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# #CHIMoney: Financial Interactions, Digital Cash, Capital Exchange and Mobile Money

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**Abstract**

Interactions around money and financial services are a critical part of our lives on and off-line. New technologies and new ways of interacting with these technologies are of huge interest; they enable new business models and ways of making sense of this most important aspect of our everyday lives. At the same time, money is an essential element in HCI research and design. This workshop is intended to bring together researchers and practitioners involved in the design and use of systems that combine digital and new media with monetary and financial interactions to build on an understanding of these technologies and their impacts on users' behaviors. The workshop will focus on social, technical, and economic aspects around everyday user interactions with money and emerging financial technologies and systems.

**Author Keywords**

Digital money; digital financial interactions; electronic currencies; mobile money; eCash; financial instruments; interaction design; user studies.

**ACM Classification Keywords**

H.5.m. Information interfaces and presentation: Miscellaneous.

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## **Web Page**

More information about this workshop is available at <http://chimoney2014.wordpress.com/>.

## **Background**

Work with money is suffused with human-computer interactions. We spend, lend, borrow, change, give, and manipulate many different forms of currency and financial instruments in our work and leisure time. New and emerging technologies are democratizing the ways that we are able to use and interact with money, from the M-Pesa and mobile monetary transactions in the developing world [[2],[3]] through new cryptocurrencies like BitCoin ([bitcoin.org/](http://bitcoin.org/)), and across crowdsourced trading services (e.g. [banktothefuture.com/](http://banktothefuture.com/)) that open financial markets up to individual users outside large institutions. From online banking to exchanging mobile phone credits, financial transactions are, increasingly, digital transactions. Even specialist instruments such as automated high-frequency traders, bots, and algorithms are the life-blood of global financial systems. Contemporary computing is deeply implicated in our economic lives.

Yet, despite some notable exceptions (e.g. [5,6,8]), researchers in HCI have largely resisted the topic of money: this despite a rich literature in economic sociology, ICT4D [[6]], anthropology, business IT, and science and technology studies on the subject. Such studies have shown that monetary transactions are part of nearly all social institutions, including marriage, birth and death [[7],[9]]. They have emphasized the essentially social nature of economic lives and transactions, and have theorized the role of digital systems in economic work. The study of money and its

exchange is therefore also a study of how meaning and value are assigned by those who use it. This idea can be leveraged to support design; for example, Mainwaring et al.'s ethnographic studies of digital money use shows how cultural aspects can be leveraged to design mobile payment systems that fit with the context of its users [[5]]. In this workshop, then, we hope to bring this rigorous multi-disciplinary work into conversation with HCI to produce novel understandings of the role of money in contemporary computing environments.

Alongside these theoretical tools at our disposal are new empirical opportunities. The increased availability of metadata and data-mining techniques about market interactions and the flows of capital have provided opportunities for organizations like Bloomberg to provide new ways of understanding and investing in complex financial markets, or for news media to report on and provide novel visualizations of financial trading conditions (e.g. Thomson Reuters and Yahoo Finance) [[4]]. Social media also have a role to play in this arena, as we see in the developing media interest in marketing, sharing financial information and in enabling fraud and scams. HCI is well-positioned to take the lead on research in this domain due to the computational and empirical tools at our disposal, as well as our connections with key industry players.

## **Timeliness**

Inasmuch as the novel systems described above have taken off at an alarming pace, this technological frenzy takes place against a financial landscape in which the banking system has arguably failed, and patterns of lending and spending are under legislative and regulatory scrutiny [[1]]. The time to discuss these

issues is now. Understanding the complex connections between HCI research and design on the one hand, and economic transactions on the other, will enable us as a community to think carefully about our central role in the development of future financial systems, and design better tools as a result.

### **Workshop Goals**

Building off a successful last-minute SIG at CHI 2013, our aim with this workshop is to establish a forum for discussion on theories and methods in the use, design and evaluation of forms of financial services. Through the exchange of knowledge and discussion sparked by the workshop we can set out a research agenda in the field of HCI that addresses the social, technical, economic, and ethical aspects around user interactions with money and emerging financial technologies and systems. We also hope to bring together professionals in HCI with colleagues in finance, economic sociology, STS, and business innovators to exchange ideas, key literatures, and approaches to this important and complex topic. We have secured agreement to publish a special issue to develop the workshop papers in the journal of Personal and Ubiquitous Computing on 'Financial HCI', co-edited by the workshop organisers.

Three key questions to be addressed are:

(1) *State of the art*: What are the existing design approaches to the wide variety of forms of financial interactions, specific challenges, lessons learned and best practices?

(2) *Social impacts*: What is the role of social meanings and interactions around financial transactions?

(3) *Opportunities for design*: What is the role of technology in shaping financial services and their use?

We also want to explore future work: what are the most urgent topics for future research?

### **Workshop Topics**

We welcome diverse submissions with the aim of making links across practitioner and academic perspectives, technologies, contexts, data and methods. Submission topics should cover related financial issues of relevance to the CHI community including, though not limited to, the following:

- How the social meanings of money/mechanics of exchange inform infrastructure design
- Designing digital infrastructure for alternative forms of transaction/ currencies
- Dematerialisation and rematerialisation (from real to e, and back again; how achieved, problems, utility)
- Establishing and maintaining credibility, trust and security in new forms of transaction
- Exploring how the digital divide reflects or challenges fiscal inequalities
- Examining how economic systems underlie our own work, with what consequences
- Digital banking, transactions and digital cash

## Organising Committee

**Jofish Kaye** is Senior Research Scientist at Yahoo Labs, and his work revolves around studies of how people connect with each other. He is currently studying how people understand and think about their everyday personal and family finances.

**Janet Vertesi** is Assistant Professor of Sociology at Princeton University, studying the organizational aspects of NASA's spacecraft teams. She is currently exploring the role of public funding structures on mission development.

**Jennifer Ferreira** is a Research Fellow at Brunel University, focusing on how people make sense of and use physical and digital forms of local currency. She is conducting ethnographic research on local currency.

**Barry Brown** is a Professor at the University of Stockholm, and a research manager at the mobile life centre. His research focuses on the leisure uses of technology. His book *Enjoying Technology* is forthcoming with MIT Press.

**Mark Perry** is a Reader at Brunel University, looking at ubiquitous and mobile computing from a user-centred and ethnographically-informed perspective. Mark is PI on the 3DaRoC project, exploring new media formats for alternative and peer-to-peer financial services outside the banking sector.

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