

Sustain Innovation - Yea, Sure

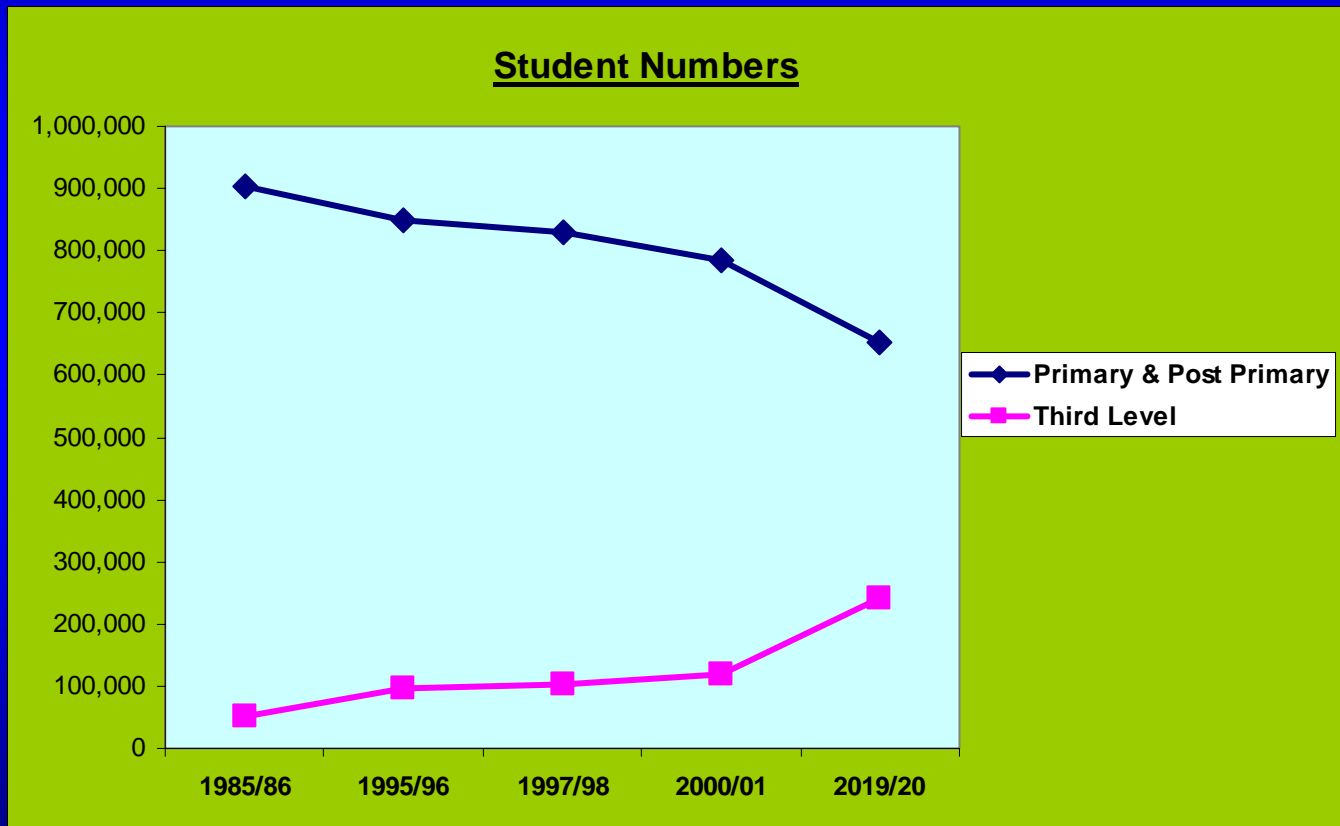
Martin Hayes
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Welcome to the Future

