically stored monetary value*** *on a technical device that may be used for making payments to entities other than the e-money issuer.*

This device acts as a prepaid bearer instrument which does not necessarily involve bank accounts in transactions.

Digital money is *any means of payment that exists only in electronic form.*

It never takes a tangible form like a dollar bill or a coin. It is accounted for and transferred using computers or other electronic devices

Digital money is exchanged using technologies such as PCs, smartphones, credit or debit cards and the Internet.

A Glimpse from The Media

> *"**Ransomware** problem in the US is on the rise ---- and the U.S. government is appraising the digital currency that is associated with this cybercrime. The criminals who unleash ransomware encrypt victims' data and demand payment in bitcoins in exchange for the decryption key. The burgeoning problem of ransomware, combined with the lack of regulation around the cryptocurrency Bitcoin and its underlying technology, has started to draw the attention of U.S. legislators such as Rep. David Schweikert.*
>
> *But given **the lack of awareness in Congress around blockchain**, and the **role of Bitcoin in cybercrime and terrorism, other legislators are currently focused more on blockchain security and the risks associated with the technology,**as opposed to its potentially good uses. In a testimony on the topic that was held before the House Subcommittee on Commerce, Manufacturing and Trade, committee members expressed their concern that **blockchain enables cybercriminals by giving them a way to transfer money that is hard to trace by law enforcement.***
>
> *Witness **Jerry Brito, executive director of Coin Center**, a public policy organization dedicated to digital currency research, **acknowledged that ransomware is a very serious problem made possible by Bitcoin, as well as cryptography and data breaches."***

This only proves that no matter how they over-hype the use of block chain on payments and other fields, regardless whether it will disrupt the payment industry or not at present or in the near future, it cannot be denied that there are still some **standing issues to address**. But it should all start by understanding the technology and the underlying security, privacy and accessibility of it. Even government needs to do their assignments and study the technology, as **Dana Syracuse, counsel at Buckley Sandler LLP, based in Washington, D.C,** said:

> *"It is a story about cybersecurity. It's a larger conversation that needs to be had around regulation in that area and creating proper standards there. Furthermore**, it's important that law enforcement officials educate themselves on the forensics tools available**, so they can trace funds."*

(http://searchcio.techtarget.com/news/4500279516/Congress-questions-blockchain-security-amid-ransomware-news)

On the other hand, digital money/currency is also giving some headache to the government in terms of TAXATION.

> *"Governments globally have a huge challenge from the emergence of a digital economy which has the power to disturb or outmaneuver tax systems if not accommodated adequately and in a timely manner.*
>
> *"On the **international front, the challenge is posed by technology diluting the efficacy of borders**. The equalisation levy of 6%, introduced in Budget FY17, on the*

*advertisement fees paid to foreign digital media companies, is a corner stone of the international problem of BEPS** (Base Erosion and Profit Sharing). In yet another example, since 2015, the EU has brought all digital goods' B2C sales under VAT, irrespective of the country of origin.*

On the domestic front, the challenges are created by a piecemeal approach from the tax authorities with respect to the evolution of this new economy ever since the internet and software delivery have proliferated. *The fragmented system is not able to cope with new business models that are based on innovation and ideas where "software is eating the world"—as famously said by Marc Andreessen, a general partner at the prominent venture capital firm Andreessen Horowitz .*

In some countries, Netflix users evaded tax when they procured directly online, as against paying taxes when procured through a partner. In India, the same 'SaaS' software is taxed only under the service tax component when procured through a service partner, as against service tax plus VAT when procured directly. ***The confusing tax systems create immense frictions for ease of doing business for digital goods and services****.*

The world has recognised the problem and started moving towards pragmatic solutions. India, with its 29 states and over 250 million internet users, cannot afford to overlook the ***taxation issues facing a digital economy.*****"**

***BEPS** refers to tax planning strategies that would exploit the gaps and mismatches in tax rules to artificially shift profits to low or no tax locations where there is little or no economic activity, resulting in little or no overall corporate tax being paid. These norms were announced by OECD in October 2015 to close tax loopholes that it estimated cost countries upwards of 100 billion US dollar a year.*

(*http://www.jagranjosh.com/current-affairs/beps-guidelines-of-oecd-to-be-implemented-in-india-from-1-april-2016-1453466914-1*)

More Links and References

For more on Digital Central Bank™ go to: www.viacard.com or www.digtalcentralbank.com

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