# New Perspective on Private Cyber Coins in Electronic Commerce

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# Money is an information system we use to deploy human effort (Linton, M)

This presentation is based on an article that has been accepted for publication in Lecture Notes in Computer Science

### INTRODUCTION



#### RISING NEW TRANSACTION MEDIA

- The widespread of the Internet has been constantly creating new business opportunities
- The advances of IT have brought about remarkable changes to the payment system(Huber & Robertson, 2000)
- Internet provides ease of issuance and circulation of new payment media and opportunity to create a new value standard(Matonis, 1995)

### NATURE OF PROBLEMS



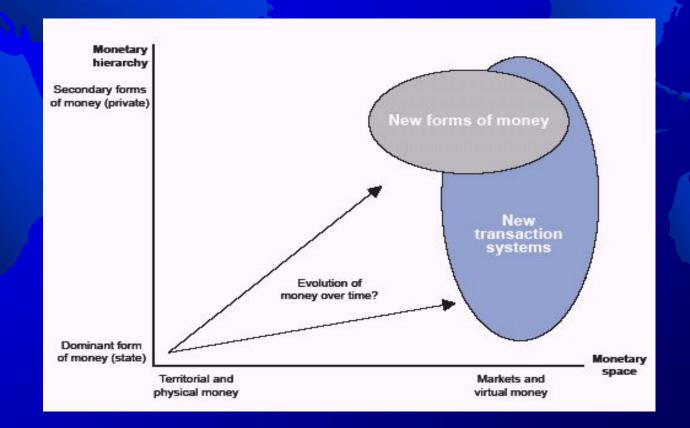
#### RISING ROLE AS A NEW PAYMENT MEDIA

- The purpose of this study is to present rising new role of private cyber coins and their impact on the revenue generation
- The importance of this study lies in its first step towards conceptualizing private cyber coins, which are used for gathering customers through both creating a value and building a relationship



#### PATH FOR THE FUTURE OF MONEY

• Monetary hierarchy and space(Miller et al. 2002)





#### PRIVATE MONEY

- Any currency issued by the private sector and accepted as a transaction medium that performs monetary functions to some degree (Good, 1998)
- It is originated from tokens offered by merchants, credit cards, and coupons provided in a number of commercial transactions(Marrota, 1998)

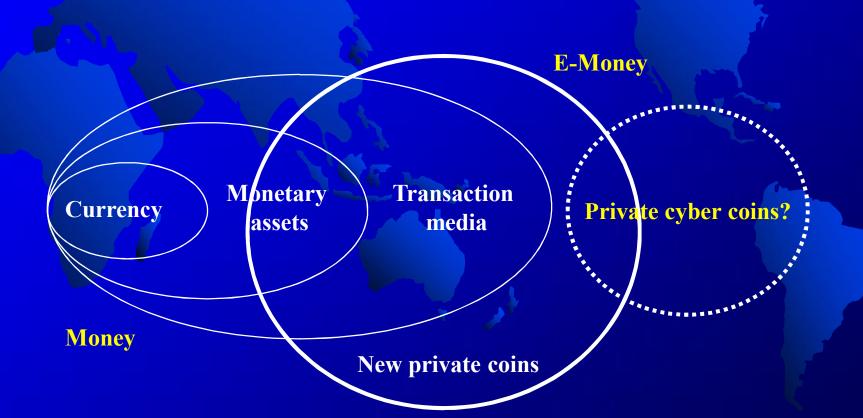
#### PRIVATE CYBER COINS

- Private cyber coins refers to new tokens that issued by private companies such as Internet portals and other on-offline retail companies and used in limited area for specific purpose
- private cyber coins include various types of medium such as portal cash and game money which are circulated by depending on customers' trust on issuers' willingness



#### **CLASSIFICATION OF MONEY**

• Money and E-Money(Kvasnička, 2000, Park et al. 2004)





#### MONETARY FREEDOM THEORY

- The freedom of accessibility to all individuals in providing the functions of money without the involvement of government
- The essence of true digital cash system(Matonis, 1995)
- The Internet has been regarded as the most influential factor in assuring monetary freedom through competition with currencies

#### NEW UNIT PROVIDER

- Potential unit providers including Internet portal and online merchant sites are well positioned with the high recognition(Matonis, 1995)
- The step-by-step progress of portals is classified in three levels, such as acquiring new users (or new traffic), retaining traffic, and moniterizing traffic(Ledbetter, 1999; Wileman, 1999)



#### SOCIAL NETWORK THEORY

• The progress of social network (Park, 2003)

