



### **DIGITAL CONTENT**

**ENABLING MERSEYSIDE** 

### **CASE STUDY PROFILE >>>**

#### COMMUNICATING WITH MEANING AND EMOTION

Digital content expands human communication, enhancing senses mankind has refined over the ages to interpret the world around. Learning Inc creates digital content at its best, helping government, employers and the public sector to make new connections empowering people.

'Emotional information is the most memorable kind,' says Ivor Perry. 'Events that stand out in your life have a deep emotional component. We communicate this naturally by telling and listening to stories.

'People also learn more effectively if training material has a strong personal appeal,' explains the Director of Operations of Learning Inc, the Merseyside company already having a major impact through the UK's public and private sectors.

'We go a step further and specialise in ambiguity!' he adds provocatively. 'Helping people to cope with complex human relationship issues, such as racism, bullying, or negotiating, works best as events they can 'step into', explore and discover for themselves.

Learning Inc's solution is highlyinteractive, rich, multi-media, storybased training environments where trainees make choices and mistakes, question attitudes, use guidance and research to feel they are personally involved in shaping sound conclusions. A 'golden' optimal path is provided but producing a powerful programme for Ufi (University For Industry) which is responsible for the national 'Learndirect' programme. It has produced well-regarded programmes for Centrex (formerly the national police training body) and NCSL (National College of School Leadership).

'People are now totally accustomed to sophisticated media experiences. They expect nothing less when training. Until recently, e-learning often meant simply putting 300-page paper manuals on screen as HTML. It turned people off completely,' says Ivor.

'With digital content, we can unite every media type to generate memorable experiences that translate powerfully into peoples lives, using DVD-quality video, video and graphics. The key is that this allows us to deliver realistic and compelling experiences online.'

Digital content's power and excitement is now being used by innovators and entrepreneurs in numerous other fields to offer an array of thought-provoking services, data products and entertainment.

This speciality is the core of Learning Inc, the company founded with Director of Learning, Warren Deer, in the cooperative business incubation community of ICDC's Digitalinc at Liverpool Digital.

The company's now well-proven modus operandi is encapsulated in its strap-line 'Stories that Change Minds'. Business and training aims are conceptualised during a story-driven analysis, connecting goals and actions to deliver a 'learning-by-doing' experience.

Learning Inc's next move is a state-ofthe-art, generic product, 'Diversity-in-Action', which is appropriate to vital business improvement areas. It is available in a variety of formats, including online and DVD.

In the near future, the company aims to create online 'communities of practice' around products where trainees can discuss and share ideas to add network value to learning experiences.

www.learninginc.co.uk www.diversityinaction.net



"DIGITAL CONTENT IS A CONVERSATION. WELL DESIGNED MEDIA MAKES YOU PART OF IT."

**IVOR PERRY** 

all responses are valuable learning opportunities.

Since 2003, this approach has brought Learning Inc success with the environment department DEFRA, BT and DWP (Department of Works and Pensions). The company is also 'I think we are an exemplar digital content company,' Ivor continues. 'We bring together learning, creative and technical expertise and exploit advances in broadband and the ubiquity of the Flash platform to deliver compelling media to a wide audience.'





#### **INTHIS ISSUE**

#### **SUCCESS PROFILE**

#### THE DIGITAL CONTENT CONVERSATION

Learning Inc shows how well-conceived digital content leads to memorable, engaging and emotional experiences. At its best, digital content is a conversation between different people, rich in nuance and flavour, with the flexibility to convey shades of opinion and diversity (previous page).

#### **WORLD CENTRE**

#### **ATWO-WAY FLOW OFTALENT**

International Centre for Digital Content (ICDC) ensures that Merseyside is a world epicentre for digital content application as well as technology, attracting entrepreneurs and experts globally and developing services and products with a world market – pages 4-5 and case-studies 6-7.

#### **INCUBATING THE FUTURE**

#### **CO-OPERTION BEATS COMPETITION**

Digitalinc is ICDC's business incubator, commercialising ideas today that will shape the world tomorrow. Success is built on an environment of mutual co-operation among promising young start-up companies as they prepare to become competitive leaders – page 8.

#### **ULTRA SECURE WITH 3G**

#### DIGITAL CONTENT IN A

#### **'LOCATION INDEPENDENT' SOCIETY**

Mobile communications can be both far-reaching and secure, with major opportunities on Merseyside – page 9.

#### **IP BRINGS EVERYONE CLOSER**

### CHANGING MINUTE-BY-MINUTE COMMUNICATION

Internet Protocol-based telephony and video conferencing are putting complex information conveniently into the hands of ordinary users – page 10.

#### **KENSINGTON LIFE**

#### **BT HELPS ENCOURAGE COMMUNITY SPIRIT**

Liverpool's Kensington district is setting a precedent for how a rich media environment enables everyone to make the most of opportunities – page 11.

#### **MERSEYSIDE LEADERS**

#### **PIONEERING DIGITAL FRONTIERS**

Big oaks from digital acoms grow. Innovators and entrepreneurs at their most sparky – pages 12-13.

#### DIGITAL CONTENT -A RICH EXPERIENCE

This publication is dedicated to Merseyside's true strength in the production and innovation of digital content. Firstly, let me explain why digital content is so important in our new world of instant communication.

Digital content is, in effect, everything you see - or interact with - on the myriad personal devices now almost universally available. These include the personal computer (PC), either in desktop or laptop format, palm-held machines, iPod Wide, BlackBerries, public display plasma screens and, of course, the now ubiquitous mobile telephone.

