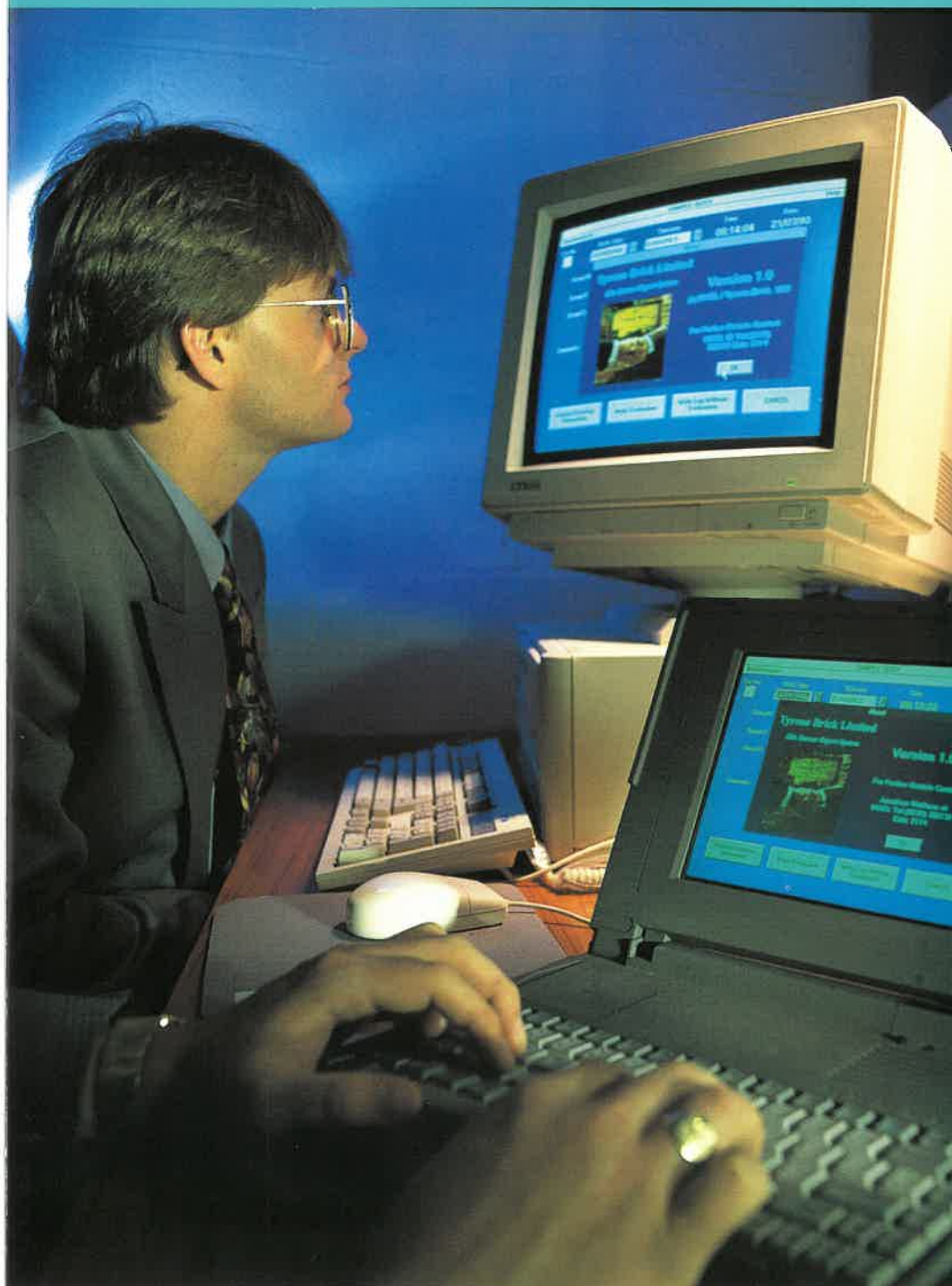


Foresight

NORTHERN IRELAND

SOFTWARE

SUMMARY REPORT



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THE PANEL

Chairman

Mr Frank Graham

Kainos Software Ltd

Secretary

Mr Colin Hunter

*Northern Ireland
Growth Challenge*

Members

Professor Danny Crookes

The Queen's University Belfast

Dr Barry Hagan

BH Associates

Professor John Hughes

University of Ulster

Dr George Kernohan

UNITE Solutions Ltd

Mr Colin Reid

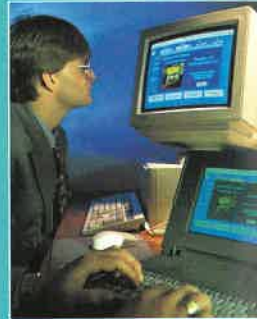
Task Software Ltd

Mr Denis O'Sullivan

NI Software Industry Federation

Mr Eugene Treacy

Industrial Research & Technology Unit



APPROACH

The Panel decided on the following strategy-

- to use as its initial source of ideas the IT and Electronics section (Book 8) of the Progress Through Partnership reports, office of Science and Technology
- to select up to four of the many recommendations in this book which the Panel believed would have most relevance to Northern Ireland
- to investigate and use, where appropriate, the work already carried out by equivalent panels in Great Britain
- to allocate one Panel member to be responsible for each of the selected areas of investigation, who would ultimately make recommendations and write a report on his subject which would be discussed and edited by the entire Panel
- the Panel would meet monthly to monitor progress and ensure that the entire project would be completed within six months.

The four areas selected by the Panel and the member to whom they were allocated were as follows -

- IT Literacy, Education and Training - Frank Graham
- Business Incubation - Denis O'Sullivan
- Creating Infobusinesses - Barry Hagan
- Distributed Information Management - John Hughes

FINDINGS

Barriers to progress were found to be -

- **an apparent resistance from many Small to Medium Enterprises (SMEs) -**
 - to use proven but modern IT systems as part of their everyday existence
 - to aspire to sectoral best practice in terms of quality systems, staff training, research and development
 - to communicate the local sectoral exemplars for mutual benefit
 - to respond positively to DED agencies which attempt to provide guidance and help in these matters
- a fragmentation of effort over a number of areas such as bringing IT into the community and the attempts to create Business or Technology Parks
- an apparent major 'hole' in our basic education system which allows most students at every level to emerge without any significant IT knowledge, which is simply unacceptable for any region in the 21st century
- a level of communication between the public and private sectors and academia which although probably superior to that of Great Britain could be further improved for the greater benefit of the whole community.

The majority of businesses in Northern Ireland, which are mainly SMEs, do not immediately view ITEC as providing significant competitive advantage. There is a burden of proof on the ITEC sector to demonstrate to other sectors that sustainable business benefits can derive from the early adoption and exploitation of this technology. One of the key opportunities to overcome these barriers is in the creation of INFOBUSINESSES - multi sector information businesses which exploit knowledge, expertise and creativity to address global markets. There are many possibilities including tele-shopping, distance learning, 'edutainment', financial services and health care.

