

VARDIZ



Bitcoin:

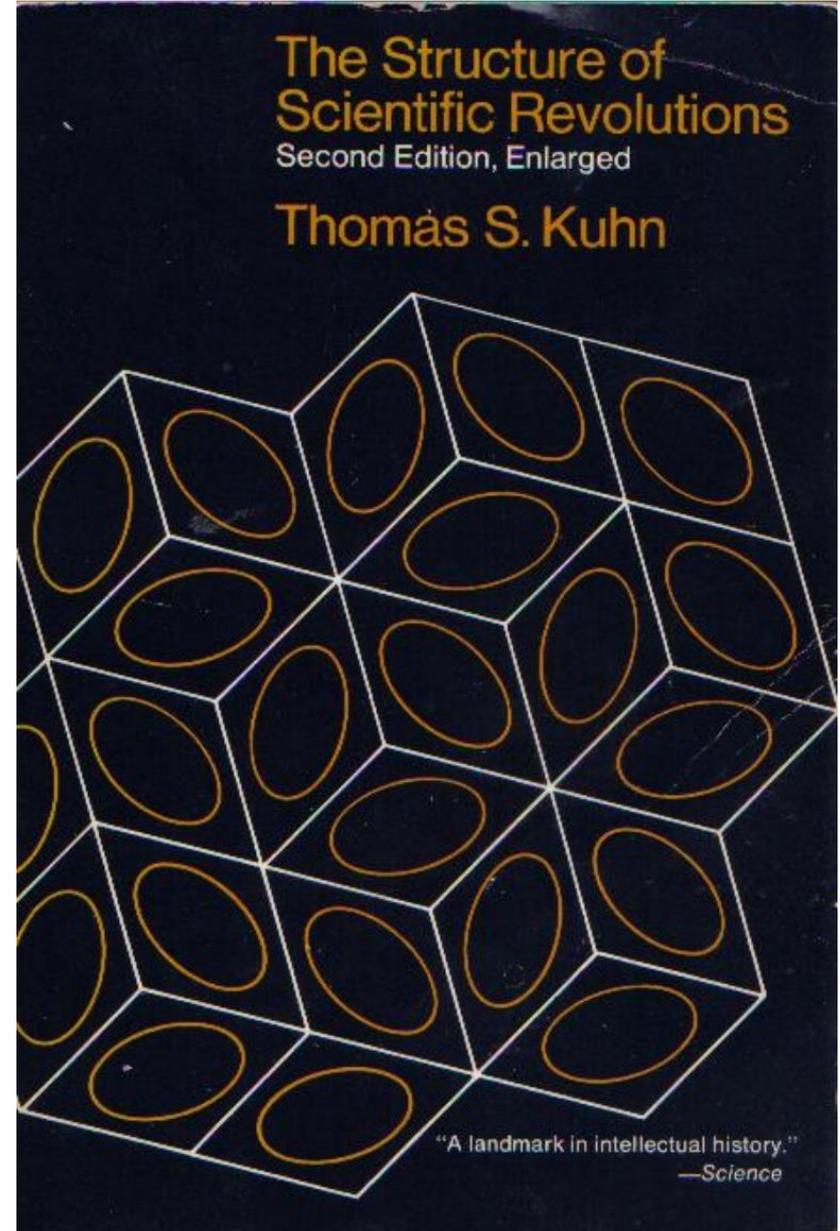
Business niches in the
Bitcoin ecosystem

