

LUISS GUIDO CARLI UNIVERSITY

XX Ph.D. in Management Information System

Impacts of ICTs on the  
temporal dimension of organizational culture:  
a literature review and a case study

**Thesis Abstract**

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## **Abstract**

In the existing literature about ICTs and the organization of work, organizational dimensions like distribution of authority and control, standardization, centralization, specialization of labour, organizational size have received great attention, both in the perspective of the technological imperative, in the organizational imperative model and in the structuration theory perspective (Ravagnani, 2000).

Much less attention has been given to the study of the relationship between ICTs and the temporal dimension of the organization of work, in spite of the fact that we can consider the time dimension as one of the fundamental variables in organizational analysis since the early scientific management movement (i.e. Taylor, 1903; 1911).

Today it is generally accepted that information technology, when implemented in organizations, speeds up business processes at an enormous rate and thereby saves the adopting organizations a great amount of time. Nevertheless, in spite of its significance in temporality, research on temporal impacts of information technology in organizations is still limited (Lee and Whitley 2002).

Empirical studies on this topic have started to appear regularly during the last decade (Sahay 1997, 1998; Lee 1999; Lee and Liebenau 2000; Sawyer and Southwick 2002; Scott and Wagner 2003; Kvassov 2003; Sarker and Sahay 2004; Prasopoulou et al. 2006), gaining a stable attention which has lead in 2002 to the publication of a special issue of *The Information Society* on “Time and IT”.

Speeding up the pace of work activities, foster workers’ polychronicity, promote shifts from “batch” logic to “flow” logic, improve synchronization among organizational units are just a few examples of some important objectives pursued by firms when they adopt systems like Workflows or ERPs.

Such objectives are related to potential changes in the temporal organization of processes and activities, but also to potential changes in mental attitudes and assumptions people have towards time and time use in the workplace.

Organization studies have long acknowledged time as a fundamental dimension of organizational culture (Schein 1985, Hofstede 1991) and it has been underlined that, besides being a condition for the coordination of activities and the production of organizational outputs, the temporal organization of work activities, processes, routines constitutes a “pattern” which plays a fundamental role also as a template for organizing behavior: a cognitive and cultural framework which helps people make sense of actions and events in the workplace (Barley, 1988).

It has also been pointed out that temporal patterns and assumptions are as well an expression of the specific culture of different organizational units and professional groups within a firm (Gherardi and Strati, 1988; Dubinskas, 1988; Butler 1995), thus conveying a strong symbolic value for both individual workers and groups.

Both these cognitive and cultural functions of temporal patterns contribute to their strength and permanence in organizational units and work groups, suggesting that changes in the temporal dimensions of organizational culture potentially conveyed by information systems are not to be taken for granted – on the contrary, they might affect, positively or negatively, the achievement of the expected temporal performance of the system.

**Based on the above considerations, this thesis intends to give a contribution to this area of studies, through the following objectives:**

- Presenting a review of the literature on time as social and cultural construct, with a focus on how the temporal dimension has conceptualized in organizational literature.
- Presenting a review of the state of the art of theoretical and empirical scientific contributions on the temporal impacts of ICTs in organizations
- Presenting the results of a case study which investigates the impacts of the introduction of a workflow system on the temporal assumptions of three organizational units within a company and tests the hypothesis that the temporal assumptions existing in organizational units before the introduction of the system can affect it's the way it is used, thus facilitating/hindering the achievement of the expected performance conveyed by the system.

The case study presented has been conducted in the Italian branch of a multinational manufacturing Company, where a Workflow System has been introduced in order to improve Customer Service processes.

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