**Social network** 

**Communication network** 

Internet



#### VIRTUAL COMMUNITY

- Virtual community is defined as "social aggregations that emerge from the net when enough people carry on those public discussion long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (Rheingold, 1993)
- The term, commercial virtual community(CVC), is proposed to understand the business perspective surrounding electronic commerce
- The need for this term CVC exists for several reasons: First, it is important to understand the virtual community from the standpoint of consumer behavior. Second, it is also important from the management perspective in creating an initiative to promote revenue generation opportunities

### **METHODOLOGY**



#### RESEARCH DESIGN

- This paper is discovery oriented and is based upon single-case design methodology largely inspired by the work of Yin (1994) and Lee(1998)
- Both monetary freedom and social network theories are used to guide understanding of the role of private cyber coins to the revenue generation

#### DATA COLLECTION AND ANALYSIS

- In-dept case study and documentary evidence were adapted to conduct case study by using observation, published materials, and secondary data on DAUM Communications
- The credibility of our findings was enhanced by the nature of the interview under taken based on the relevant literature and by interviewees who are deeply involved in mileage system at case company (Rohm, 2003)

## **CASE**



#### RESEARCH QUESTIONS

- Question 1: What is the role of private cyber coins in portal's progress from a point of view on monetary freedom?
- Question 2: What can be a framework that would explain the process of revenue generation?

#### **■ TWO FACTORS FOR GUIDING CASE ANALYSIS**

Factors	Measures	Previous research
Confidence	• Performing money's basic three functions (M1)	Matonis, 1995; Miller et al. 2002
	• Easiness in circulation (M2)	
	• Acceptance in large commercial zone (M3)	
Efficiency	• Degree of cost(M4), risk(M5), and convenience(M6)	Kvasnička, 2000; Bergo, 2002; Rankin, 2002

### **FINDINGS**



#### **DAUM COMMUNICATIONS**

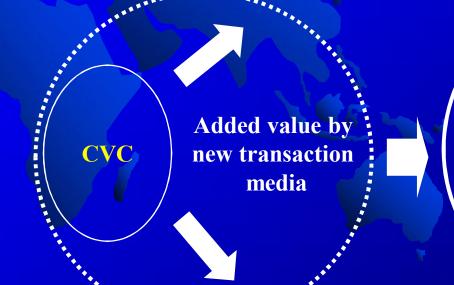
- As the traditional steps to the portal's development DAUM took four steps such as communications, content, community and commerce
- In four steps DAUM cash as a actuarial transaction media play a major role at community step by providing new value to the costumer with increasing the traffic on the DAUM café
- With the help of these attraction to the customers, DAUM eventually builds a relationship between customers
- This means that DAUM cash has direct relationship with community and indirect relationship with the commerce

# **FINDINGS**



#### **DAUM COMMUNICATIONS**

• Expanded CVC and private cyber coins



**Expanded CVC** 

### RESULTS



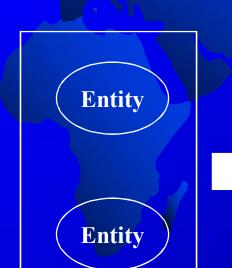
#### **GROWTH OF EFFICIENCY**

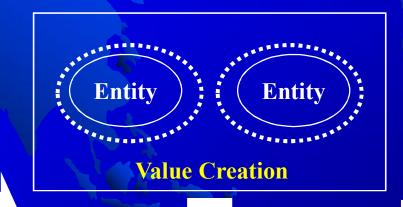
- The results show that the role of private cyber coins in online portals has been evolved: From promotion tool to transaction media
- Monetary freedom, which means free issuance and circulation of new value standards, is an direct element to the growth of traffics on the portal
- This traffic makes to build a new relationship between two entities, largely based on social network theory
- In the long run, this phenomenon increases the efficiency in whole electronic commerce

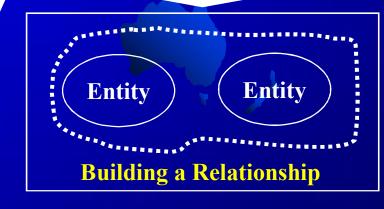
# RESULTS



#### PROPOSED FRAMEWORK







Revenue generation

### **CONCLUSIONS**



#### FIRST STEP TOWARD BUILDING A THEORY

- •This paper tries to demonstrate the progress and expansion of electronic commerce by showing how a promotion tool in Internet portal changes their nature during continuous developments with IT
- In doing so, we tried to demonstrate not on why cyber coins but how cyber coins are important in electronic commerce
- •This paper tries to explain the whole concepts of electronic commerce by using monetary freedom theory, which is connected with transaction media
- Research present that In Internet era, which is affecting in all ways of human life we should not concentrate our research in a single direction