Last updated:
September 2018

Preamble



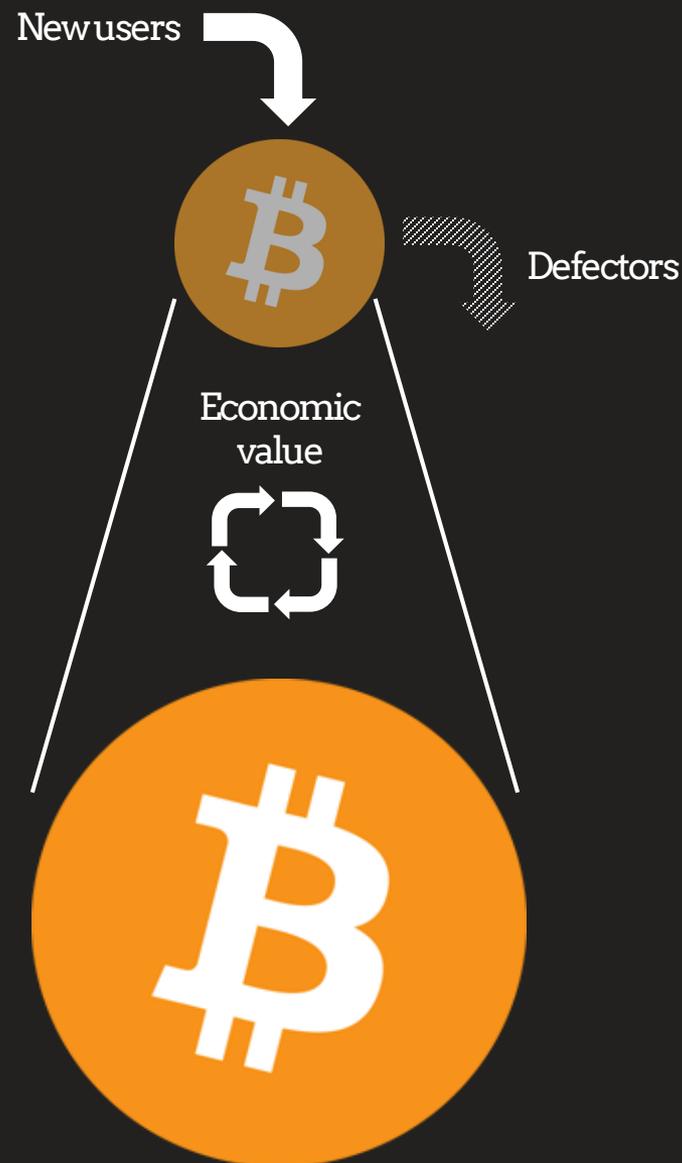
1. The term “Paradigm Shift” was coined by Thomas Kuhn in 1962.
2. It describes a profound change in fundamental models or perception of events by society.
3. Paradigms are not right nor wrong; just ideas taken for granted.
4. When paradigms fail to account for anomalies, it enters a crisis and new models are explored.
5. What follows is a battle between proponents of the new paradigm and holdouts of the old. Shifts were neither instantaneous nor calm.
6. Paradigm shifts occur through accumulating followers, **never** by convincing the other side to change their minds.



Want to produce a paradigm shift? Ignore the haters, focus on accumulating followers



1. Bitcoin is an ecosystem. The intrinsic value of Bitcoin is dependant on the vibrancy of its ecosystem.
2. The more new users enter it, the less defectors leaving it, the more economic value will circulate within it.
3. Accumulation of economic value is the *only* sustainable catalyst for long term price appreciation.
4. The goal of every business niche in the Bitcoin ecosystem is to:-
 - Attract new users into the ecosystem.
 - Circulate user spending within the ecosystem.
 - Convince users to stay!



Spot check!

Which of these niches help Bitcoin accumulate followers?



Essential



Marginal utility

	Attract new users?	Circulate spending?	Prevents defectors?
Fiat-bitcoin exchanges	✓✓✓✓✓		
Bitcoin-accepting merchants		✓✓✓✓✓	✓✓✓✓✓
Merchant processors			✓✓✓✓✓
Professional services		✓✓✓✓	
Lobbying	✓✓✓	✓✓	
Mining		✓✓	✓✓✓
Application development			✓✓✓
Protocol development			✓✓✓
Custodian services			✓✓
OTC desks	✓✓		
Exchange-traded funds	✓✓		
Crypto ATMs	✓✓		
Market makers		✓✓	
Local currency stablecoin	✓✓		✗✗
Hackathons	✓		
Conferences	✓		
Blogging	✓		
Crypto-crypto exchanges		✓	✗✗
Options / Futures / Margins	✗✗	✗✗	✗✗
Blockchain consulting	✗✗✗	✗✗✗	
ICOs			✗✗✗✗✗

Structure of the Ecosystem



1. Shared layers in the Bitcoin Ecosystem are open, permissionless and decentralized.
2. A wealth of reliable services & markets already available; we inherit powerful network effects.
3. Focus on building on top of them, not competing with them.
4. We need to develop the “last mile” for Malaysia, or else we will get left behind the foreigners.
5. Or... not.
6. Bitcoin allows users and businesses to be self-sovereign. The availability of this option is unprecedented.