We are now a global society that thrives on instant communication, from standard news media to email and interactive web activity. We download music, films and ringtones with the ease of drawing cash from ATM 'hole in the wall' bank dispensers. Increasingly, this plethora of media attracts the majority of advertising revenue. Why? Because, by definition, it is personal to the user and can be highly targeted, unlike previous one-way communication channels, such as television.

Merseyside has an edgy, creative culture that seems to produce leaders in the exciting new media age. This is exemplified by the sub-region's global renown in the games market, which spawned many pioneering games companies and attracted the presence of global giant, Sony. Liverpool John Moores University (LJMU) has devoted part of its engineering faculty to games and gaming technology, with the aim of producing graduates in software architecture that focuses on the more demanding games technology – essentially software development with a bullet-proof front-end.

The International Centre for Digital Content (ICDC) is the outcome of LJMU's strategy to institutionally capture the digital content phenomenon. Although maturing, the centre still needs total Merseyside-wide encouragement to achieve its global leadership goal. To truly mark Merseyside out in so crucial a field, we must do more to highlight this most topical of our specialities. That is why we at Merseyside ICT are taking a party of local and national media business leaders to Silicon Valley in May 2006. There, they will meet organisations at the Digital Content Revolution's real pinnacle, including Apple, Google, Yahoo! and Adobe/Macromedia.

From such early steps, we must at every opportunity reinforce Merseyside's message that in the world's digital content space we really do innovate and nurture deep talent. Achieving this will require the support of continued investment in the incubation, and subsequent development, of businesses. In parallel, our efforts must be matched by a concerted, senior level drive to attract national attention with the BBC, Channel 4, ITV and Merseyside's independent and highly successful Mersey TV. These represent major opportunities for inventive SMEs!

As we show here, the first strong shoots of success are now clear to see. Good collaboration and a determination to remain nationally significant will keep us ahead of the pack.

Steve Smith ICT Industry Sector Director Merseyside ICT

#### **LOCAL ADVANTAGES FOR A WORLD LEAD**

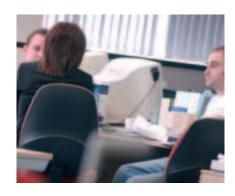
### PACE-SETTING TECHNOLOGY WITH ALL IMPORTANT INNOVATIVE APPLICATIONS

The International Centre for Digital Content (ICDC) gives Merseyside a global influence in advancing the new media that are helping millions of people to see the modern world differently and communicate more intimately.

ICDC is respected worldwide for pioneering technical developments and, equally importantly, groundbreaking applications that add new 'dimensions' to the exchange of popular ideas.



It leads in the inventive presentation of digital information on screen, through evolving mobile devices, via interactive TV and in new, digitally-based industries.



The centre successfully generates new revenue streams by introducing innovative solutions to the global marketplace, developed with partners in Europe and worldwide. ICDC also has a reputation for attracting global names, inward investment and know-how to Merseyside. As a result, England's Northwest has a centre of excellence known for actively boosting regional economic growth, skills acquisition, employment and business performance.



How ICDC reaches out to innovators, entrepreneurs, business, researchers, young people and students, sharing the skills and knowledge that make a great sustainable digital content industry, is outlined in the following pages.

As a school of Liverpool John Moores University (LJMU), ICDC has impeccable academic credentials. It is also supported by The European Regional Development Fund (ERDF) and the Northwest Regional Development Agency (NWDA).

www.icdc.org.uk

#### CONTINUING MERSEYSIDE'S REPUTATION FOR MEETING WORLD DEMAND

**Lindsay Sharples, Project Director** 



Those of us who work in Liverpool and around Merseyside are constantly reminded of the greatness which was once embodied here. Second city of the largest empire the world has ever seen, this region played a critical part in the global industrial revolution.

Only a hundred years later we find ourselves on the upswing of the information revolution, and a local economic turnaround.

We have a truly vibrant creative IT sector which consistently punch above its weight. This offers an opportunity we must not miss.

The Victorians shipped steel and iron, coal and soap to be consumed as the world developed. Now, new material is being consumed – digital content.

It is the lifeblood of our new information economy. Every phone, PC, watch, PDA, television and radio feeds this content to consumers around the world at a staggering rate.

With increasing media at their disposal, from hundreds of TV channels to 3G technology and Interactive TV, users want personal control over quality content. Knowledge is becoming the great enabler, overcoming human limitations - drawing and spelling - and allowing data use in

ways limited only by the imagination. In the foreseeable future, 'augmented' reality extending rich media out into our everyday experiences, will become unremarkable.

Our tasks are ensuring the technology is in place giving end-users both connectivity and the capacity to receive and enjoy their digital content. Creating interactive, personalised content, and making sure we have the skills to do so, must be priorities.

The opportunity, simply stated is this: If this region continues to foster excellence in the production of digital content, we increase our exports. What was soap 100 years ago becomes software. Coal becomes interactive entertainment.

The world is eagerly consuming this new export and for those skilled and creative enough to supply it, there's a bright future ahead. We have everything to play for.



## LINKS FOR BUSINESS, LEARNING, INNOVATION AND ENTREPRENEURS

TAKING DIGITAL CONTENT INTO COMMERCE, THE COMMUNITY AND CLASSROOM



#### **WORKING WITH INNOVATIVE ENTREPRENEURS**

Promoting future employment and wealth-creation is a priority. Digitalinc, ICDC's business incubator, is helping to put the first of 65 promising start-ups, and pre-start-ups, on a fast-track growth route to market. The incubator's team of content developers work closely with start-up companies at the all important proof of concept stage to develop and convert original ideas into products and services for market. Importantly, the incubator's culture of non-competitive, mutually-beneficial co-operation amongst occupants helps many young companies.



