THE UNIVERSITY *of* EDINBURGH

is

BITS
MAGAZINE

Issue 20, Spring 2018

Sharing news and stories across Information Services Group and the University

Near future data, near you

Data-Driven Innovation

New Web Search

Extending Digimap

60 second interview

If you require this publication in an
alternative format, please contact
Viki Galt, Disability Information Officer
on 0131 650 6645 or email
viki.galt@ed.ac.uk

SUBMISSION DETAILS

If you would like to submit an article, or tell
us about some news, please email:
BITS@ed.ac.uk

The deadline for submissions for the next
issue of **BITS** is **18 May 2018**.

To keep up to date with IS news:
www.ed.ac.uk/is/news

Editorial

Our featured theme for this issue is Data-Driven Innovation, inside and
outside Information Services Group. We have services and projects in
ISG which provide 'near future data, near you, now' to support decision
making across the University community. We also provide infrastructure
and tools which will benefit people across the local regions as part of
the City Region Deal. Our feature article on pages 2-3 highlights our
contribution to developing new capabilities and capacity.

Our teams in ISG continue to grow and change in response to the needs
of the University. In this issue, we welcome Gosia Such, our new Director
of User Services. Our Head of Research Services, David Fergusson, is
the subject of our 60 second interview on page 13.

You can keep up to date with our activities, news and exhibitions via
our social media channels, newsletters and websites. We have a
wide range of engagement activities planned this year in response to
growing demand. In February teams across ISG offered more than 20
events, workshops, showcases, hacks and hands-on activities to staff
and students during this year's Festival of Creative Learning Week. We
explored augmented and virtual reality, adventure story games, animated
gifs, paper circuits, archive collections, digital skills, painting on vellum,
medieval pigments and medieval perspectives on information security.

Our engagement events fill up quickly and waiting lists show how keen
members of the University are to get started with new digital ideas. If you
would like to have a session run specifically for your group or students,
please let us know.

Melissa Highton
Director of Learning, Teaching and Web

ISG news

New people

Gosia Such

Gosia Such joined the ISG Senior Management Team in January as Director of User Services. User Services Directorate provides frontline Helpdesk services to our students and staff, on-site library support across all campuses, IS Helpline and operational 2nd line support, including printing and card services.

Gosia previously worked in the manufacturing industry, namely Heineken International, where she managed IT Global Service Provision for 80 countries. Previous to Heineken, Gosia worked in Service Management at ATOS and RBS, bringing 20 years of experience in IT Service and Operational Management.

" **I am very excited to be joining the University of Edinburgh, where diversity takes precedence and allows for out-of-the-box thinking. I am very passionate about quality and providing world-class service, and I look forward to ensuring the best user experience to our students, staff and affiliates.**

Wikidata in the classroom

Ewan McAndrew

Data Science for Design MSc students volunteered to analyse, model, import and visualise data about 3,219 accused witches and 3,211 witch trials (spanning 1563 to 1736) from the Survey of Scottish Witchcraft database into Wikidata. Wikipedia's newest sister project, Wikidata is an online hub of machine-readable, structured, linked open data.

The project aided the students' data literacy through the practical application of working with a real-world dataset. Surfacing this data on a multilingual open platform where it can link to and leverage from other related datasets may, in turn, fuel discoveries and shed light on a little understood period of Scottish history.

Store and transfer your data securely

Andrew Todd

The University is expanding its support to the research community by delivering a state-of-the-art Data Safe Haven environment.

The service provides a secure analytic environment, secure file transfer protocol for receipt of sensitive data and provision of a range of analytic (SPSS, STATA, SAS and R) and supporting software. Longer term we will offer high-power compute options and will attain the ISO27001 certification for best practice in information security.

Access is gained via an assigned 'Yubikey' and secure VMware Horizon Client. This allows trusted and authorised researchers to analyse linked individual-level data while maintaining the utmost confidentiality.

Inclusive Workplace award

Viki Galt

We are delighted to have been awarded the SUSE (Scottish Union of Supported Employment) Inclusive Workplace award. Gavin McLachlan accepted the award, on behalf of ISG, at the SUSE annual conference in December where it was presented by MSP Jamie Hepburn, the Minister for Employability and Training.