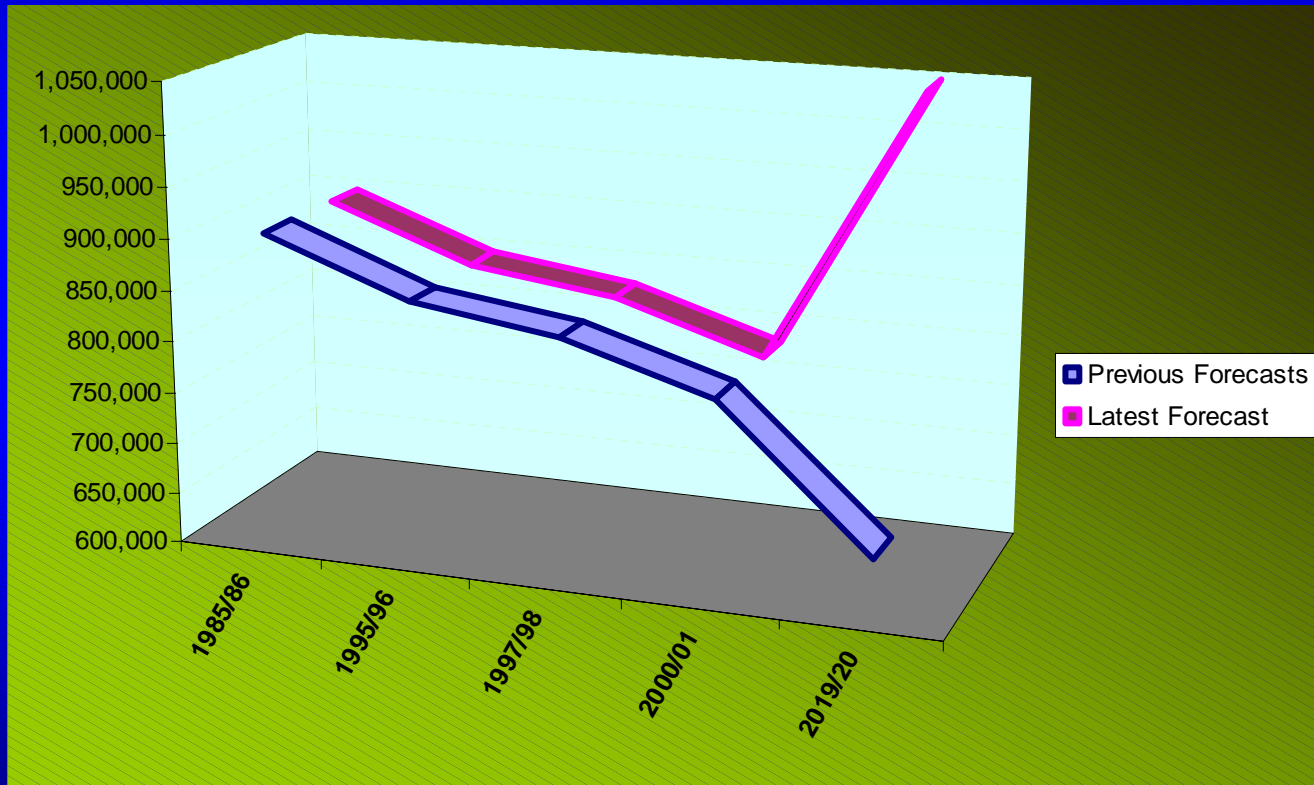
- - - It's broken

- *Marshall McLuhan*

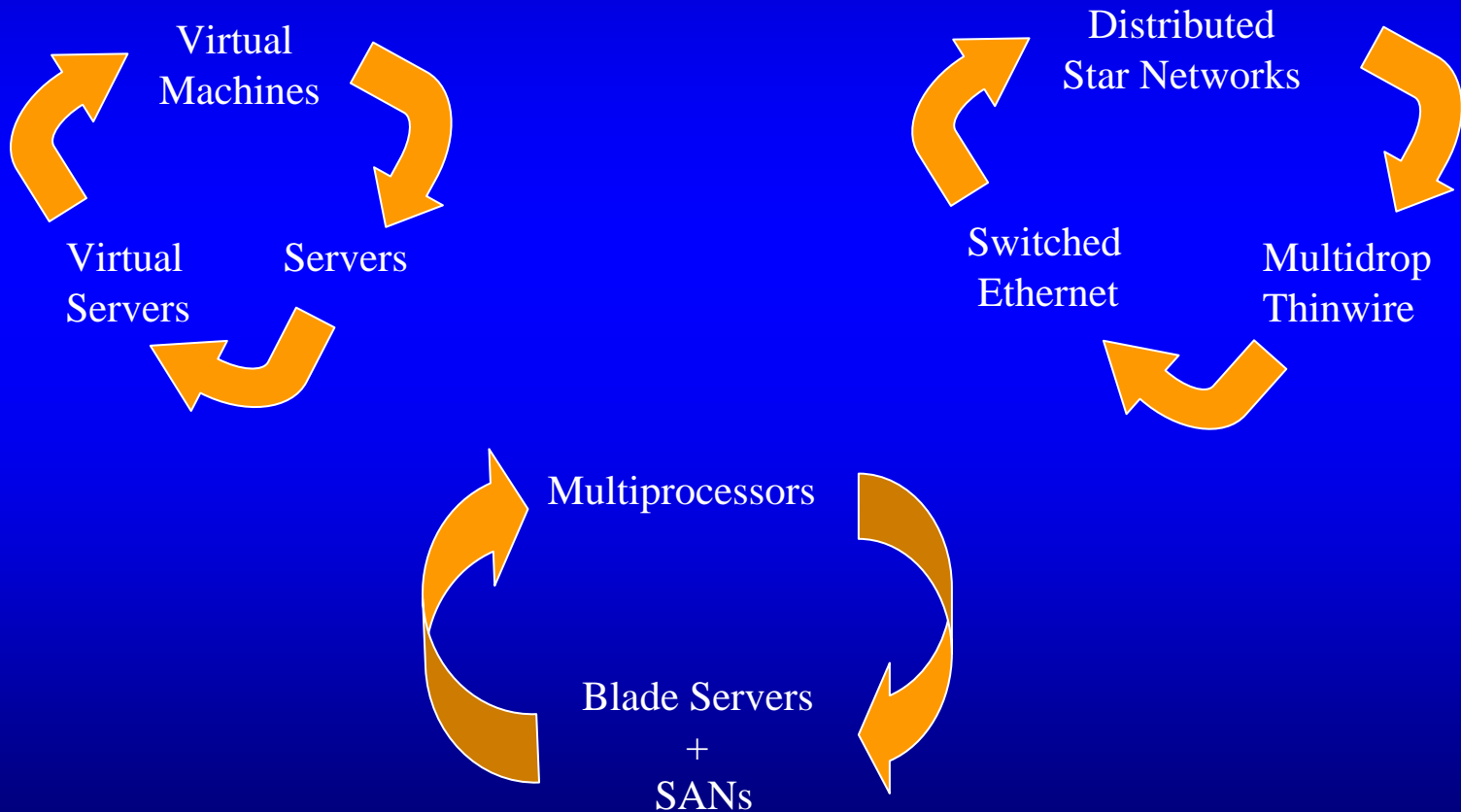
Uncertain Environment



Primary & Post-Primary Student Numbers



A Long Way Back to the Future





e-Learning

- IT will enable us to reach many more students?
- IT will enhance learning through student collaboration?
- IT will enable distance learning?
- IT encourages active rather than passive learning?
- Learning should be fun?

The Computer Center

If technology is simply an instrumental, more efficient means to pursue traditional kinds of knowledge and teaching, then computing is a transitional phenomenon. However, if digital technologies are changing what we mean by knowledge, then it may be that the classroom and disciplines are about to change. If so, its mission will be catalytic, to provide new modes for learning and teaching."

- *Hawkins, Brian L. Organizing and managing information resources on campus.*

EDUCOM, 1989.

Anytime/Anywhere Services ?

“Innovation is not Reform”

- *Edmund Burke*

IT Doesn't Matter

Nicholas G. Carr, Harvard Business Review (May 2003)

- What makes a resource truly strategic is not ubiquity but scarcity.
- IT's power is outstripping most of the business needs it fulfills.
- The price of essential IT functionality has dropped to a point where it is affordable to all.
- The capacity of the Internet has caught up with demand.
- Finally, and most definitively, the investment bubble has burst.