#### **WORKING WITH BUSINESS**

Companies need to know how digital technology can keep them ahead. Close technical and business support, with many valuable ideas shared, is essential. ICDC acts as a catalyst in bringing new ideas to reality - generating technical reports and briefs, assessing profitability, taking concepts forward to the proof of concept stage, inputting innovation and providing support throughout. Where businesses and entrepreneurs have identified a need and solution, ICDC can provide the innovative research and development element while working directly within a company to bring products and services to market.



#### **WORKING WITH RESEARCHERS**

ICDC works in partnerships with local companies to take solutions for new and emerging technologies into the commercial marketplace. The centre's experienced digital content developers are working on a range of research projects in a variety of tourism, health, e-learning and games applications, with technology partners such as BT, Philips and the BBC. This expertise is then made available to SMEs working with ICDC to help in developing their own ideas.

For more information on each of the above, contact Tony Hughes t.hughes@livjm.ac.uk



#### WORKING WITH YOUNG PEOPLE

Nurturing sustainable skills within Merseyside's future talented workforce is fundamental. ICDC's educational agenda has expanded to promote new ways of learning, plus skills and innovative projects, in schools and community groups specifically designed to encourage and support 14 to 19 year-old young people. Building pathways to Further and Higher education, as well as industry, is a key centre priority. Ensuring a constantly renewed pool of available talent is essential for the business community's sustainable future.

For more information, contact Lindsay Sharples I.h.sharples@ljmu.ac.uk



#### **WORKING WITH STUDENTS**

The centre's worldwide network attracts international and UK students to degree programmes ranging from foundation qualifications to under and post-graduate studies. The school has strong links with industry, a prime aim being to constantly confirm the relevance of courses that provide students with appropriate skills to exploit new employment opportunities in the digital content industry.

For more information, contact Simon Robertshaw s.robertshaw@livjm.ac.uk

The ICDC website – **www.icdc.org.uk** – is a regular source of updated news and events designed to bring together innovators, business people and the skilled workforce of the future.

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#### **DIGITAL INGENUITY**

#### **ENSURING THE WORLD'S MOVERS AND SHAKERS SUCCEED**

What do young children learning how to use numbers with the BBC's support, Liverpool's busy streets and an 18th Century scientist have in common? The answer is interactive digital content from ICDC that offers alternatives to the conventional limits of communication.

#### NUMBERLINE ADDS UP FOR THE BBC

ADDING CONTENT TO THE DIGITAL CURRICULUM

Content developed on Merseyside is making simple arithmetic much easier for young children to understand, as part of the new Digital Curriculum BBC Jam learning programme.

Numberline is designed to make learning about numbers fun, stimulating and personal for 5 to 6-year-olds.

Nicola McGovern has been managing the Numberline Project at ICDC. 'The BBC has to provide content that is accessible to everyone. Numberline needed to be used by learners in schools and at home, across a range of platforms. Testing was rigorous,' she explains.

To ensure the software was going to work in the teaching environment, BBC representatives saw it in action in Liverpool schools before BBC Jam's January 2006 launch.



#### **COMMISSIONING HELP**

The BBC has an increasing need to outsource digital content development and ICDC is busy proving that Merseyside is in a prime position to help. The centre has co-ordinated a workshop where regional SMEs met BBC Digital Curriculum commissioners for an insight into what is involved in successfully

pitching and delivering projects. Internal BBC production departments are being commissioned to produce content, part of which is likely to be sourced from external organisations. To set the ball rolling, the commissioners presented three tender opportunities and invited attending companies to submit proposals.

#### HERITAGE CONSERVED SAFELY FOR ALL TO EXPLORE

#### DIGITAL CONTENT COULD UNLOCK THE VAULT HOLDING FRAGILE SCIENTIFIC SECRETS



"Twenty First Century researchers can look forward to exploring eminent 18th Century naturalist Carl Linnaeus' carefully archived collection in safe virtual 3D."

Some 40,000 irreplaceable specimens collected and catalogued by leading 18th Century Swedish naturalist, Carl Linnaeus, could in future be in the 'hands' of everyone through a mixture of web and 3D technology.

ICDC is working with Liverpool interactive 3D technology company, Lateral Visions, (see page 12) in a proof of concept demonstration depicting a virtual archive room. The development is part of a wider programme with The Linnean Society of London to digitise and share its priceless collection with the world.

'It's a tremendous opportunity,' explains ICDC Marketing Manager, Phil Blything. 'We are working with the society to explore their aspirations and then plan to engage Merseyside SMEs to deliver different parts of the project.'



## SUCCESSFULLY KICKING THINGS THAT AREN'T THERE – AND ENJOYING IT!

Passers-by are becoming used to seeing 'Big Screens' in six UK city centres. The BBC is interested in ICDC's ideas for enriching the experience of using modern streets.

The fun was in the absurdity. Grown adults kicking imaginary balls and trying to join giant red 'blobs'. But up on the screen the action was very clear – and everyone was enthralled.

