



EUROPEAN COMMISSION

**INFORMATION SOCIETY TECHNOLOGIES
(IST) PROGRAMME**

**POLICY RESEARCH INTO
INNOVATION AND MEASUREMENT
PRACTICE IN THE INTANGIBLE ECONOMY**



Executive Summary of 2nd Plenary Meeting

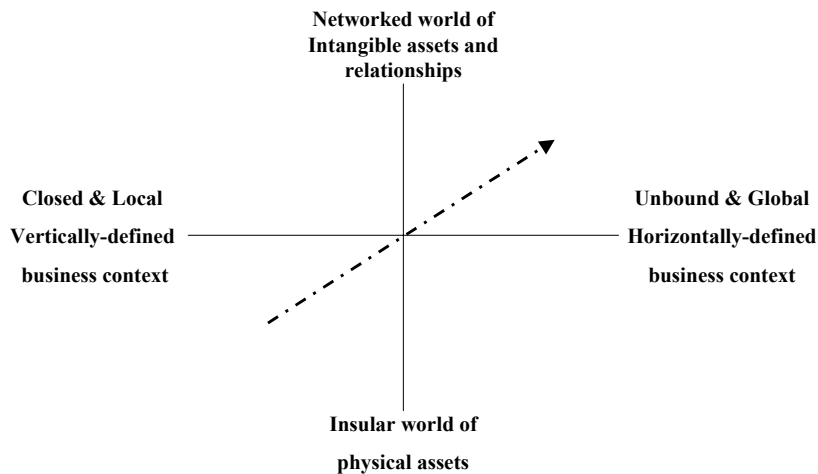
Barcelona, March 4-5, 2002

Introduction

The PRISM project group convened for the second time in Barcelona on March 4-5, 2002. The session was well attended by both project and Advisory council members; the list of attendees can be found in Appendix 1.

The key issues discussed within the individual sessions are outlined in the pages below, starting with an executive summary of the discussions over the two days. The agenda was organised around three key issues that the research projects and case studies are seeking to shed light on. Presentations were clustered accordingly.

The first theme concerns the new and emergent theory of the firm. The PRISM group believes that management challenges and practices are changing due to the changes taking place in the context in which they operate. Firms have been moving inexorably over the last few years towards the right-hand quadrant of the diagram below. The challenges and practices are not well understood and various sub-projects are seeking to shed some light, in particular on the issues surrounding the management of networks.



The second theme leads on from the first. If there *are* new management challenges and practices, and if firms have become unbound and horizontally-defined, there is a need for a different set of practices in accounting for, measuring and reporting such practices. Our current practices were devised when firms were clearly and vertically-defined. Only with new tools that reflect the new value drivers can we hope to improve the chances of effective capital allocation decisions by management, both within firms and government, and the financial community.

The third and final thematic grouping brought together those projects looking at the knock-on effects for a range of key economic actors. What are the policy implications for government? How are the banks and venture capitalists adjusting their analytical methodologies?

For additional information on the project, proceedings of previous meetings and references to other key works in the Intangibles field, please visit the PRISM website – www.euintangibles.net

Executive Summary

Intangible investments constitute a very significant part of today's economic action. Depending on the exact definition used, investment in the knowledge base of the most developed countries now represents something like 50% of investment in the physical asset base. And this proportion appears to be growing. For our management and measurement systems to continue to be negligent in their coverage of the intangibles exposes us all to the detrimental effects of ill-informed, sub-optimal, capital allocation decisions within our economy.

The root of the problem may lie with the fact we have not developed a standard language around intangibles and the new economic context. With intangibles we have a definition which groups together the residuals which are "not tangible". The resultant group is not homogeneous and so intangibles means different things to different people. As a starting-point three sub-divisions of intangibles were proposed. One set encapsulates intangibles which are largely about the displacement of cost, not about value creation per se. Another set is composed of those intangibles which are very similar to physical assets in their economic function, albeit they are largely unrecognized as such. And a third grouping is concerned with the intangibles which are about shifts in value as they cause demand reconfiguration.

