

UNIVERSITY OF COLOMBO, SRI LANKA
FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration (Level II-Semester VI) Examination
December - 2017

BEC 2218 - Management Information Systems

Two (02) Hours

Answer FOUR (04) questions in all, including Question No. 1

1. Read the case study and construct an answer to the following question.

Venezuela's Currency Crisis – A Case Study for Bitcoin

By Kevin Rands

Source- <https://www.forbes.com/sites/realspin/2017/02/03/why-venezuelas-currency-crisis-is-a-case-study-for-bitcoin/#21d898db19b2>

As the value of hard currency changes drastically—and often—developing or recession-hit countries are finding Bitcoin as an innovative solution.

Just look at Venezuela, the country with the highest inflation rate in the world. Experts say that Venezuelan inflation could go as high as 1,600%, leaving many people without basic necessities.

A 100 bolivar note—once the highest denomination offered in Venezuela—is now worth roughly about 2 cents. The country is printing higher-denomination notes so citizens don't have to bring bags and bags of cash for transactions in stores, but this doesn't solve the issue of poverty.

With the Venezuelan bolivar essentially worthless and supplies rapidly running out, Bitcoin is rising as an answer. According to Bitcoin brokerage Surbitcoin.com, the number of Venezuelan users skyrocketed, from 450 in August 2014 to more than 85,000 in November 2016.

So, just how is Bitcoin helping in Venezuela, and can it be used to boost other recession-struck nations?

Recession-proof currency

As the bolivar continues to fall, many Venezuelans are turning to Bitcoin as an alternative. Humanitarians can donate Bitcoin to those in need, who can then use Bitcoin to buy Amazon gift cards, then purchase goods through the online retailer.

One of the biggest strengths to Bitcoin, and one often ignored in developed nations such as the United States, is that you don't need to have a physical bank account to send and receive Bitcoin. All you need is an Internet connection, which many Venezuelans have in the form of mobile phones.

This lowers the bar for Venezuelans seeking relief, allowing them to receive Bitcoin through their phone and use that money for desperately needed goods. Some companies in Venezuela are even exclusively accepting payment in Bitcoin, knowing that the bolivar is highly volatile and largely useless right now.

Another major positive to Bitcoin for a country in disarray is that its government can't control the value of it. Countries like Venezuela can become banana republics as their government causes rampant inflation via over-printing currency.

Bitcoin taking hold worldwide

Unlike many other currencies, the value of Bitcoin continues to grow. Once a mysterious cryptocurrency, Bitcoin is now widely acknowledged and accepted as a valid form of payment.

Cash-strapped governments are taking notice. Indian Prime Minister Narendra Modi and Venezuelan President Nicolas Maduro have accepted policies that allow Bitcoin to flourish in struggling economies.

While countries such as Iceland, Bolivia, Ecuador and Vietnam have outright banned Bitcoin, it's largely legal to some degree throughout the world.

Countries with struggling economies can look to Bitcoin as a more reliable alternative for *citizens*. Usage of Bitcoin has surged in Nigeria, where Google search interest in Bitcoin is definitely the highest, as well. As Bitcoin becomes accepted and embraced by more countries, the taboo will lift and those in impoverished nations can have access to a more stable form of currency.

The fact that Bitcoin is not within government control scares nations with a strong central bank, but for nations with currency in disarray, Bitcoin is a relatively stable investment. If you really want to help those in developing countries, a gift of Bitcoin might be the best bet for a sustainable recovery.

Question –Why have some struggling economies taken Bitcoin as a more reliable alternative for normal currency while some nations with a strong central bank have banned the usage of Bitcoin? Build your answer highlighting the transactional and monetary properties of cryptocurrencies.

(25 Marks)

2. i. “Although today’s information systems are typically thought of as having something to do with computers, we have been using information systems even before the computers were invented.”

Explain above statement giving appropriate definitions and examples.

(12 Marks)

- ii. Elaborate how the adoption of computerized information systems enables a firm to become a “Digital Firm”.

(13 Marks)

(Total 25 Marks)

3. i. Define following system concepts.

- a. Control
- b. Cybernetic System
- c. Sub-system
- d. System Interface
- e. Open System
- f. Adaptive System

(02 x 6 = 12 Marks)

- ii. a. Graphically present the components of an Information System.

(03 Marks)

- b. How do system resources help system activities? Evaluate with appropriate definitions and examples.

(10 Marks)

(Total 25 Marks)

4. i. Construct a table highlighting the major features of Operation Support Systems, Management Information Systems, Decision Support Systems and Executive Support Systems.

(12 Marks)

- ii. Explain how an ERP system works by highlighting its major modules and functions.

(13 Marks)

(Total 25 Marks)

5. i. Discuss how Supply Chain Management Systems help reduce “Whiplash Effect”.

(12 Marks)

- ii. Assess how Operational Customer Relationship Management systems and Analytical Customer Relationship Management systems can aid the Customer Life Cycle.

(13 Marks)

(Total 25 Marks)

6. i. Interpret following terms in relation to business intelligence systems.

- a. Predictive Analytics
- b. Big Data Analytics
- c. Location Analytics
- d. Data Mining
- e. Online Analytical Processing

(03 x5 = 15 Marks)

- ii. Construct a Value Chain Model to illustrate how information systems can be incorporated in to various processes of the business for the efficient functioning of the business.

(10 Marks)

(Total 25 marks)

7. i. What steps you can follow to arrive at a decision when faced with an ethical dilemma in the organization? (5 Marks)
- ii. Describe three (03) Cognitive Science Applications developed under Artificial Intelligence Applications. (10 Marks)
- iii. Summarize the System Implementation Process by highlighting the main tasks performed at each step. (10 Marks)

(Total 25 Marks)