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**Your Event ....**

Integriertes Informationsmanagement an Hochschulen

Quo Vadis Universität 2.0? Workshop 2007

**Optimierte Forschung, Lehre und Verwaltung**

Auf dem Weg zum digitalen Campus:  
Die Universität Karlsruhe modernisiert die Kommunikation zwischen Fachbereichen, Studierenden und Verwaltung.

Optimised research, teaching and administration  
On the way to the digital Campus: The University of Karlsruhe is modernising communications between its areas of specialism, study and administration.

How Do We Make It All Happen?

### 1 Your Event ....

Thank you for inviting me to give the keynote presentation at your event in Karlsruhe on 1<sup>st</sup> March 2007.

The theme, “Integrated Information Management in Higher Education – Where Are We Headed With University 2.0”, gives me an opportunity to offer a personal overview of this fascinating area of university development. I’m making no attempt to offer a technical contribution, but rather to set a context of issues and factors that I believe will be relevant to your objectives.

This paper:-

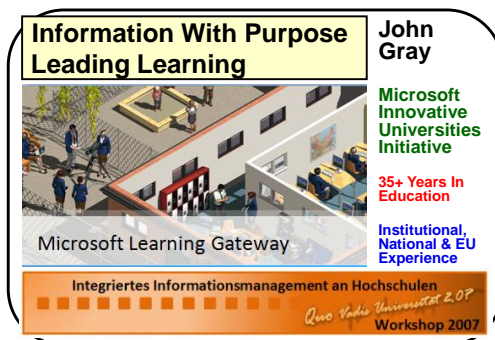
- Sets some global background relevant to the way our institutions (and our governments through their adoption of the Bologna accords) plan for the future
- Offers some reflections on models for ICT-led change that alert us to potential barriers to success in



providing new ways of supporting learning

- Builds on personal experience and use of desktop and server products in my colleges to present the rationale for Microsoft's Learning Gateway concept and its potential for helping organisations implement change
- Provides an overview of the MS Innovative Universities initiative that I'm working on for Microsoft EMEA.
- Considers the challenge for leaders (and followers) in facilitating the substantial change management agenda involved in enabling our organisations to become e-mature.

Inevitably, there's more left out of this overview than could be included! I hope the presentation will prompt further conversations.



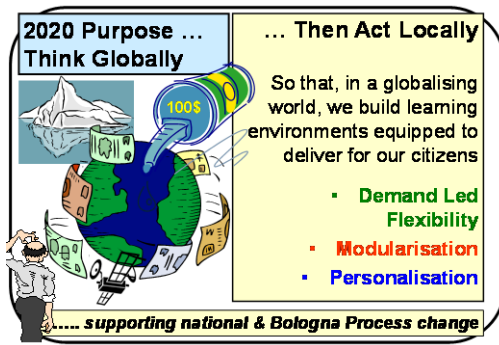
## 2 Information With Purpose Leading Learning

I recently retired from a career of 35+ years in education, about half of that time as a teacher, and half as a manager – and around 25+ years using IT, and involved in a variety of UK & European e-learning policy assignments. Since retiring I've become a PhD research student at my local university – I'm exploring policy and practice issues around the development of 'e-maturity' in colleges and universities.

I'm also working on projects for Microsoft. The projects I work on, across Europe and in the UK, aim to support colleges and universities in using technology each project aimed at supporting anyone wanting to develop ways of using technology to support teaching & learning, manage the institution and improve its capacity for communication and collaboration.

My view has always been that, when we assess the contribution that ILT can make to our educational mission, 'the whole is greater than the sum of the parts'. In my own colleges we pursued integration of our various systems in order to get maximum leverage of the investments of time trust and money that each system represented.

Microsoft recognises the validity of this approach and has embedded it in Learning Gateway – a framework for using the strong integration of its desktop and server products to service institutions' needs.



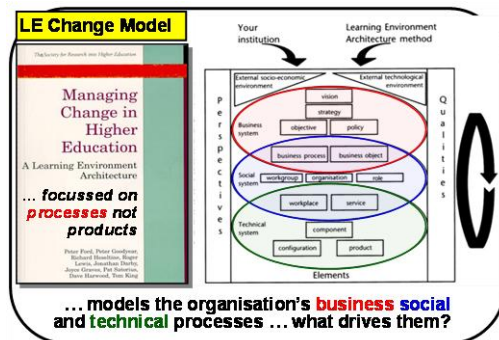
### 3 2020 Purpose ... Think Globally

Around 2003 I participated in a UK DfES scenario planning seminar at which we were exhorted to think 20 years ahead .. Not 5, not 10 .. Only 20! The discussion rapidly led to some far-reaching possibilities to be considered ...