The illusion is created by a camera high above the screen that using software developed by ICDC's Professor Simon Robertshaw which detects motion and objects, directly engages people on the





ground below with the on-screen contents. However, the Big Screen demonstration held in the sunshine of Liverpool's Clayton Square could be pivotal to how 21st Century urban regeneration responds to the community. Instant vox-pop voting on popular issues, street games – such as joining the blobs – and jukeboxes have been trialled. In the future, high-profile street communications could be an essential part of city living.

The hands-on – and feet-on - display was initially for a BBC team led by Live



Events Project Director, Bill Morris. Liverpudlians couldn't resist the temptation, however, to hop the fence and join in, rather proving the point!

'We were impressed by ICDC's transformation of a germ of an idea just a few months ago into a series of viable options for us,' he commented. 'We now have a better understanding of what we mean by Big Screen interactivity and what is likely to work best.'

The BBC, ICDC and Philips, which provides the screens, are discussing how ideas can be taken further.

"The recent demonstration on Liverpool's Big Screen represented a significant step forward for us."

**Bill Morris, BBC Live Events Project Director** 

#### A TURN FOR THE BETTER

Visitors entering the archive would be able to open drawers to remove, rotate and examine specimens in detail, magnifying and measuring individual items accurately.

Carl Linnaeus was born in 1707. His research, leading to the binomial nomenclature system based on genus and species names used to classify the plant and animal kingdoms today, could set a precedent for conserving the past digitally as well as physically.

www.linnean.org

The principle remains the same for olives, plant stamens and any other components. Digital objects can be spun swiftly through all plains of movement with pinpoint 3D accuracy to be viewed from any perspective. The olive jar

example shows how, with magnification, a visitor can 'enter' and explore the internal space between packed fruits. The power of Lateral Visions' representation even shows where the moist olive flesh squashes up tightly against the glass.







#### DIGITAL ENTREPRENEURSHIP

#### **BACKING TOMORROW'S WINNERS TODAY**

DIGITALINC REFLECTS ICDC'S HIGH AIMS OF PROVIDING A REWARDING HOME FOR THE FINEST INTERNATIONAL TALENT BEFORE TAKING THE WORLD BY STORM FROM MERSEYSIDE

#### **'KRIN' HEADS FOR THE DIGITAL BOX-OFFICE**





The true story behind a Merseyside 'phenomena' ready to sweep the entertainment world by film, DVD, 3D games and with major broadcasters is as fascinating as the digitally-generated fantasy it weaves.

Krin has all the makings of a classic global scifi blockbuster in the Star Wars genre. Indeed, Feng Zhu, Lead Designer on 20th Century Fox's Star Wars Episode III, is taking a similar role in Krin's production, while 2003 Maya Master and computer graphic expert, Meats Meier, will be its Art Director.

In the real world, this romantic and bloodthirsty tale, which assumes the moral highground, is the brainchild of Australian-born Bruce Fitter. Bruce is bringing it to life at Digilalinc through his young production company, Rusted Image Productions (RIP).

From a Digitalinc perspective, only part of the success story lies in Bruce's recent barnstorming global tour that won huge support from China's burgeoning film industry, Hollywood and Vancouver's growing digital centre. The other half of the tale reflects

Digitalinc's mission to attract the world's finest digital talent to Merseyside and then generate companies, products and industries commanding a global market.

Bruce's decision to leave Australia, drawn by Merseyside's 'vibrant' reputation for creative industries, is a measure of the strategy's success. He read an MA in New Media Production at Liverpool John Moores University (LMJU) before going on to write the script for Krin entirely himself.

His global tour, backed by Digitalinc and UK Trade & Investment, was extremely successful in China in finding cast and crew members, investment and some of the world's best computer-generated image (CGI) designers and illustrators. In Hollywood he discussed further investment and distribution rights.



www.rusted-image.co.uk

#### SOFTCAPITAL CHANGES THE FACE OF KNOWLEDGE TRANSFER WITH WEB 2.0

### COLLECTIVE WISEDOM MAKES US ALL SMARTER

Knowledge networks are becoming increasingly powerful as new organisational and management possibilities are opened up by the 'new web' - increasingly known as Web 2.0.

Softcapital's swift response has been to develop Knowledge Networks 2.0, explains MD Mark McNally. The company specialises in managing and developing online knowledge networks for government and industry.

Knowledge Networks 2.0 takes maximum advantage of the fact that, in the new online environment, boundaries between learning, community and knowledge transfer are beginning to disappear.

'In this new domain, knowledge is captured and shared 'bottom-up', rather than the traditional 'top-down' approach. Knowledge workers become empowered to build their own social networks that enable them to accumulate truly collective wisdom,' says Mark.

'Knowledge Networks 2.0 is a well-managed, people-centric, multi-media approach for developing sustainable social online environments where people can now collect, discover, share and build knowledge.' With its US partners, Softcapital helps to design, or re-design, knowledge-based online communities that genuinely engage members and facilitate real learning and knowledge transfer.



www.softcapital.co.uk



#### **3G ENCRYPTED ACCESS TO SUPER-SECURE SERVERS**

#### SAFEGUARDING SENSITIVE PROJECT DATA AROUND THE WORLD

It is impossible for sensitive data to be left on a contractor's laptop tens, hundreds or even thousands of miles away.

Providing, that is, you use an absolutely state-of-the-art software system developed on Merseyside. Tubedale Communications Ltd (TCL's) new Enterprise Software Management system hosts and co-ordinates real-time activity among thousands of remote project managers working on complex projects demanding total security. Yet it does so over the ordinary 3G wireless network.

Project managers are trusted colleagues who need powerful on-screen tools. It is, however, reassuring to know that once an ultra-robust 3G wireless link is terminated, no files were stored, no printouts were possible and nothing could be copied.