And in considering intangibles, one must recognize the difficulty of trying to study them in isolation. Innovation is created by the powers of complementarity between different intangibles and, indeed, between tangibles and intangibles, a dynamic PRISM is studying. Furthermore, it must be recognised that the situation will vary from one country to the next, as values and culture will be different, and because the mix of intangibles and tangibles will be different, starkly different in some cases as illustrated empirically between Italy and Sweden.

Yesterday's language is used to describe tomorrow's business. Old language is used to describe new problems. Progress might be achieved in this regard by not allowing ourselves to get hung up on words and definitions, and instead concentrating on management practices. Only by observing real practices will we find indicators of true meaning. PRISM is observing the management of networks in such a way.

It is seeing that networks are characterised by weak links and heterogeneous resources. On the one hand, this throws up significant management challenges; on the other, such an organizational form may offer management the flexibility it cannot find in a traditional firm. PRISM is seeing how, in a network, money is not always the key capital, but that the emotional and social ties are very important. This is particularly apparent in non-profit situations, where money and IPR do not get in the way. PRISM is observing how it is that networks stimulate new business, not the other way round. It is noticing how confusion can exist in the distinction between networks and supply chains. The relationship of research and industry is changing, whereby organizations, such as universities, are becoming part of the supply chain in as much as they retain the IPR.

PRISM is confident a new operational context for firms has emerged. In this context the emphasis is as much on building and sharing, as it is on owning and protecting. Key to this context is an understanding of the value chain in the production of knowledge and innovation. New competencies need to be developed for firms to flourish in such conditions, not least the competencies to develop and interpret indicators and metrics. Improved information flow goes to the heart of effective capital allocation and the development and nourishment of enterprise.

Real problems exist with our current reporting and measurement systems, as shown in the raft of corporate problems connected to gaps and abuses in the current framework. The very difficulty PRISM has had in finding macroeconomic data on intangibles (such as human capital and knowledge) is illustrative of the deficiencies of our systems in collecting information on what are very significant flows and what are generally accepted to be significant value drivers. There is an apparent fixation within the accountancy profession – at micro and macro levels - with the need to financially value everything. And since intangibles' value is rarely about transactions per se, the end users are deprived of potentially useful information on flows. Maybe it would be useful to approach value in a wider sense than a purely monetary fashion. Whilst valuing something on one level might entail financially valuing it, on another it might be more about a management practice of recognising and appreciating its importance (positive and negative) to the firm, to the network or the economy as a whole. Looked at in a different way, it might be important to recognise value has different angles to it – we might usefully talk about potential, perceived and actual values, for example. In PRISM's case study on Digifone, value in a 3G world is contextual and is in the eyes of the beholder (the end user). In PRISM's study of the digital music industry and its now bankrupt ventures, we see examples of where financial value has been eradicated, but where potential value has potentially been left behind from its attempts to re-configure the industry's value chain.

The brutal reality is that we do not know the answers to these problems since we have not yet developed the tools, the language or the conditions needed to make such judgements. PwC's work in this field has illustrated a key issue. On the one hand, we have companies who are proud of their reporting; on the other, we have the investment community who say company reporting doesn't tell them what they need to know. Clear benefits of greater transparency (in particular about intangibles as they relate to strategy, organization, people, etc.) need to be demonstrated before the market will change voluntarily. New corporate reporting frameworks are regarded with suspicion: they are viewed as costs and as hostages to fortune. And yet benefits do appear to be apparent. There is tentative evidence that there is a connection between better reporting and lower stock price volatility (and, therefore, in turn lower cost of capital). Skandia reckoned it saved 0.5% (amounting to about Euro20m per annum) in debt costs once it began to be systematically more transparent through its IC reports. Furthermore, a study of Italian environmental and social reports compared to Intellectual Capital reports undertaken within the PRISM portfolio reveals there is considerable overlap in content, suggesting that the costs of developing indicators and reporting on intangibles may not be as great as executives fear.

