



## The measurement and reporting of intangibles

### Collaborative working for broad-based dissemination of the PRISM project through metaphor

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#### Introduction

Collaborative working has been one of the guiding principles of the PRISM project on the measurement and reporting of intangibles. The contract lays down the three key objectives that are to be achieved through coordination. These are; to materially advance the knowledge frontier, to propose specific policy recommendations and to disseminate the results of the research.

The two-year project is now approaching completion. The period for research is over. Nearly 200 papers and presentations have been created by members of the PRISM community. These people are based in locations across the length and breadth of Europe. Since month one of the contract, a robust electronic infrastructure has provided a virtual workspace for co-developing, sharing and publishing the deliverables. All this, together with a selected collection of learned work by others has been progressively disseminated via the project's public website (<http://www.EUintangibles.net>).

The final report of the project will contain a scientific summary of the research findings and policy recommendations. This paper is concerned with the communication of key concepts to the wider community and the acceleration of understanding of these concepts through the use of readily accessible metaphors.

*"A picture is worth a thousand words; a metaphor is worth a thousand pictures"*

Alan Kaye, Apple Fellow (1993)

Therefore, the purpose of this paper is to record and illustrate the human interaction that has led to the production of so much original work. In other words, the intangible activities that have made possible the tangible, printed outputs.

This account is expressed in terms of a timeline to show how the knowledge exchange between members of the PRISM community has ensured the steady evolution and refinement of a model that communicates the importance of orchestrating the interplay of tangible and intangible assets for value creation in the 21<sup>st</sup> Century economy.

#### A chronology of collaboration

PRISM project began in October 2001 with a work-plan divided into four 6-month periods. Broadly, these periods address, in turn, discovery, design, development and dissemination. An evolving community of some 150 practitioners, academics and experts has contributed to and commented on the research. This research was carried out during the first three periods, ending 31 March 2003. These periods have been punctuated by a series of well-attended and fruitful project conferences and workshops to share and review over 80 research papers produced by PRISM researchers. To underpin these face-to-face events a community website has supported on-going interactions and knowledge exchange.

The principal project deliverables are rigorous academic studies. Taken together, this corpus of original work adds up to several thousand pages of evidence, analysis and synthesis. When faced with new ideas and concepts, many people find that models or metaphors can accelerate shared understanding of new ideas. The PRISM community is no exception. At various points throughout the project groups of PRISM researchers have sought to formulate diagrams and models that captured the essence of the research outputs at that time and represented a shared



### **Period 1: October 01-March 02 [P1]**

In this initial period the PRISM research teams revisited work in 1999 by the EC's Higher Level Expert Group on Intangibles. This defined the link between tangible assets, intangible goods and intangible competences (HLEG Report, 2000, Figure 13, page 30). This work paid homage to Michael Porter's value chain model (Porter 1985) and, by adopting the same arrow motif, suggested a directional flow from tangible to intangible. PRISM researchers reviewed the corpus of published research and, in the process, new thinking since 1999. By the time of the second PRISM community meeting (in March 02 at IESE, Barcelona) a consensus was emerging that there was a fourth asset category, namely 'latent capabilities'.

### **Period 2: April 02-September 02 [P2]**

These ideas were taken forward at an intensive workshop attended by 40 members of the PRISM community in May 02 at Copenhagen Business School. More detailed research was now well under way and the prevailing view was that enhanced financial performance required the combination of tangible and intangible assets. The emerging concept of a dynamic blending process was characterised as 'the Value Creation Mixer'. With informed leadership, this combination can create value; without it, value is likely to be destroyed. Furthermore, it was noted that tangible assets were often of more interest to external stakeholders while intangible assets are usually more appreciated by internal stakeholders.

At the third PRISM community meeting (in September 02 at Copenhagen) it was proposed that there are two principal conditions for value creation, namely; intangibles context and intangibles culture. Here, 'context' means the environmental factors for intellectual capital formation such as industry sector competitiveness or national/international standards.