The analysis presented by the DfES statistics branch painted a picture of an aging, ethnically-diverse population in which extended working life would be the norm, with continuous just-in-time skills development the norm to support career transfer. There was a strong view that Mandarin Chinese might have become the international business language by then as the huge Asian markets mature and the majority population languages oust the use of English.

Dependence on overseas oil in a politically unsure world has led to proportionately lower [and more expensive] energy use and in particular to a reduction in private transport use resulting in much more home working and home schooling based on a ubiquitous high bandwidth electronic communications infrastructure. No doubt if the seminar had taken place just a couple of years later we would have been speculating about the impact of global warming & climate change.

What would learning, work and life look like in such a world? Clearly thinking globally and acting locally has a place – even if we often struggle to find a way to make it happen! The agreement by many countries, outside the EU as well as within, to progress towards ‘Bologna compliance’ is the immediate challenge we have to face in providing the flexible, personalised and high mobility service future students and lifelong learners will need. A central theme of the MS Innovative Universities initiative will be to explore what a European university will look like ‘after Bologna’.



### 4 LE Change Model

In 1996, following the publication of the FEFC Learning Technology Committee report, I was asked by ICL to endorse the sending of a book to every College Principal in the UK. The letter accompanying the book said ...

*... in HE currently there are massive changes, and there is a growing recognition that they cannot be sustained on the basis of traditional models of teaching and learning alone.” This sounds familiar to us in the FE sector and, though written for HE institutions, the book’s principles transfer well to our context. A central message of the FEFC’s Learning & Technology Committee report (and the FEDA and NCET work that informed it) was the need to plan strategically to construct new learning models, and especially to enable a new role for the FE tutor, meeting the needs our colleges serve.*

*Colleges will by now be thinking about how to participate in the whole-sector ‘staff development’ programme*

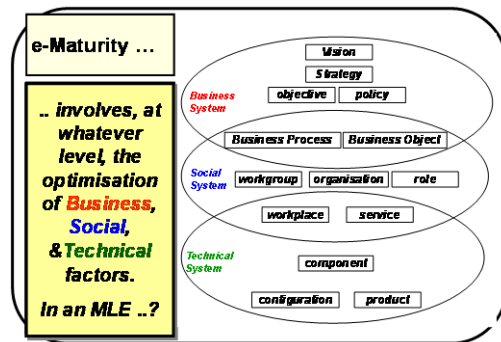


*being planned by FEDA and NCET in response to a recommendation made in the L TC report. This book is a timely and valuable contribution to a new way of thinking about the complex of business, social and technical issues that define each institution's scope for managing its future learning environment ..."*

This book is currently being revised – and since it was first published the FEFC has become the LSC, NCET has become Becta, and FEDA has morphed into the QIA and the LSN ... 10 years is a long time in today's education!

Links From This Slide To:

<http://www.elearning-reviews.org/topics/culture/change-management/1996-ford-et-al-managing-change-higher-education/>



## 5 e-Maturity ...

The principal justification for the Learning Environment Architecture approach to managing change is presented in "Managing Change in Higher Education - a Learning Environment Architecture" ISBN 0 335 19791 4 as:-

- It is specific to learning environments
- It is based on the principle that diversity and change are forces to be managed and harnessed rather than resisted
- It flows from business through to information systems so that all systems and processes clearly support the aims of the learning institution
- It incorporates a value system
- It is supplier-independent, which means it accommodates any supplier's products
- The resulting architecture is designed to cope with changes which will occur in the future, for although not all changes can be foreseen, the architecture can be used to control specific events such as planning a new organisational structure, redefining a strategy or establishing a procurement policy.