This new award requires workplaces to undertake a written assessment on their support, procedures and policies regarding disabled staff (including recruitment, promotion and reasonable adjustments). In addition, seven disability awareness training sessions were provided by Enable, focusing on autism spectrum conditions and learning disabilities.
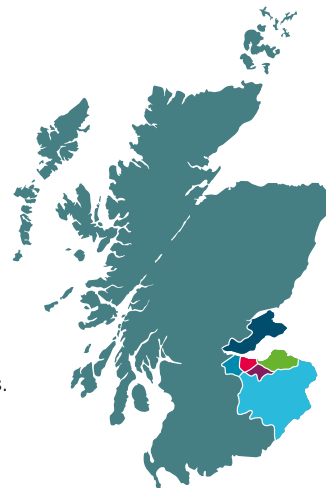
Data-Driven Innovation: 'Near future data, near you'

Gavin McLachlan, Chief Information Officer and Librarian to the University
Mark Baillie, Communications & PR Manager for the City Region Deal

Support for technology across the region is a new strategic priority for ISG. As part of the City Region Deal – the £1.1 billion investment to fund major infrastructure projects in Edinburgh and the surrounding region – the University will play a central role in the development of Data-Driven Innovation to make our region the 'Data Capital of Europe'.

The new Data Economy will be a growth area for new jobs, companies and industry. In developments such as SMART cities, Personalised Health, SMART transport and SMART Tourism, advanced use of data drives value and understanding for new services. Institutes such as the Edinburgh Futures Institute, Bayes Centre, Easter Bush Campus and Usher Institute will directly lead innovation programmes. The 15-year programme will increase the contribution of research and graduate skills to the region's economy, launching more spinout companies, attracting start-ups and established businesses and driving investment.

ISG will support all of these institutes and contribute directly by managing the new Southeast Scotland City Region Internet of Things (IoT) education, Digimap and Digiscience for Schools, data education courses and an Innovation and Research network.

> **Data-Driven Innovation will be across the whole city region, consisting of Edinburgh, the Lothians, Fife and the Borders.**

> **The DDI Programme will include the Easter Bush Campus, Bayes Centre, Edinburgh Futures Institute, Usher Institute and Robotarium – a partnership with Heriot-Watt University.**

DDI launch events

To mark the launch of the Data-Driven Innovation Programme, we're hosting roadshow events in April and May in all main campus areas. Join us to find out more about the Programme and the opportunities for academic staff.
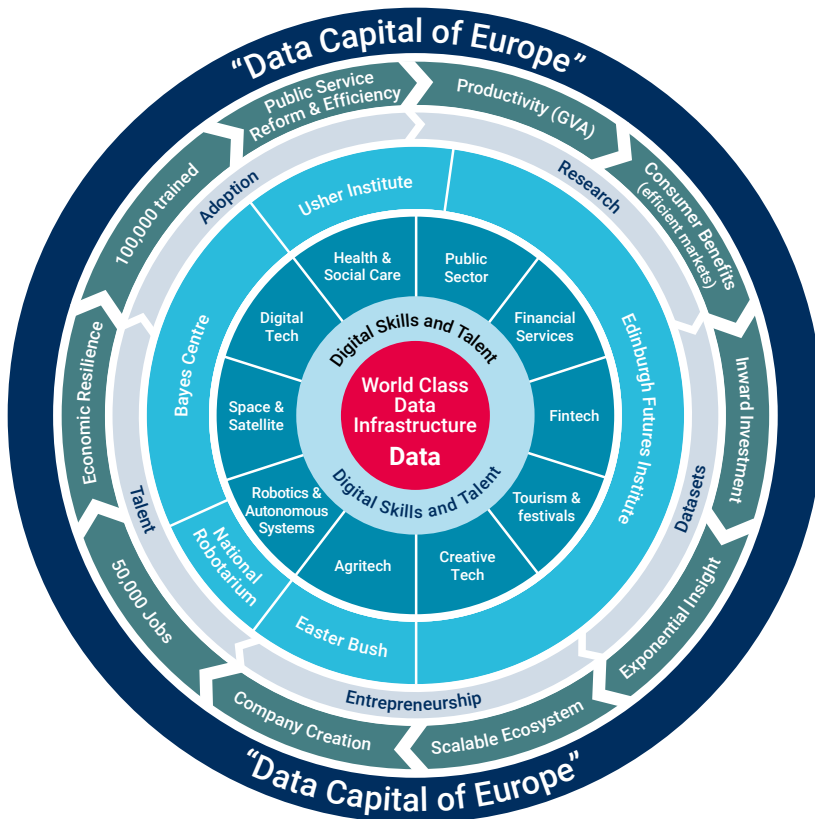
Book your place now: **edin.ac/ddi-launch**