Instead, all data – and the programmes that drive it – remain exclusively on a parent server located 'somewhere in the world', with a storage capacity in excess of tens of terabytes (TB).

TCL's Software-As-A-Service (SAAS) system is an evolution of the ASP concept. Rather than being held on PC hard drives, sophisticated programmes and secure data can now be accessed instantaneously online.

There are major budget and time advantages too. A recent 'State of IT Project Management' study by the University of Oxford's Templeton College revealed that 35% of projects are delivered late and 54% fall below full scope. Only 16% are on time. Project management often accounts for 15% to 20% of total costs.

Tubedale developed its system to respond to the high specifications of a major client but believes it could radically change how technology-led businesses, governments, local authorities, the military and large organisations work in future. SMEs could benefit equally.

MD, Paul Morrissey, describes how high-level partnerships have been crucial in developing every aspects of the system. 'Working with Microsoft and strategically with Orange, we

have created a suite of server software, the highly encrypted 3G network link and software that rests on dedicated contractor computers,' he explains. The system is compatible with all commercial and proprietary software packages.

There has also been tremendous input from Liverpool John Moores University (LJMU), particularly its School of Computing and Mathematical Sciences,' Paul adds.

With some 75 qualified project managers among its 180 staff, Tubedale is working through MICT's north Virginia partnership with Mason University to ensure its Merseyside-generated innovation is recognised in Washington.



### **3G MOBILE COMMUNICATIONS JUMP A GENERATION**

#### TAKING DIGITAL CONTENT WHERE OTHER NETWORKS MAY NOT REACH

Licensing agreements oblige the UK's five mobile phone operators to provide 3G services for at least 80% of the population by the end of 2007.

Third generation mobile technology (3G) is designed to extend the reach of sophisticated data services - and the Internet - far beyond the office, home and location-specific Wi-Fi networks. Through laptops, phones, PDAs and other enabled devices, it promises expanding, on-themove 'virtual office' access by email, video conferencing and a growing range of integrated high-speed services.

Local authorities, companies and organisations are rapidly learning how to link disadvantaged community members, permanently mobile staff, employees with

irregular hours and many others without a routine base, via comprehensive 3G radio networks on a UK-wide, EU or world scale.

Typically, mobile networks link residents to digital material provided by schools, libraries and museums. They ensure highly mobile maintenance; sales and professional staff on the road are in touch with group databases, calendars and diaries. Tailored functions range from secure team group conferencing to wireless CCTV network management.

By the end of 2007, the mobile communications providers, O2, Orange, 3, T-Mobile and Vodafone are jointly expected to have some 50,000, low-power, UK radio transmitter base stations linking individual 3G-enabled phones and

devices into mobile and landline networks.

Tom Powell heads up Orange UK infrastructure expansion from the Northwest and foresees 25% to 30% of UK enterprises having mobile solutions in place by 2007. 'Most companies have been focusing IT and telecommunications budgets on their desktops but are beginning to see how much there is to be gained from investing to support remote employees,' he says. He sees Merseyside as a region with significant potential and much to gain.



www.orange.co.uk

#### IP 'CONVERGES' VOICE, E-MAIL, TEXT AND IMAGES

### THE INTERNET, DIGITAL CONTENT AND INTELLIGENT PHONES IN A 'LOCATION INDEPENDENT' WORLD

IP communications – both telephony and video conferencing – are putting complex information into the hands of ordinary users - literally. Internet Protocol (IP) maximises the potential of digital content to integrate previously separate streams of information. The result is voice, video and data messages delivered as one.

There are two distinct advantages.

The first is that - particularly in new buildings - up to three sets of costly cabling can now be replaced by just one. The second is in the way that people receive information. Not all staff work behind a PC. Many employees, such as healthcare, retail or manufacturing workers, find it more convenient to keep in touch via intelligent phones and other mobile devices. Rapid access to database information is easy. Productivity rises. For example, incoming calls can be redirected from an absent or lunching receptionist to other PC-based staff elsewhere in a building, or even home workers via the Internet.

IP conferencing via the Internet is radically refreshing how remote groups of people relate too. Schools and colleges are bringing students together with lecturers who may be guest experts working hundreds, or thousands, of miles away. Safe virtual field trips can visit cultural and

environmental venues.

IP communication's beautiful simplicity is seen where e-mail, voice mail, fax and telephone all merge into a single communications infrastructure. E-mail and voice messages arrive together in a single personal inbox, from which replies can be returned to both. Previously separate information streams can now 'talk' to each other simply and seamlessly through 'intelligent' phones that are essentially small computers. In schools, teachers can 'mark' class registers via an IP phone that automatically sends parents a warning SMS message if children are absent. Security staff on their rounds can view CCTV images on their IP phones as they go.

Cost savings are made not just because conventional public branch exchange (PBX) boxes, co-axial cabling and other cumbersome hardware features disappearin a digitally 'convergent environment', but also because only one network manager is needed. Maintenance is correspondingly low. Installation costs can typically fall by

40% to 60%.
Operating costs are frequently some 20% lower too.
Another bonus is free telephone calls and video conferencing across an organisation's wide area network, or the Internet, which may include home workers.

#### PICKING PROPERTY IN THE HEAT OF THE MOMENT!



You track-down the perfect looking property at sunset on Saturday. Can you contain your enthusiasm until the estate agent's office reopens on Monday? Why wait? In fact, why spend the busy working week hunting down comparative details on interesting properties when you need to make an urgent decision and offer?

