Chapter 6
Production Cognitive Capital as a Measurement of Intellectual Capital

Leonardo P. Lavanderos
Sintesys Corporation, Chile

Eduardo S. Fiol
Sintesys Corporation, Chile

ABSTRACT
At present, knowledge plays a key role in the new economy. Nevertheless, its measurement as Intellectual Capital has not been possible from a certainty vision for the states, events and entities, leaving aside the complexity of organizations. This work proposes a paradigmatic shift where the fundamental support is the relational–semiotic condition of human organizations; any deviation from its strategic goals could be explained through the closeness between language and the action emerging from language. Defined as Coherence and Congruity (Sustainability) Management, the process named NETOUT allows increasing both coherence and congruity through co-participating in decisional modeling, and transferring repulsion interactions to organization areas that re-signify the conflict. Configurations arising from Sustainability are Production Cognitive Capital and constitute a measurement of Intellectual Capital.

INTRODUCTION
Knowledge Society and Knowledge Economy are concepts coined in the XXth Century to highlight the role of knowledge as key and differentiating element of economic growth. Hence, intellectual capital, defined in the simplest possible terms as knowledge generating value, has become the subject of study in many research works (Petty, Guthrie 2000). However, there exist as many definitions of Intellectual Capital as there are researchers devoted to the study of this matter.

A possible explanation to the above is that Knowledge-based Economy, as a value generation process, is fundamentally characterized by its uncertainty condition. This is based on that knowledge production is the result of organization’s relational dynamics which does not allow locating a productive source in a person but in the network. Under that condition, knowledge generation involves a permanent uncertainty reorganization which we define as crisis. Finally,
Production Cognitive Capital as a Measurement of Intellectual Capital

Figure 1. Tangibles and intangibles worlds

To round out these ideas, we call innovation to the art of reorganizing uncertainty or crisis.

The above mentioned leads us to the schema shown in Figure 1 (a), where uncertainty, crisis, and innovation are the cornerstones of the intangibles world.

By the other hand, object economy, the more traditional view, may be explained through another scheme, shown in Figure 1 (b), whose cornerstones are certainty, power and conservation.

Here, certainty is bound to the permanence, to the object itself. Power and Control are a means used to “press” knowing where, when, and how. Finally, the idea of conservation is the appropriation over the capital, leading to richness through consumption.

The worlds shown in Figure 1 are not exclusive but may coexist and be integrated, leading to a “better” configuration which is obtained “rotating” the (a) side, superposing both, leading to a virtuous hexagon shown in Figure 2.

As shown in Figure 2, there are two apparently opposite “worlds”: tangibles and intangibles, coexisting, and the hexagon is called virtuous because the two opposite worlds are co-active, generating emergence or synergy instead of reduction, as in the ying-yang metaphor, and it is possible to make a “leap” from one world to the other, depicted in a spiral movement. Thus, we may have, for example, a leap from innovation to uncertainty (in knowledge production), where tangible economy will enforce profit conservation; another example, innovation is always trapped between power/control and conservation.

The above leads us obligatorily to a change in our approach, from an objectual-dyadic view to a relational-tryadic one.

BACKGROUND

The Relational Approach

Relational Theory is an explanatory system basing its operation in the relation as a sense and world generation process. For this theory, the relational unit in cognition is Organism-Entorno, opposite to the classic proposal of organism and environment (Malpartida and Lavanderos, 1995 and 2000). The Surroundings of the observer are unique and permanent relational configurations of territoriality (code generation for bonding and belonging) for this one.

We spoke of Co-circumstantiality in the distinction of units, implying, as much the definition...