"

We aim to accelerate growth by investing in infrastructure, skills and innovation to support significant improvements in the region's economic performance.

Gavin McLachlan, CIO, ISG

"

Our services for Digimap for Schools and new tools for digiscience will provide the platforms for young people in schools in the six local authorities across the region to learn with their teachers how to use data to solve problems and find new ways of thinking. They will work with the data which is near to their own schools and homes to understand how the world around them works.

Janet Roberts, EDINA Director, ISG

> In the context of a citywide network for the Internet of Things, connections can be made that link together civic, cultural and private activities to foster an open innovation environment. We can provide the infrastructure for this innovation.

Tony Weir, Director of IT Infrastructure, ISG

> Our University of Edinburgh MOOC courses and open educational resources provide learning which can be accessed by local communities online and in their workplaces. This is an ideal way to bring new data skills content for upskilling and lifelong learning.

Melissa Highton, Director of Learning, Teaching and Web, ISG

> The University of Edinburgh has a long established practice and drive for futures thinking. In our archives we have many documents from colleagues C.H. Waddington and Donald Michie discussing the value of vision and planning back in the sixties. They are a fascinating read for anyone interested in early data-driven innovation.

Rachel Hosker, Archives Manager and Deputy Head of Special Collections, ISG

> University buildings such as the Main Library are visited by huge numbers of people who live in the region. We have more than 2.5 million visitors each year; we are second only to Edinburgh Castle in terms of numbers. We are already using IoT techniques to understand use of our buildings and make informed decisions to improve services as a result.

Kirsty Lingstadt, Head of Digital Library, ISG

> Digital skills and data skills are essential for most jobs these days. The University is ideally placed to help our staff, our students and our community across the region to identify the skills which will make a difference to the way we live and work.

Jenni Houston, Head of Digital Skills and Training, ISG
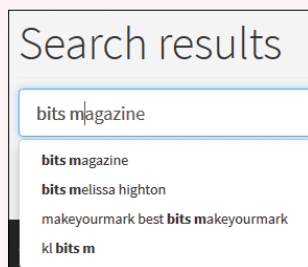
New University Web **Search**

Stratos Filalithis

The recently deployed University Web Search features enhanced ways to search content and access results from across the UoE web estate. New updates include:

- a new filter to search within available programmes, fed from the degree finder pages
- autosuggesting search terms when typing more than two characters
- customised output for specific content types, like profiles and videos

These enhancements will not only bring changes to the existing search delivery, but are a first step to influence the future of content management at the University.
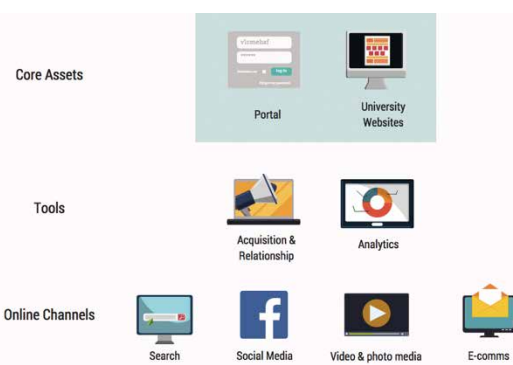
edin.ac/new-web-search

Website Strategy

Colan Mehaffey

Over the past few months, we have been developing a new strategy for the University web estate to enhance the student experience and engage with our diverse audiences. The strategy has been developed using research, data and workshops with colleagues and students.