Once again, it's digital content to the rescue. In the future, watch out for a simple texting reference shown clearly on 'For Sale' boards. Text in and, for a nominal fee, receive immediate comprehensive details via your mobile on asking prices, amenities and intricacies of the central heating system.

The opportunity has been identified by pickingProperty.com, a new IP communication-based service launched in mid-2006 by Merseyside entrepreneur, Nick Maguire, in collaboration with Liverpool-based award winning new-media consultancy, New Mind (see page 13).

Nick is a Director of icommunicate, specialising in new market applications and mobile portal technologies for intelligent information solutions that help businesses and consumers. He sees picking Property.com as an innovation of the type needed urgently by the global Internet economy to 'remove inhibitions caused by distance and time'. Further pace-setting IP developments are in the pipeline!

www.pickingproperty.com www.newmind.co.uk www.icommunicate.biz



#### RELEASING THE POWER OF CREATIVITY WITH TECHNOLOGY

#### **BRIAN CROUCH, BT REGIONAL DIRECTOR, NORTH WEST**

Broadband and digital technology have the potential to significantly enrich peoples' lives - changing the way they live and do business and unlocking a wealth of information and possibilities.

The digital networked economy is the exciting new environment in which we live and work. Dynamic and constantly changing, this is a world where developments in networking technology - broadband being one of them - are increasingly connecting everything to everything else, bringing people together to communicate and collaborate for mutual benefit.

With Merseyside now having 100% of its exchanges enabled for broadband, communities and businesses have a world-class platform to take advantage of this networked world.

For businesses, broadband technology enables true e-business, offering increased productivity, profitability and customer and employee satisfaction levels. The technology is also being integrated into the family home, supporting flexible working, creating quality time, encouraging learning and enabling family members to download music or do online gaming.

BT and MerseyBroadband have been working in partnership to accelerate broadband adoption in Merseyside. One such partnership project, which is making great progress, is Kensington Vision - an innovative initiative aimed at 160 households and designed to give Kensington people a unique opportunity to create their own rich content for broadcasting to their community using broadband.

Led by the International Centre for Digital Content (ICDC), supported by the Northwest Regional Development Agency and using BT's broadcast and media technology, this is a first initiative of its kind in the country - supporting the hosting and delivery of video content created by Kensington residents and businesses.

Each home is able to access local content, services and applications via Interactive Digital Television or a PC and is also available to anyone with broadband access. The content created covers anything from local football matches, fitness, healthy eating, education, key skills and community competitions to business services and information - ensuring people have access to the latest digital content and transforming the use of broadband services.

So, broadband and usage of digital technologies are changing the way we work and live. These technologies have the power to revolutionise our business and home lives and Merseyside is already leading the way in creating the future of the digital home and business!

For more information visit www.kensingtonvision.org or for details on the latest broadband services available go to www.bt.com/broadband



## NEAT 3D PROVES THAT GOOD IDEAS TRAVEL WELL

### THOUGH WHY TRAVEL AT ALL WHEN YOU CAN HAVE A CONVINCINGLY ACCURATE 3D WORLD ONLINE?

Take a high G-force, white-knuckle roller-coaster ride in Norway, check modern cargo security at the Port of Durban, or watch a new pipeline spread sparkling waters across California's famous wine-growing Napa Valley. See how new forensic and security techniques are leading the fight against worldwide skulduggery, or appreciate how nuclear plant decommissioning is carried out in safety.

All without leaving your chair – or computer monitor. Neat 3D is working round the world to bring virtual world realities into decision-making, business planning and entertainment. En route are many, by now almost routine, visits' to property developments, building interiors, engineering sites, courtroom crime reconstructions and even a journey into the London Underground.

In creating this growing array of 3D models, visualisations, animations and simulations, Neat 3D starts with clients' rough sketches and designs before engaging the latest technology, often with completion in just weeks or days.

Even then, there is often much more than meets the eye. When independent consultants set out to independently test and certify the new Tusenfyrd roller-coaster in Norway, they asked to append a 3D simulation to their report, knowing it was exquisitely accurate to the last millimetre and included all the real effects of speed, G-forces and motion.



www.neat3D.com

#### MERSEYSIDE DIGITAL CONTENT MARKET LEADERS

#### COMPANIES THAT MAKE ORIGINAL SOLUTIONS THEIR BUSINESS

Many local companies of all sizes, capacities and vintages are collectively pioneering a cluster of excellence with the flexibility to respond to customer needs, commercial openings and market trend. MICT is here to help make matches.

#### **EDUCATION BECOMES FAIR GAME**

The excitement of digital content can be injected into education and industry, as Dr Carl Gavin is proving.

His young, visionary Liverpoolbased company, Lateral Visions, is successfully transferring the benefits of dynamic interactivity, first designed to add realism to gaming worlds, into business, education and training.



Racing Academy is an inspirational teaching approach bringing learning to life when 14 to

16 year-old students are involved in a multiplayer car racing game that gingers up physics and engineering by adding a turn of speed. The model adds finger-tingling engagement by realistically simulating weight, inertia and driver interaction, including convincing suspension system responses to road undulations.

Racing simulations aside, this is a serious breakthrough for professions such as architecture.

What is different 'under the bonnet' is the company's 'interactive 3D engine'. 'In most virtual 3D environments you are just an observer,' explains Carl. 'In ours you have the ability to explore and interact.'