Page 3 of the book declares that:-

"A learning institution using the Learning Environment Architecture to create its own architecture can expect a number of benefits:

- A forward vision for the institution
- A common understanding



- Better internal collaboration
- A clear projection of purpose to the outside world
- A means of managing change in a fast-moving environment, by using the architecture as an anchor when all around is undergoing change
- The establishment of a quality learning environment

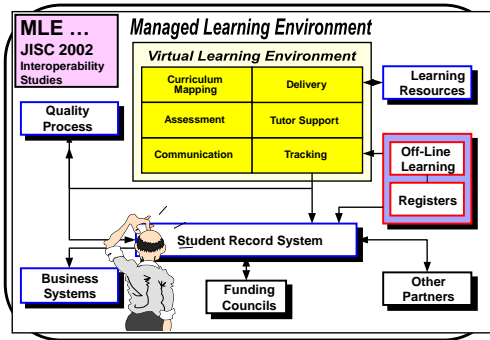
Cost savings by:

- aligning the organisational structure and business processes to the aims of the institution
- using a consistent approach at both institutional and departmental levels
- adopting an evolutionary approach which incorporates existing assets and systems
- managing the effective introduction of new learning methods and supporting services
- adopting a supplier-independent approach, avoiding tie-ins to particular suppliers

Information systems which:

- improve efficiency through a high degree of usability, helping staff and students to carry out their functions more effectively
- are clearly aligned to the learning environment's direction and requirements, and are flexible enough to accommodate future changes in both the learning environment's strategy and future developments in technology.

This set of attributes guided the subsequent thinking and activity of the JISC MLESG, and of course the benefits for colleges and universities are at the heart of the value proposition that MS Learning Gateway offers.

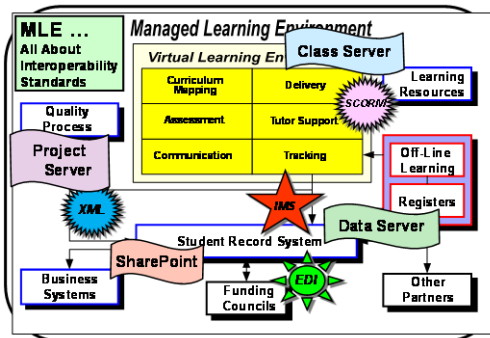


## 6 MLE ... JISC 2002 Interoperability Studies

During 2001 the UK JISC established its MLESG and tasked it to go about the business of providing advisory material and policy guidelines on the use of the plethora of so-called MLEs “managed learning environments” being brought to market in the late 1990s. There was at that time substantial confusion around the use of terms like MLE, VLE and LMS.

The group, which I chaired, decided to take a wider and more holistic approach to setting out the kind of ICT & e-learning strategies that institutions would be likely to need in future. We set out key positions concerning the use of a standards-based approach, encouraging and working with vendors to produce products that are interoperable; and being active in promoting awareness of the MLE concept as a unifying framework for managing and operating colleges.

This work was all about avoiding the ‘magic bullet’ temptations of e-learning and ensuring that colleges’ strategies reflect a more complex, but ultimately more sustainable “*blended learning*” strategy in which *E-learning* will be about ALL of learners’ learning, not just distance and online learning.



## 7 MLE ... All About Interoperability Standards

The MLESG report in 2003 was concerned to emphasise, above all, that MLE thinking is about college processes and standards, not software products. This reflected the view that the use of Information and Learning Technology (ILT) across the English FE sector, as originally conceptualised by the Further Education Funding Council’s (FEFC’s) Higginson Committee, would enhance all aspects of college services and systems with benefits for the extended community of learners.

It recommended that colleges should use the MLE conceptual framework as a guide to planning IT infrastructure to support a whole organisational approach to development planning that takes into account those pedagogic, business and technical factors that might influence their approach to their central task of widening participation and raising standards of learning. Colleges should consider how successful implementation of an MLE could impact upon their business processes and plan for organisational change.

The MLESG advised that colleges should seek advice from advisory bodies about VLE procurement and vendors’ commitment to conformance with IMS specifications, and test content they intend to use in their VLE to ensure that it can at least import and deliver IMS Content packaging and that it meets college needs in terms of student tracking. Colleges should invest significant resources in staff development and technical support to ensure the success of any MLE implementation.



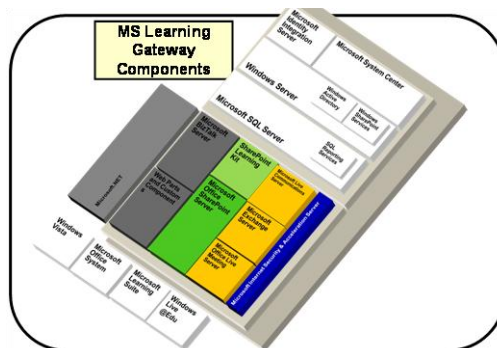


## 8 MLE Into Practice ...

At Newark & Sherwood College during the period 1995-2005 we made considerable progress towards 'joining up' our various technologies and data sets in the MLE spirit.