IT Support Desk

Rad Sargeant

The IT Support Desk continues to be a very popular and well-used service by the student community, resolving over 4,000 problems last semester. Credit for this success goes to all the staff involved, who, with great team work, are able to handle and resolve such a high volume of problems.
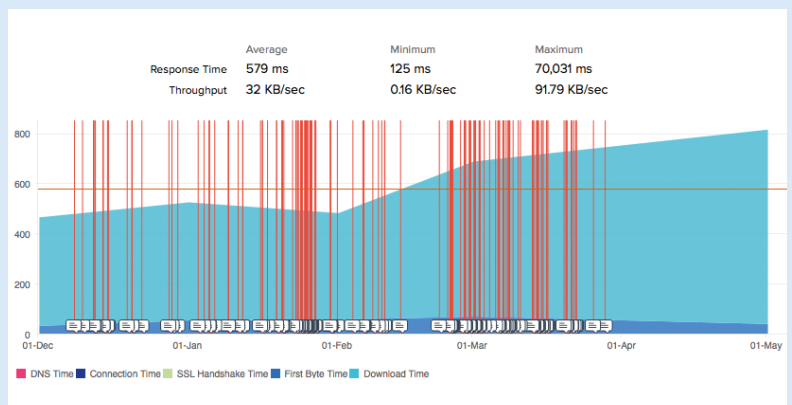
Availability data improving service stability

Stefan Kaempf

We've been using availability data in ISG to increase service quality, find underlying problems and address recurring issues. The data gathered covers availability for each priority service and is publicly available at:

edin.ac/availability-reports

With this information, we can establish underlying infrastructure issues, shortfalls in application resilience and trends and impact of regular service patches or upgrades. This data has helped reduce outage times to apply patches or perform upgrades over the last few years.

	Average	Minimum	Maximum
Response Time	579 ms	125 ms	70,031 ms
Throughput	32 KB/sec	0.16 KB/sec	91.79 KB/sec

DNS Time · Connection Time · SSL Handshake Time · First Byte Time · Download Time

This graph shows outages (vertical red lines) which started occurring in the HR/Payroll system after introducing payslips via self-service. After several application settings were changed, the outages disappeared in April 2017.

Novel dog welfare **app launched**

Nicola Osborne, Louise Connelly & Heather Bacon

EDINA have been developing a new dog welfare app for the Jeanne Marchig International Centre for Animal Welfare Education at the University, building on research funded by the Dogs Trust. The app will aid in humane dog population management by allowing projects engaged in neutering free-roaming dogs to benchmark their practices against evidence-based welfare indicators, and thus improve the welfare of the dogs. Projects will receive advice and support for improvement from the Jeanne Marchig Centre. The app was piloted in Sri Lanka, India, Bangladesh, Nepal and Botswana and will be used internationally. Further information and resources about dog welfare:

edin.ac/dog-welfare

Improving the **timetabling experience**

Sheila Fraser

We've recently sought to improve the Timetabling experience for all students through development of new Students Double Booked and Travel Constraint reports. These reports enable the Timetabling team to ensure that students aren't inappropriately double-booked on their timetable and can get to their scheduled locations in good time.

We can also now carry out modelling of different scheduling scenarios to see what would happen to the students' timetables, so that we can attain greater curriculum flexibility as well as better utilise all of our available space.

Information on current USG projects is available on the projects website:

edin.ac/usg-portfolio-17-18

If you have any questions, please contact Jamie Thin (Timetabling Programme Manager):

Jamie.Thin@ed.ac.uk

Near **Future Library**

Kirsty Lingstadt

What does the future hold for the University's library? What will it look like? What services will it provide? Is it a place? Will there be books, or machines, or robots?

The Near Future Library project, run by Library & University Collections, envisages the future of the Library, and asks what this means for the University of Edinburgh. By inviting student responses to this question, and hosting a symposium exploring the concept of the Near Future Library, we aim to stimulate discussion and ideas, fostering a creative interest in the future of our Library and helping to inform future strategy.