Conversely, the term 'culture' refers to intellectual capital formation at the level of the firm, the team or the individual. When this concept was applied to the first nine PRISM case studies the distinction was validated.

### **Period 3: October 02-March 03 [P3]**

During the third research period the iterative process of developing a new perspective on organizational assets continued via in depth discussions with subject matter experts representing approximately half of the PRISM community. These consultations occurred at progress review visits and workshops and involved all the case study researchers and a number of members of the Advisory Council. The prevailing view was that the four assets types are equally important factors of production; that is, there is no uni-directional flow of value transfer from tangible assets towards intangible assets, or vice versa.

### **Period 4: April 03-September 03 [P4]**

The consultations during period three led to eight iterations of the emerging model. These were played back to the participants and further developed via the electronic infrastructure. The consensus view is that value is created through an asset combination cycle which can start with any one of the four factors of production. Value is created progressively by building on the learning and experience gained in each cycle.

A model was found that depicts in a simple image the continuous dynamic interplay between tangibles and intangibles that leads to value creation - the PRISM 'double torus'.

Students of mathematics may observe that this model takes the form of a lemniscate or twisted parabola as discovered by Jacob Bernoulli in 1694. In 1858, August Möbius developed from this the 'Möbius strip' - a two-dimensional surface with only one side. The application of this concept to the study of intangibles shows that any perceived boundary between tangible and intangible factors is illusory; they are indissolubly linked.

## An interim model to support dissemination

The results of the Prism project have arisen from theoretical analysis, practical case histories and the synthesis of the findings by means of on-going consultation between sub-groups of researchers and with the wider community. Part of the forthcoming Final Report contains a table of the four types of corporate asset in a form that is underpinned by the scientific research. This is shown in Figure 2 below.

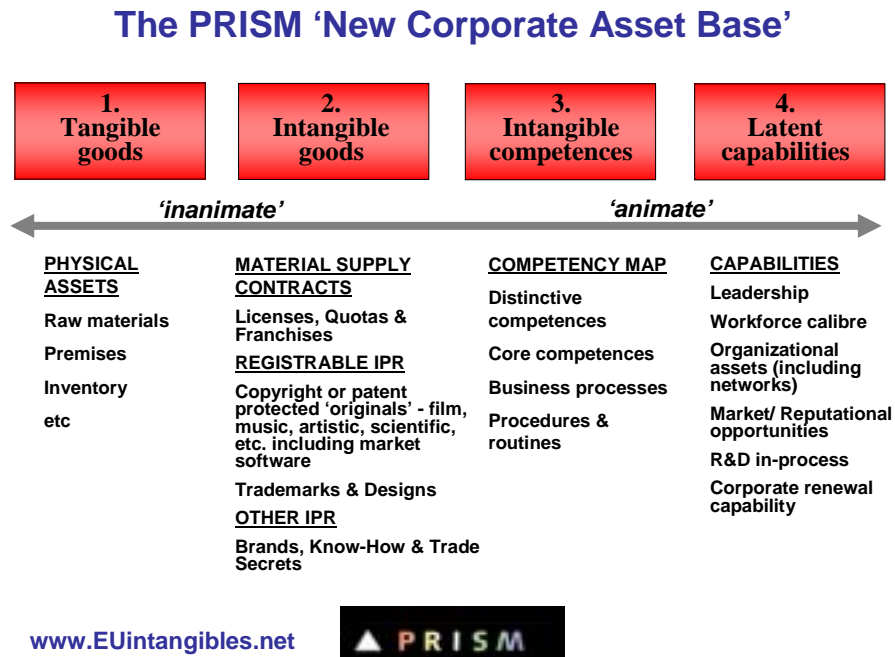


Figure 2: The new corporate asset base (PRISM 2003)

This table is paired with a diagram showing how value is created by orchestrating these resources of 21<sup>st</sup> Century business (see figure 3).