The Managed Learning Environment [MLE] concept arrived at in 2003's JISC work is based upon the availability of such interoperable elements. In practical terms our adherence since 1995 to industry standard Microsoft products was our passport to progress in this area. Our strategic approach to ICT infrastructure gave us a VLE-type provision in the form of Microsoft Class Server and Business Continuity systems, including critically important data access and risk management arrangements, that depend on MS Exchange and MS SQL Server ... and, in the later period, increasing use of MS Sharepoint Services allowed for powerful document management & data integration.

Microsoft's Learning Gateway concept embodies all of this, and more ...



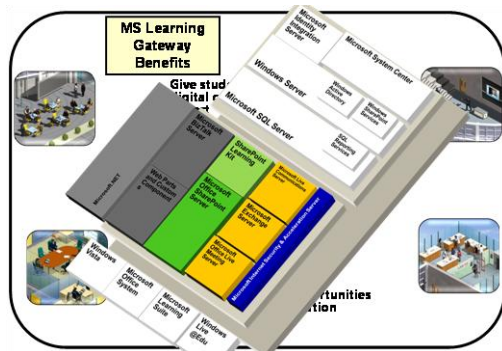
## 9 MS Learning Gateway Components

The Microsoft Learning Gateway framework offers a scalable, 'building block' approach, which helps institutions to meet immediate needs quickly and cost-effectively by getting more from their existing ICT investment. At the same time, it delivers the core technologies that can be used as a platform for new developments in education.

As the institution develops, so will its demands on its information systems. With the Microsoft Learning Gateway framework, the institution can manage growth and realise its full potential.

Support staff and management can implement an appropriate, scalable solution for their institution by using the Microsoft .NET Framework or Microsoft BizTalk® Server to connect their systems. The modular approach of Learning Gateway means that the ICT framework can accommodate to future requirements, building upon existing assets.

For educational institutions that have their own internal developer community, Web Parts are another option - a free, open source resource and community for developers.



### 10 MS Learning Gateway Benefits

Learning Gateway offers a rich collaborative environment for all an institution’s stakeholders. It is a powerful, extensible suite of features, delivered by Microsoft with its specialist education partners and designed to help meet the institution’s priorities using a scalable, cost-effective framework.

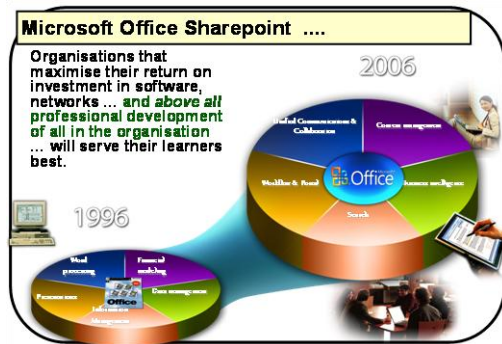
Digital Campus: Microsoft is engaged in education across the world and can bring unique experience, knowledge, and understanding to the Learning Gateway. Meet your students’ high expectations by offering them hassle-free access to a digital campus—anywhere, anytime. Bring together information such as course materials, library systems, and timetables to a single point of access.

Empower Lecturers: Free your educators from administration and let them focus on what they do best. Support your lecturers by giving them applications to develop and deliver quality teaching resources and give your students greater learning opportunities

Boost Opportunities for Innovation: Support innovation, research, and development by improving communications and collaboration. Make it easier for research groups to use and share information, regardless of their location. Offer commercial partners industry-standard systems for collaboration.

Streamline Management Processes: Give your staff the resources they need to recruit students, without needing specialist knowledge to operate the systems. Support your institution’s decision-makers by giving them powerful, familiar, easy-to-use technology that simplifies analysis of complex information

Using Microsoft Office SharePoint Server, Windows Server 2003, Windows SharePoint Services, SharePoint Learning Kit, Active Directory, Microsoft Office system, Office Live Meeting, Microsoft Exchange Server, Microsoft Internet Security and Acceleration Server, Microsoft Office Live Communications Server, Microsoft SQL Server, Microsoft Dynamics, BizTalk® Server, Office InfoPath.