The Bitcoin Ecosystem

Malaysian Users	Sovereign Users	Foreign Users
Malaysian Businesses	Sovereign Businesses	Foreign Businesses
Malaysian Regulation	Sovereign Regulation	Foreign Regulation

Block explorers,
mining pools,
price indexes

Services

Desktop clients,
App wallets,
Payment servers

Application

Full nodes, LN
channels, Miners,
TOR, TCP/IP

Infrastructure

Bitcoin Core, BIPs,
GitHub, open
source developers

Development

Resilience over efficiency



1. For non-self-sovereign users and businesses, we need to face the realities of the environment.
2. The local environment in Malaysia is **still hostile**.
3. We have apathetic regulators and wary service providers. What other industries take for granted, Bitcoin has to fight for.
4. Includes banking, payment processors, accountants, auditors, lawyers, system integrators etc.
5. Niches are advised to tweak business models that assumes unreliable support.
6. Upon paradigm shift, we can evolve accordingly.

Accommodating market environment

Hostile market environment

 bitFlyer

coinbase

 bithumb

 CUMBERLAND MINING
A DRW COMPANY

 LocalBitcoins.com
Bringing Bitcoin Everywhere

 Coinsource



Fiat ramps

bitpay



COINGATE

 BTCPAY

 OpenBazaar



Merchant tools

 wirex

 TenX

 Bitrefill



Consumer tools

Positioning Bitcoin to Malaysians



1. When it comes to payment options, Malaysians are *supposedly* spoilt for choice.
2. Despite high penetration of internet and mobile banking, Malaysians only use them < 20x per year. In contrast, cash grew healthily.
3. This indicates a **user experience** gap – opportunity for Bitcoin:-
 - Bitcoin payments can be made fast, cheap, private and final.
 - Sign-up, transfer & settlement is devoid of friction.
 - Bitcoin opens up use-cases which current options are incapable of serving.

Table A.31

Number of Cards and Users of Payment Instruments and Channels

As at end of period	2016	2017
	'000	
Number of subscribers:		
Internet banking	22,774	25,526
<i>Individual</i>	22,021	24,579
<i>Corporate</i>	753	947
<i>Penetration rate to population (%)</i>	72.0	79.6
Mobile banking	8,946	11,480
<i>Penetration rate to population (%)</i>	28.3	35.8

¹ A debit card with an international brand debit network application (e.g. Visa and MasterCard)
² A debit card with the domestic brand debit network application, i.e. MyDebit
³ A debit card with two payment card network applications or brands

Source: Bank Negara Malaysia

Availability not an issue

Table A.22

Basic Payments Indicators

	2016	2017
Population (million)	31.6	32.1
GDP (RM million)	1,230,120	1,352,477
Cash in circulation (CIC) (RM million)	85,460.3	92,347.6
Transaction Volume Per Capita (unit):		
Cheque ¹	4.2	3.7
E-payments:	97.5	110.6
☞ Credit card	12.1	12.7
☞ Charge card	0.1	0.1
☞ Debit card	3.4	5.1
E-money	52.6	58.1
Other cashless instruments ²	1.6	0.9
☞ Interbank GIRO	5.5	6.1
☞ Instant Transfer	2.6	4.1
☞ Direct Debit ³	0.1	0.1
☞ ATM ⁴	1.4	1.3
☞ Internet banking ⁵	13.2	15.9
☞ Mobile banking ⁵	1.4	2.6
Mobile payment ⁶	-	...
RENTAS - Third party transactions ⁷	0.1	0.1
☞ Intrabank direct debit and standing instructions ⁸	3.2	3.4

Cash still king

Usage still low

Sovereign businesses: A new frontier



1. By abolishing barriers to finance, children, machines, even code can now **own assets and conduct transactions without legal entities** – essentially sovereign businesses.

2. Current e-payment options presupposes a local banking relationship – are we *really* going to force millions of IOT devices and APIs to open bank accounts?

3. Being designed for internet use from the ground-up; Bitcoin is far more well-positioned for use in these novel use cases.

