Chapter 8
Three New Directions for Time Banking Research: Information Management, Knowledge Management, and the Open Source Model

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ABSTRACT
This chapter aims to highlight three viable fields of research within the domain of time banking (TB), a time-currency-based complementary economy system that has been implemented in various frameworks now for more than three decades. The areas of information management (IM), knowledge management (KM), and open source software (OSS) are almost totally unexplored within time banking. In information management, attention has mainly been devoted to IM frameworks. One link (among others) between knowledge management and open source software has been found in a core concept of the time bank called co-production. Finally, all three of these fields can be related directly to time banking and should have a place in further research, the results of which could also have applications in the field of complementary economic systems in general.

1. INTRODUCTION
Time Banking has been around for more than thirty years, during which time it has spread from its country of origin, the United States, to other countries around the world (hOurworld.org, 2017b; Timebanks_USA, 2017). In some resources (Miller, 2008), however, the world’s first time bank is said to have been founded in Japan in 1973 by Teruko Mizushima, with the idea beginning to spread globally approximately ten years later when E. S. Cahn invented his Time Dollar in the US (Cahn & Rowe, 1992). The TB concept has faced many challenges, and in terms of cultural environment it is often adapted to reflect a particular regional reality (Valek, 2013b), this adaptation including the management of information and knowledge contained within a time bank, but also various information technology solutions. Nowadays many Time Banking movements have emerged around the world, with the number ever-increasing, thus it is quite

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difficult to determine a precise count (Blanc, 2011). Nevertheless, their focus on social economy gives
users a tool to help themselves rather than expect support from authorities. At the present time, more
than 30 different web platforms and software (Boyle & Bird, 2014) support TB endeavors as well as
efforts to unify time banks into stronger groups or alliances (Valek, 2016).

This goal of this chapter is to show a number of new directions for research in the field of Time Bank-
ing. Time Banking is a type of complementary economy, and as TB uses time as a form of currency, it
is also considered a complementary currency system. The word “complementary” is important, as we
can also find in the literature the term “alternative economy,” with the difference being in the fact that
an alternative structure is intended as a replacement for current economic systems or for a particular
currency, while a complement merely helps in places where a current economy or currency is failing
(Lietaer, 2001). Complements are easier to integrate into an economy, and by its influence slowly shifts
the economic paradigm. As for complementary economic systems, literature is available, including works
on TB, outlining advantages and risks related to various complementary currency systems (Kennedy,
2012). Justifications for existence of complementary economies and their putative place in society are
not part of this study, as this is rather extensive topic which has already filled many books.

Thus far, in many places where people have been learning about concepts of Time Banking they
are in very hard position to implement it (Valek, 2013a, 2013b, 2015a). Warnings to expect opposition
(Cahn, 2004) have been given. It remains important is to build a surrounding environment with people
who think the same way, thus a community can be created to further develop the idea and to apply the
positive effects of TB. Unfortunately, however, mere enthusiasm is often not enough, since to keep a
Time Bank running and sustainable several factors are necessary which are related to the language and
other cultural conditions in a respective location, as well as to the number of users and services it offers,
how funds are obtained, the readiness of the environment to accept ideas of Time Banking, policies and
legal issues, as well as tactical and strategic planning. These points seem to be crucial in all courses of
the lifetime of a Time Bank (Valek, 2013b). Aside from this, with the growing professionalization of
TB a systemic approach towards managing information and knowledge is necessary. Time Banks are
themselves a tool itself to directly target the origin of specific problems, and as tools they should be
carefully managed and structured.

Research in field of TB is very scarce. Naughton-Doe has found 80 documents related to Time Bank-
ing, out of which only 38 can be considered primary data and 29 qualitative data. Most of topics related
to TB implementation, processes, outputs, associations and outcomes. Nevertheless, they often contain
limited or unexplained samples, the methodology used was not found to be adequate, or the texts fail
to explain the measurements used. In the end, only 11 papers were found usable for scientific research
(Naughton-Doe, 2015). In the area of information and Knowledge Management, TB remains unexplored,
as none of resources were found to be related to these domains.

Throughout this text, TB is used as abbreviation both for Time Bank and Time Banking, with TBs
used in plural for Time Banks except in situations when the use of abbreviated form might hinder under-
standing. The chapter has the following structure: after this introduction a short background is described
which focuses on the non-mainstream economic approaches of which TB is integral part as well as the
details of TB. In next section, the three fields of Information Management, Knowledge Management and
Information Technology are outlined in the given context. In the discussion, all three are scrutinized in
greater depth, from which conclusions are then drawn.