The advantage for clients, when Lateral Visions creates dynamic virtual worlds on its platform, is access to technology that could cost over £100,000 if supplied by the gaming industry.

Lateral Vision's virtual experiences are substantially further enriched by 3D interactive integration of back-end data: text, sound, video, or any other digital content. Models are so accurate that an inbuilt digital tape measure calculates dimensions impossible to deduce from the plain 2D plans. Again, a key feature for architects and designers. Expect more!

www.lateralvisions.co.uk



Saving time and money on the small print

It can take months to design and produce catalogues running to hundreds of pages. SMR Creative knew there had to be a faster, more cost-effective digital answer.

The company searched for software to swiftly turn complex database information into attractively laid out pages but found none. We were convinced there had to be a better way of doing things,' says Catalogue Division Manager, Paul Burnhill. There was and it led to the company developing its own PageMentor programme. PageMentor is the link that now allows database details to be transferred into page templates within seconds, where the designer can concentrate on adding refinements. The

system is so interactive that last minute updates can be made from database to pages – and vice-versa.

PageMentor is the result of both off-theshelf and bespoke software. It has the advantages of being built on a desktoppublishing package. Importantly, unlike high-cost systems created by IT people, PageMentor has been developed to work alongside traditional workflows. This makes it ideal for companies that need catalogues produced but are looking for a 'better and faster way'.

The result has been a ten-fold increase in productivity that is important in price competitiveness. 'It used to take two people from four to five months to finalise a





age Mentor

catalogue. Now one operator can work on two at once,' adds Paul. 'For example, we first discussed one project in mid-December.

Allowing for the Christmas break, production started in January with final delivery of the 200-page catalogue in the first week of February.

SMR Creative, a 13-year-old Southport design company with 10 staff, spent a year developing PageMentor. It is now exploring other potential applications for the programme.

www.smr-creative.co.uk



#### RENDER NATION ADDS LIGHT AND LIFE ON THE GRID

#### AIMES' aim is to bring powerful computing to ordinary SMEs

Digital content can be a highly flexible but computer-hungry tool. The University of Liverpool's AIMES Centre is committed to putting digital content-based solutions, otherwise only available to sizeable organisations, at the fingertips of SMEs.

Render Nation, led by MD Jim Mooney, is a new AIMES start-up company conceived with just this in mind. Its plan is to go national and global in a key field of digital content. The realism - texture, colour and light - making 3D animation so convincing results from a computer 'rendering' process that breaths life into basic animated images.

Traditionally, only large companies can afford to assemble the essential computing power through 'render farms'. Render Nation's intentional breakthrough is to make efficient and cost-effective rendering available - on-demand - to all SME animators, digital media, design, architecture and forensic modelling companies. Part of its secret is support from the AIMES' 'grid' computing utility model, which marshals capacity through linking - by agreement - the spare processing availability of large numbers of physically remote computers. The result is rendering costs that are more competitive than currently found in the UK and USA.



'Another important bonus for small firms is access, through an innovative web application, that allows them to submit work and retrieve completed projects,' explains Jim. By the end of 2006, he plans for Render Nation to have built a 400 CPU, remote rendering service - the UK's largest to date. The result is yet another Merseyside first. Already, Render Nation has supported local companies River Media, Neat 3D and Elucidate.

www.rendernation.com www.aimes.net

#### TIME AND VALUE MANAGEMENT YOU CAN TRUST

#### Managing internal resources and monitoring profitability on multiple projects can be the key to success

Traditionally, applications with the scale of functionality required to store data relating to project revenue, costs and profitability were beyond the budget of the SME. However, Liverpool-based IT company, Implemetric, has a solution which delivers all the benefits of digital content in one affordable and flexible solution.

iomis® is a web-based service which coordinates activity throughout a company, including mobile workers. iomis® ensures that all management planning, monitoring and control information is instantly visible to optimise productivity and profitability.

A keen advocate of the system is Merseyside ICT, which is currently using iomis® to improve communication and internal daily administration. Concurrently, the MICT team co-ordinates staff activity, routinely updates accurate contact details and proactively reaches out to members and crucial industry stakeholders by e-mail and e-newsletters, all through iomis®

iomis® reseller, New Mind Internet
Consultancy, is also a user of the system.
Already an expert in innovative applications
for digital content, New Mind has
developed a Destination Management
System (DMS) which now boasts a 25%
share of the UK tourism market. The
flexibility of digital content enables tourist
organisations to store local
accommodation, attraction and events data



and provide features such as online booking and ticketing as standard. The sophistication of New Mind's DMS solution, however, is not restricted to a sole application. The software system is proving perfect for managing, and allowing easy public access to detailed property market database information, explains Director, Richard Veal. New Mind is working closely with Merseyside innovator, picking Property.com, to give home buyers immediate property profiles by text to mobile phones. (See page 10)



#### MANDO GROUP HELPS TO PLAY IT SAFE

#### Keeping the HSE's website vibrant is vital

Adding a constant sparkle to more than 7,000 pages of health and safety information is challenging, as the Health and Safety Executive (HSE) knows well – particularly as written text pages give way to rich media. Fortunately, it can turn to leading Merseyside web development and marketing company, Mando Group.

The content of what effectively is a series of mini-sites must always mean something positive to many different people, from workers to professionals, and that is the challenge,' says Mando Group project manager, Gary Barnes. HSE's solution is to use an in-house team and Mando Group as trusted external consultants.