IT has become part of the infrastructure

New rules for IT management

1. Spend less
2. Follow, don't lead
3. Focus on vulnerabilities, not opportunities

The key to success for the vast majority of companies, is no longer to seek advantage aggressively but to manage costs and risks meticulously

Cost-Effectiveness of IT

U.S. Productivity Growth, 1995 - 2000

- The bulk of the US economy's productivity growth was generated by just six industries - retail, wholesale, securities, telecom, semiconductors and computer manufacturing.
- Use of IT was not the most important factor contributing to the growth in these industries.
- The other 53 industries accounted for 62% of the growth in IT spending but did not contribute to the productivity growth.

- McKinsey Global Institute Report

There is not a direct link between IT and productivity in either the services or the manufacturing sector.

In a post-Dotcom, post-Y2K, post-9/11 era we should focus on:

- Consolidating what we have achieved to provide simple adaptable foundations for the future
- Cost-effectiveness
- Disciplined innovation focused on e-learning
- Information management and management information
- Getting back to first principles
- A more rigorous questioning of our assumptions

Innovation

The would-be innovator must go out and look, ask, and listen. They go out and look at potential users to study their expectations, their values, and their needs.

To be effective, an innovation has to be simple, and it has to be focused. It should do only one thing; otherwise it confuses people.

Effective innovations start small.

In innovation, as in any other endeavour, there is talent, there is ingenuity, and there is knowledge. But when all is said and done, what innovation requires is hard, focused, purposeful work

Knowledge-Based Innovation

- Knowledge-based innovations differ from all others in the time they take, in their casualty rates and in their predictability.
- They can be temperamental, capricious and hard to direct.
- The lead time is something like 50 years, a figure that has not shortened appreciably throughout history.

- Peter Drucker

Thank You

The Computer Center

"What essential services require the existence of a computer center beyond the maintenance of the network and its central shared nodes? It may be that academic computing is a transitional organisation, necessary to manage the transfer of computers and technical expertise to the desktops of users, but then to become a place of historical interest. What is fundamental here is the relationship between digital technologies and the missions of higher education, research and teaching. If technology is simply an instrumental, more efficient means to pursue traditional kinds of knowledge and teaching, then computing is a transitional phenomenon. However, if digital technologies are changing what we mean by knowledge, then it may be that the classroom and disciplines are about to change. If so, its mission will be catalytic, to provide new modes for learning and teaching."

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We will be able to put on new services such as music streaming, video streaming - you see in Korea where they are completely interactive across the Internet from the games point of view, that hasn't really happened here in Ireland or indeed in Western Europe to a large extent but it has in those places like Korea and Singapore and we're trying to emulate those.

*Dermot Ahern, Minister for Communications
launching the rollout of the new €11m. Broadband network for
the Midlands - RTE News, 24th April 2003*

IT Doesn't Matter

- What makes a resource truly strategic is not ubiquity but scarcity.
- When companies buy a generic application, they buy a generic process as well. Both the cost-savings and the interoperability benefits make the sacrifice of distinctiveness unavoidable.
- Signs that the IT buildout is much closer to its end than its beginning
 - IT's power is outstripping most of the business needs it fulfills.
 - The price of essential IT functionality has dropped to a point where it is affordable to all.
 - The capacity of the Internet has caught up with demand.
 - IT vendors are rushing to position themselves as commodity suppliers or even as utilities.
 - Finally, and most definitively, the investment bubble has burst.

Applications

- Transaction Systems
- MIS - Management Information Systems
 - DSS - Decision Support Systems
 - EIS - Executive Information Systems
 - BIS - Business Information Systems
 - BI - Business Intelligence
- MIS
- E-Learning

Innovations vs. Needs

Innovations

- Wireless
- Bandwidth
- 24*7 Support
- Anytime/Anywhere services

Gadgets & Gimmicks

Needs

- Productivity
- Information
- Security

Cost-effectiveness

Software Engineering





An Uncertain Environment

- The number of school leavers is falling?
- But, set against this are
 - Higher participation rate
 - More students from abroad
 - More mature student entry
 - Distance learning
- So, student numbers will continue to grow