Examples to try:-

Self-funding mesh networks



API-based web services¹

SaaS backend	Description
Server side gcc	Cross compile to save time
Google Translate	Machine translate
Google Maps	Find the latitude/longitude of an address
ImageMagick/Zamzar	Change file types
Bing Search	Search the internet
Altcoin APIs	Convert digital currencies
Postgres + data	Query one of several databases

Related service	Description
linkedin.com	Email interest group or individual for BTC
fullcontact.com	Message interest group/individual for BTC
Google Surveys	Get surveys filled out for bitcoin
mturk.com	Label training data for bitcoin
instagram.com	Buy/sell stock photos for bitcoin
twitter.com	Buy/sell retweets for bitcoin

Autonomous vending



Streaming / Metering

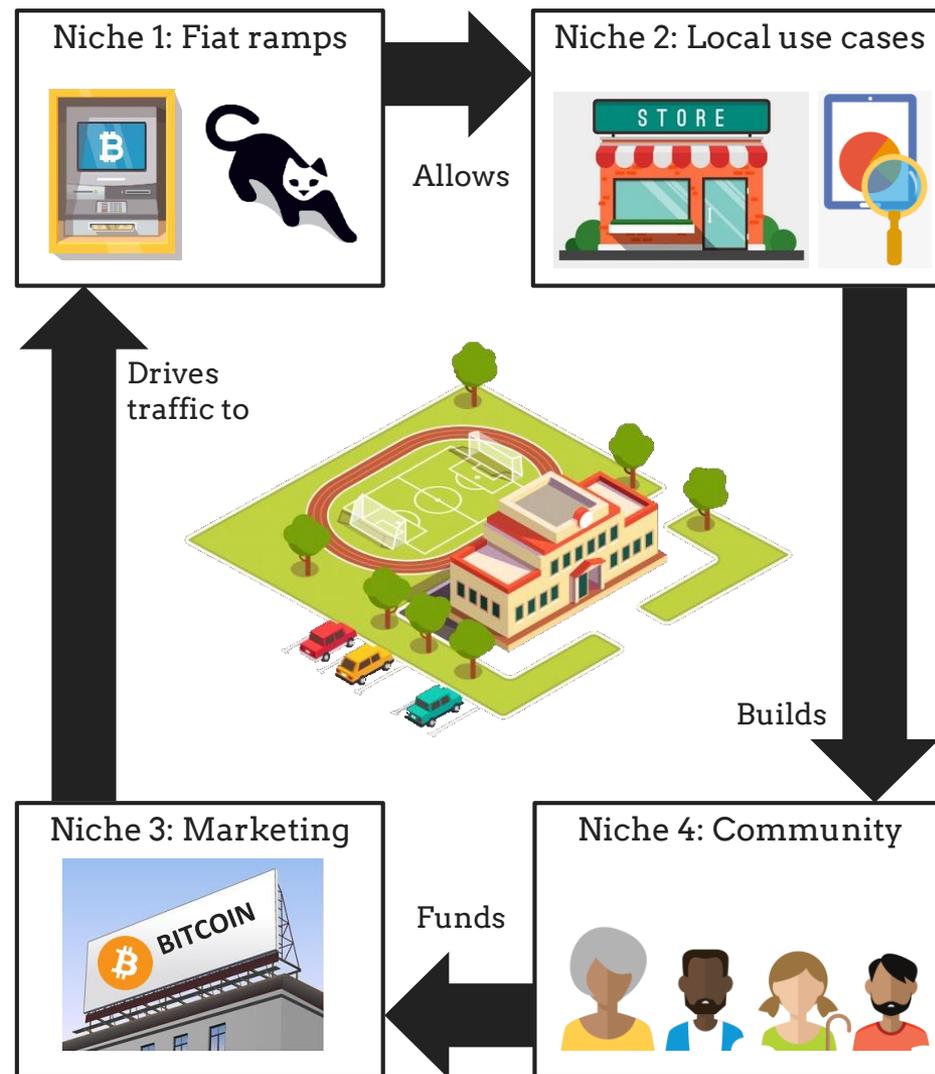


Getting the ball rolling



1. Bitcoin spread through grass-root movements; rollouts should be treated like social experiments rather than tech demos.
2. Mini-ecosystems with symbiotic niches all in one place can produce a more immersive *user experience*.
3. Efforts must be coordinated to produce a feedback loop.
4. Coordination is easier in close-knitted communities like university campuses.
5. Before we can change the world, we first need to change our backyard.

Example: Forming a mini-ecosystem within a single university campus



History of progress is a history of
paradigm shifts (or lack thereof)



“The Aztecs must’ve
found Spaniards lust
for gold so strange...

... to them it’s just a
shiny metal.”



About us

Vardiz Commerce Sdn Bhd

Our goal

To produce compliant market infrastructure for the Malaysian Bitcoin ecosystem

Our plan

1. Educate the public
2. Lobby stakeholders
3. Operate a brokerage
4. Develop an exchange
5. Spread merchant tools

VARDIZ

Get in touch

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