### The PRISM tangible/intangible 'Value Creation Mixer'

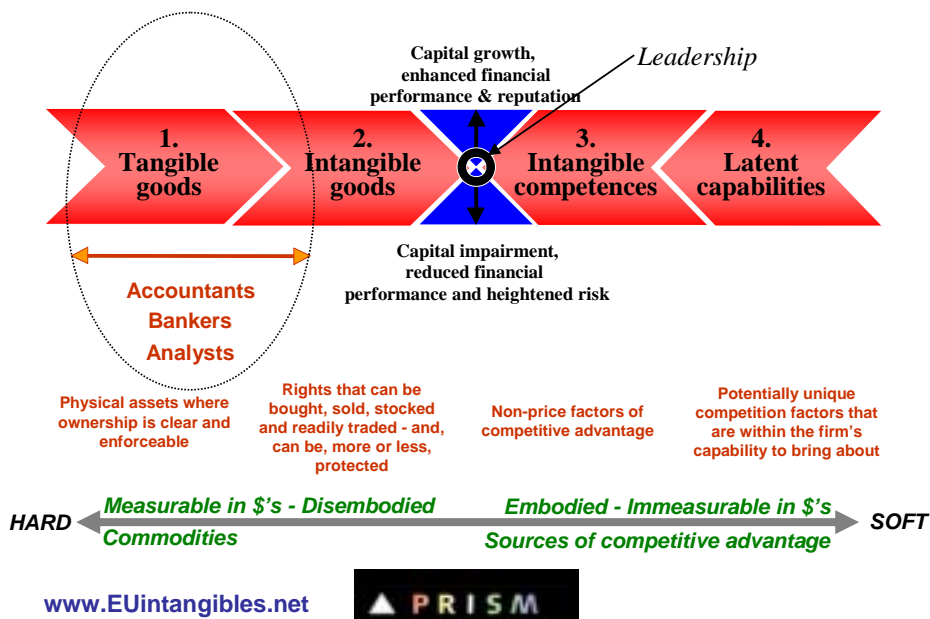


Figure 3: orchestrating the tangible/intangible dynamic (PRISM 2003)

## The current state of play

The need for widespread dissemination about intangibles continues and, indeed, is increasing in importance. At present the concepts are understood by a relatively small community of thought leaders and ‘early adopter’ practitioners. If this thinking is to result in concerted action then the knowledge must be transferred speedily and effectively to an early majority of adopters. It is therefore essential to invest further effort in the evolution of powerful metaphorical expressions aimed at busy managers.

The PRISM value creation mixed model captured the state of thinking during the second period of research. This thinking has already moved on because of a shared recognition that the combination of tangible and intangible factors of production need not be either linear or uni-directional.

This development is expressed in the PRISM ‘double torus’ model that emerged from the third period of collaborative research and consultation (see figure 1). This model symbolizes more realistically the interplay of tangible and intangible factors and how potential value is converted into actual value in a series of cycles. The double torus model is subject to further research and consultation during period 4 of the PRISM project and presents as a candidate for underpinning subsequent research and dissemination.

## Conclusion

This paper has exposed how ideas can evolve rapidly and consensually in a complex multi-national, multi-disciplinary project. Too often the process of idea development is cloaked in mystery. The key to success in this case was the will to collaborate.

This will was nurtured throughout the project period and supported with processes to sustain information and knowledge-sharing between face-to-face events.

These processes included:

- an online infrastructure providing the dispersed teams with a shared workspace – in effect, a virtual office with electronic corridors
- agreement and promulgation of guidelines and templates to aid the presentation of information and new knowledge
- relational efforts devoted to sustaining the PRISM community’s capability for clear dissemination.

This did not happen accidentally.

*“In the field of observation, chance favours the prepared mind”*

Louis Pasteur (1848)

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