### 11 Microsoft Office Sharepoint ....

For many people in colleges and Universities, staff and students, these days MS Office is the place they live and learn, formally or informally,. The biggest single cost [and barrier to change] lies where we squander the time, money and effort that people have already expended in acquiring their skills. MS Office 2007, and Office Server, build on what learners and practitioners already know and do – and take it further, giving back more return on the investment already made.

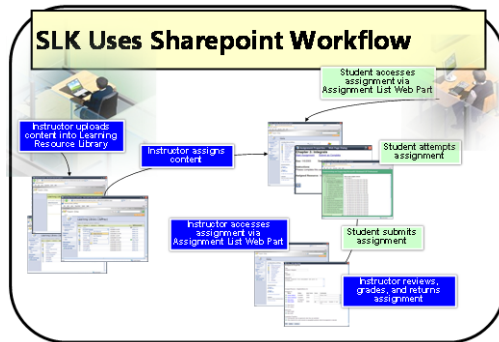
And of course, using VBA or Visual Studio, the potential to customise the applications that university staff and students offers almost boundless potential, especially when used in conjunction with the workflow and business intelligence capabilities of Sharepoint 2007.

One of the Innovative Universities group members wants to focus on adding value to the way it uses its





Microsoft Office asset through office automation. Another university in the group bases its sophisticated business intelligence framework on exposing aggregated data from many sources to its users using Sharepoint 2007.



## 12 SLK Uses Sharepoint Workflow

Sharepoint Learning Kit, which leverages the workflow functionality of Sharepoint to add e-learning to every Sharepoint site, is a free download for those using Sharepoint Server 2007

1. Import any document into a SharePoint document library.
2. The instructor can assign that doc to the members of that SharePoint sub-site or students can assign resources to themselves if they have permission.
3. The Learner is notified of a pending assignment
4. Which the learner then attempts and submits back to the instructor.
5. The instructor is notified that one or more assignments have been returned...
6. and the instructor can grade and return the assignments.. SCORM and Class Server IMS content can be automatically graded if required.

One of the Innovative Universities group members wants to get early access to MS Grava to explore its usefulness in allowing students and tutors create content to support learning.

Innovative Universities ...	
<b>Purpose</b>	Sharing of universities' good practice in credible working settings that, in aggregate, showcase all the areas that Learning Gateway addresses – even if no single university covers them all – in ways that highlight the benefits of adopting a highly integrated approach to the university's information infrastructure.
<b>Progress</b>	Universities in Karlsruhe Germany, Lyons France, Sheffield Hallam UK and Bratislava Slovakia have been engaged in the first round of network building. I am optimistic that all of them will be involved in the next steps.
<b>Potential</b>	Good prospects of building a loosely structured Innovative Universities network, showcased for the HE community via the Microsoft EMEA Contribution to Faculty Connection, focussing on the involved universities' pathway to becoming the 'Bologna-friendly' university of the future.
<b>Policy</b>	Policy decisions from universities to commit to next steps, and Microsoft's own HE engagement strategy and to resourcing the initiative, are now being explored.

## 13 Innovative Universities ...

I've been engaged by Microsoft to scope out the possibility for an Innovative Universities network across Europe. The March 2007 position is, as I see it:-

**Purpose :** Sharing of universities' good practice in credible working settings that, in aggregate, showcase all the areas that Learning Gateway addresses – even if no single university covers them all – in ways that highlight the benefits of adopting a highly integrated approach to the university's information infrastructure.

**Progress :** Universities in Karlsruhe Germany, Lyons France, Sheffield Hallam UK and Bratislava Slovakia have been engaged in the first round of network building. I am optimistic that all of them will be involved in the next steps.

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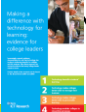
**College Leaders ...**

**Indicators of e-maturity**  
Five key indicators of e-maturity have been used to track trends over time:

- Student access
- Workforce skills
- E-learning resources
- Management and strategy
- Use across the curriculum.

**... Ready For The e-Maturity Challenge?**

- 1** Technology benefits students' learning
- 2** Technology makes colleges better able to manage their business
- 3** Technology makes colleges better able to personalise learning
- 4** Technology enables colleges to streamline processes



#### 14 College Leaders ...

On 7th November 2006 the UK Prime Minister [via a video] and David Bell, head of the DfES, keynoted the launch event of the UK's Harnessing Technology e-Strategy.

A leaflet entitled "Making A Difference With Technology For Learning: Evidence For College Leaders" was provided which asserted that the available research evidence shows

- Technology benefits students' learning
- Technology makes colleges better able to manage their business
- Technology makes colleges better able to personalise learning
- Technology enables colleges to streamline processes

How solid is the evidence that it is claimed exists to support the expectations?