Developing indicators will be difficult and will be a learning process in itself. That they are needed is well illustrated in the problems faced by the companies in PRISM's case studies. How did Cap Gemini value Ernst & Young Consulting's knowledge base? And how did the combined entity evaluate their decision to scrap the existing Knowledge Management systems and start again? How did Digifone value its investments in next generation networks and licenses? Consider some of the knock-on effects to understand why it is that indicators will be difficult to develop and embed within the economic system as we know it.

The investment community, for example, is used to standardised reporting methods which allow it to benchmark one entity to another. A new framework based on indicators will be heavily reliant on analysts (current or new types) re-skilling themselves so as to be able to interpret the new forms of data. They may need some external assessments on the quality of reporting. And they may need to learn to work with a mixture of monetary values and non-financial measures, supported by narrative. The banking community's embedded knowledge surrounds the risks of advancing of credit against identifiable collateral. Intangibles-dominated companies are becoming more frequent as a class of clients and the pressure on banks is increasing. With a new proposal in

current circulation with regard to banks' capital adequacy (Basle II), this is a serious issue. If better measurement systems do not develop and bankers do not develop new skills (which might include the provision of other support services alongside the provision of financial capital), the flow and allocation of capital could seriously hinder the growth of European enterprise and thereby undermine the EU's Lisbon objective to be the most competitive economy in the world by 2010. The problem that begins within companies also has serious implications at the macro level. Corporate executives arguably have few incentives to change the status quo as their personal value (their knowledge base) is connected to the old world's language and methodologies. That governments appear to be laggards in their own intangible practices cannot help either.

The PRISM project is addressing some of these issues, but is also particularly focused on stretching and stimulating the debate across wider sections of Europe's economic actors. It is aiming to deliver the EU a policy set to assist in progressing towards the fulfillment of the Lisbon 2010 objective. The group has embarked on a journey, for which this project is neither the beginning nor will it be the end. However, at each stage of the journey, such as this meeting in Barcelona, it is important for us to reflect with other interested parties, on what we have learned and what further issues have been uncovered, in order to refine the approach. Therefore, the executive summary finishes by restating PRISM's original statements with a few additional comments in the light of this meeting's discussions.

Policy-Making – policy makers at *all* levels in Europe need to be better equipped to optimally intervene in the economy to provide the necessary conditions for the intangible asset base to flourish.

To become better equipped, a new language needs to be learned and a new reporting framework developed around the real value drivers of the economy. A clearer and more consistent approach to IPR also needs to be developed.

Reporting and Measurement – more transparent and robust information on the values of the intangibles circulating within the economy should improve the capital allocation decision of policy-makers, corporate executives and financiers.

More transparent information flow is achievable and desirable, but will wreak large-scale change on companies, financiers and accountants. The benefits therefore need to be clear and visible to all at the outset. One should also recognise how long it might take to develop new frameworks. First, data need to be systematically made transparent. Only then will we be able to start observing the linkages and correlations between different intangibles and tangibles. This process will undoubtedly entail some refinement of the original base indicators.

Intangibles – intangibles need to be more clearly identified, delineated and measured to achieve this reporting goal.

The observation of management practices within the new context in which firms operate is intended to improve the language of intangibles, and to identify the objects and indicators worthy of measure.

Skills Development – different skills and competencies will need to be developed for Europe to both measure and report on its dynamic intangible asset base and to more effectively manage in the economic context of the 21st century.

We have mentioned the analyst community, but the need for new competencies is also very apparent in the research work and case studies on networks.

Management – better managerial decisions will ultimately be achieved through the distillation of high complexity into a manageable number of key measures and indicators of how economic sustainability is achieved in a constantly changing context.

Richard Youngman, April 2002