#### www.newmind.co.uk



'Refreshing the attraction of such a large site would seem to have parallels with painting the Forth Bridge but it is essential to keep making an impact,' adds Gary.

www.mandogroup.com

#### ... NOT FORGETTING THE ENTREPRENEURS

#### THE PEOPLEWHO CONTINUETO MAKE SO MUCH POSSIBLE

Merseyside must symbolise a brand that everyone starting up or expanding a business immediately equates with success.

Entrepreneurs deserve unreserved support to make their mark and become role models. Working towards an everstrengthening culture of well-targeted, permanent support that rewards enterprise, is a Merseyside ICT priority.

'It is no easy task to turn bold innovation into marketplace success,' explains Steve Smith, MICT Sector Director. 'Yet the entrepreneur has an essential dual role of visualising and bringing to reality ideas that will be great tomorrow, while finding solutions that imaginatively satisfy the specifications of major clients, or prospective clients, today.

'Ironically, some of the finest innovations with the greatest commercial potential

come not from inspired revelation but an ability to look at the obvious methodically and to find new, efficient, time and cost saving ways of performing everyday tasks.'

Among initiatives recently recommended by the Merseyside Entrepreneurship Commission to underpin the entrepreneur is a North of England 'Think Tank' that will offer something positively different to solutions from London and the south.

Other far-sighted suggestions include founding both a 'Graduate Greenhouse' and 'Hard Work Café' network. The aim will be to nurture promising younger talent, as well as the experience of older entrepreneurs, frequently from diverse backgrounds and often with disabilities.

MICT also actively supports a united approach to education's role in reinforcing confident entrepreneurship with financial certainty. Young entrepreneurs, aged 15 to 20, must also be recognised. Additionally, it is important that there are clear incentives for concepts that begin life in the informal economy to transfer easily into the mainstream.

### ... WITH A REWARD FOR THE HARD SELL

#### SMES VENTURE IN WITH THE 'DRAGONS'

Life is hard enough for doughty entrepreneurs. Time to give someone, not so much a lucky, as a hard-fought for break. Five aspiring entrepreneurs recently made their battle-hardened pitches to three inquisitorial 'dragons'. Organised by ICDC to underline the launch of Merseyside Entrepreneurship Commission's strategic report, the competition was so close that two split the £5,000 prize equally between them. Playing the game may be important but the objective was to show that there must be tangible support for great ideas to win through.

Giving it their very best were: -

- Eileen McCarthy of UKauctioneers, bringing the world of fine art and antique auctions to everyone's fingertips online – www.ukauctioneers.com
- Tobias Hardy and Chris Dowty of Text
   Sell with a system for photographing sale items using a mobile phone before texting images to an auctionstyle website.
- David Hesketh of Taecanet, which supports teachers and students with a national curriculum-based e-learning service – www.taecanet.com
- Eric Masaba of TEXXI with a simple, textbased taxi sharing scheme –
   www.texxi.com
- David Burrows with KNOWAT's system using handheld computers and wireless networks for businesses to monitor instant customer and staff feedback – www.knowat.com



Asking the searching questions (from left) - 'dragons' Esther McVey of Making It (UK), Matt Johnson, MD of the Mando Group and Deloitte's Jonathan Bell.



And the winners were (left) Chris Dowty and Tobias Hardy and (right) Eileen McCarthy, supported by Merseyside Entrepreneurship Commission Chairman, Professor Phil Redmond (second right).



#### KEY ORGANISATIONS WHO SUPPORT MERSEYSIDE ICT

#### **UNITED WE STAND**

Our strength is our members – their ideas, skills, initiative, adaptability and ambitions.

Members are invited to play an active role in a series of district-level events, seminars and co-operative ventures that are organised through the year.

























































































































































































































#### **MAKING CONTACT**

We would like to discuss how we can help you to make a success of ICT-based projects on Merseyside.

In particular, we would like to show you the special strengths, skills, financial advantages and support that Merseyside offers. However, we appreciate that any decisions you make must be based on reliable information. If you would like more detail, or to talk to us in confidence, please contact: -

Steve Smith
ICT Industry Sector Director
Merseyside ICT

steve.smith@merseysideict.org.uk t:+44 (0)151 221 3529 f:+44 (0)151 220 5715

I Faraday Road Wavertree Technology Park Liverpool L13 IEH The Merseyside ICT Sector has increasing partnerships, and a widening global reach, into international centres of excellence and marketplaces. A major priority is to introduce regional companies and innovators to exciting opportunities overseas, wherever possible making close new matches with successful partners already operating locally.

Concurrently, we are a conduit for international enquiries from organisations seeking commercial entry into the UK and wishing to meet potential Merseyside business and technical partners.

Strong US links with the George Mason University, Washington Center for Innovation & Technology, Greater Washington Initiative, Northern Virginia Technology Council and many others, are opening up a transatlantic gateway to north Virginia's world-renowned hub of IT excellence. This relationship offers inbound Merseyside companies first-class business support, networking, research and incubation facilities, en route to opportunities in the North American market. By return, we are able to make American introductions into the EU and beyond.

At the core of our work is recognition that growth in an expanding, dynamic sector depends heavily on the input of inventive minds and entrepreneurs who may struggle today but will provide tomorrow's standard solutions. That is why we believe that enabling innovation and enterprise is important and we make it our business to support individuals and companies at every level.

The Merseyside ICT Sector represents a forward-looking growth cluster in which ICT companies co-operate rather than compete, join in collaborative ventures, provide a voice in local decision-making and exchange technical and commercial ideas.

You are most welcome to join us.











# Visit our website at www.merseysideict.org.uk