How well is our sector positioned to deliver against the implications of what is now expected?

How do our institutions actually realise these ambitions?

My PhD work is centred around an exploration of how the various organisational, pedagogic and technical bodies of knowledge help us answer these practical questions – and, hopefully, in the process add to the research evidence that is available to guide us towards what is good and useful in the process of e-maturation.

Links From This Slide To:

<http://publications.becta.org.uk/download.cfm?resID=25958>

**Leaders Need To Be Skilled ....**

**.... Hybrid Managers**

Who, individually and/or in teams, deal with :

- Strategic Planning
- Learning, Teaching & Research
- People Management
- Operations Management
- Risk Management & Accountability
- Customer & Public Relations

supported in all areas by well-integrated user-friendly ICT .....



#### 15 Leaders Need To Be Skilled ....

For technology to add value to any organisation there's clearly a need to align thinking about the plans for its use with a meaningful non-technology-based model of what the organisation actually needs to do.

The new Sector Skills Council for the Lifelong Learning Industry in the UK, Lifelong Learning UK, has recently completed its 'Role Specification for Principals'. Produced as the basis for providing Continuous Professional Development [CPD] for Principals, the 6 elements in the specification give us a helicopter view of the main functional areas that are involved in leading and managing a college in the UK

- **Planning for the Future** (*strategic focus*)
- **Leading Learning and Teaching** (*learner & learning focus*)
- **Recruiting and Developing People** (*people focus*)



- **Managing Operations, Finance and Resources** (*operational focus*)
- **Accountability, Responsibility and Risk** (*accountability focus*)
- **Working with Partners, Employers and Networks** (*systems focus*)

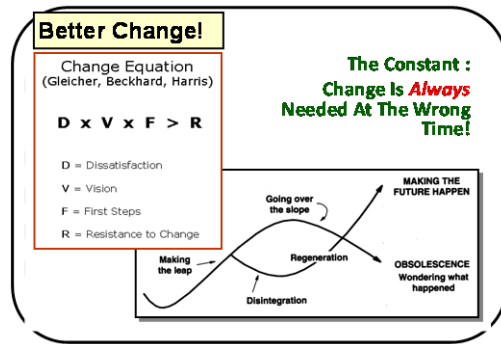
Although this specification was produced for college principals in the UK, its framework is portable. The precise vocabulary may vary, College or university, Principal or Vice-Chancellor or Rector – but in all situations the top manager is accountable for all these areas even though s/he may rely on many other people to act.

Most colleges would probably want to see ICT contributing to success in all these areas in some way – with system integration delivering the kind of added benefits that can be gained where information silos are softened, allowing for new insights to be gained, at the boundaries between the different areas. Microsoft's business interest is to make sure that its server products in particular are positioned for decision-makers in a way that demonstrates an understanding of how their organisations work and what their changing needs are.

Links From This Slide To:

[http://www.lifelonglearninguk.org/documents/docs/benchmark\\_role\\_specs.pdf](http://www.lifelonglearninguk.org/documents/docs/benchmark_role_specs.pdf)

<http://www.microsoft.com/business/peopleready/default.aspx>



## 16 Better Change!

A starter on change management ....

- What to avoid - miss out any one of the essential visions, skills, incentives, resources or planning and you'll get confusion, anxiety, frustration or lack of direction instead of the change you know is essential.
- What the 'change equation' tells us - a simple yet powerful tool that gives you a quick, first impression of the possibilities and conditions to change an organisation, recognising the connection between employee involvement and organisational success. The three components in the equation [in the UK National Health Service a 4<sup>th</sup> factor, S for 'resources', is commonly added for training purposes] must all be present to overcome the resistance to change in an organisation: Dissatisfaction with the present situation, a Vision of what is possible in the future, and achievable first steps towards reaching the vision. If any of the three is zero or near zero, the product will also be zero or near zero and the resistance to change will dominate.
- Charles Handy's diagram showing the "phases of change" reminds us of the one constant certainty - Change Is Always Needed At The Wrong Time! According to this, your organisation should probably be preparing for its next cycle of change a long time before there are visible signs of failure in the current one : a tricky one to sell to your stakeholders!

These models are offered as reminders that this is all about change management in the end – and that our communication and collaboration tools offer invaluable support in the process of effecting change.



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