RECOMMENDATIONS

- SME's in all sectors should be encouraged to strive to become 'world class' in all relevant areas including their knowledge and use of IT systems. This should be done by DED extending its support for sectoral 'federations' like the Software Industry Federation (SIF). The federations will promote best practice across a wide spectrum of issues including IT, have regular contact with SIF and act as a conduit for information on Government assistance.

- The Belfast Infocity Consortium project is a model which embodies one of our best hopes for creating new high technology industries. NIGC and SIF should harness market intelligence and promote this as an exemplar for other cities and towns.
- All students in secondary education should complete a mandatory GCSE or NVQ in 'Use of Information Technology'. A more advanced but optional module should be available to all tertiary education students.
- The efforts of academia, public and private sector bodies should be focused on creating a 'technopole' (a Science and Technology Park with integral incubator units) in the greater Belfast area.
- The province has already considerable expertise in all the constituent elements of Distributed Information Management. IRTU and SIF should provide the opportunity to 'pool' expertise and collaborate in joint ventures to expand what is already in Northern Ireland a successful but under-exploited technology.
- DED should define a series of templates, on a sectoral basis, of 'the competitive company'. Each template will contain the desirable characteristics of -
 - use of relevant IT systems
 - commitment to training (IIP accreditation)
 - commitment to quality (ISO accreditation)
 - commitment to R & D (a percentage of annual turnover)
 - commitment to market research
 - commitment to world class best practice.

Rather than provide grant assistance on the basis of the current criteria, the value of the grant should be modified on the basis also of a comparison of the company's past performance and future plans with the 'competitive' templates. In a sense this is using 'carrot and stick' rather than just 'carrot' as now. This should encourage SMEs to adopt a more internationally competitive profile.

- Market intelligence to assist in identifying and characterising infobusiness opportunities on an ongoing basis should be created and maintained. A suitable channel for the dissemination of this information to interested parties could be the SIF.
- Sectoral based demonstrators and pilots, supported by sectoral trade associations, created to illustrate sustainable business benefits and competitive advantage through the exploitation of ITEC should be initiated. Suitable channels for promoting such an initiative could be NIGC and the SIF.



A MORE DETAILED REPORT ON THE WORK OF THIS SECTOR PANEL IS AVAILABLE
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