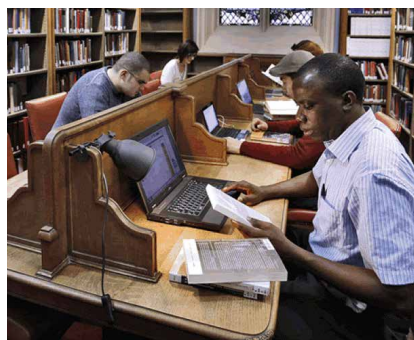# You've got the **power**

Susan Watson

Over 1,400 additional integrated power supplies have now been installed in the Main Library, from the Lower Ground Floor to Floor 5. These additions are in response to a key improvement request from students for more electrical sockets and USB charging ports to be made available at study desks. Students working in the Library are now able to easily access power supplies for their electronic devices directly from their desk.

Extended opening hours trial at **New College Library**

Paul Gorman

We are trialling extended opening hours at the New College Library this semester. For the first time in its history, the New College Library is now open every Sunday 12-5pm and will be open until 10pm Monday to Thursday from 9 April - 24 May. We hope users find these extended hours to be greatly beneficial to them.

www.ed.ac.uk/is/library-opening

Students explore **blockchain**

Janet Roberts

EDINA has employed a team of international students, undertaking an MSc in Entrepreneurship and Innovation, as a team of consultants to explore opportunities relating to the emerging technology of blockchain. The five students – 'Edtech Consultancy' (Theo Beutel, Sven Böttger, Jasper Epsom, Leonidas Galeridis and Zihao Zheng) – have eight weeks to investigate and report back to EDINA outlining ideas for innovation, evaluating the value creation potential of opportunities and options for implementation of their ideas to enhance or build value propositions.

> **It is a great way to utilise the expertise of University students, with a project that we wouldn't otherwise be able to resource, while giving them experience into a real world challenge of being innovative in such a fast moving area.**
>
> **Janet Roberts, EDINA Director**

Innovating with Open Knowledge

Lorna Campbell

Innovating with Open Knowledge is a free series of videos and resources aimed at creative individuals, private researchers, entrepreneurs and SMEs to provide guidance on how to find and access the open outputs of Higher Education. The resources help users to develop digital literacy skills and search strategies, and feature case study interviews with creative individuals and entrepreneurs engaging with the University's world-class research outputs.

openinnovation.is.ed.ac.uk

Exploring the Sounds of the City with the **Internet of Things**

Nicola Osborne & Simon Chapple

Citysounds, a new Internet of Things (IoT) project, is placing sensors at locations across the Meadows to capture short clips of audible and ultrasonic sounds of wildlife, traffic and human activity in real time. The privacy preserving data will inform the work of researchers in biodiversity, health and wellbeing, as well as feeding back to community groups, artists and data scientists.

CitySounds is part of the University's IoT Initiative, which is exploring innovative ways that internet-connected devices and sensors can be used to understand and improve the lives of people across Edinburgh and the South East Scotland area. A new IoT Research and Innovation Service, enabling researchers to create and run their own projects, will launch soon.

iot.ed.ac.uk
citysounds.eu

Online learning data insights

Learning, Teaching and Web Services (LTW) are currently undertaking projects looking into how we can use data to enhance our online learning programmes.

Analysing recruitment data

Lauren Johnston-Smith

A University-wide report analysing recruitment data for our online degrees is being produced for the first time by LTW student intern Nicola Rouse. The report will enable Schools to better understand trends, themes and behaviours among existing markets, and to use the data to inform future student recruitment marketing campaigns. In today's competitive online learning marketplace, harnessing insight from admissions data will help us make quicker, smarter decisions and predictions.

Establishing demand for new programmes

Stewart Laing

We worked with StudyPortals Analytics and Consulting Team to deliver insight to establish relative supply and demand for new online masters programmes. The basis of the analysis is a data set from StudyPortals that contains behavioural data from over 30 million visitors to the StudyPortals websites, such as page views, geographic breakdown and intended start date. Users visiting StudyPortals websites also have the possibility to shortlist their favourite programmes in their user account which allows Schools to see which programmes are competing directly with their programmes.
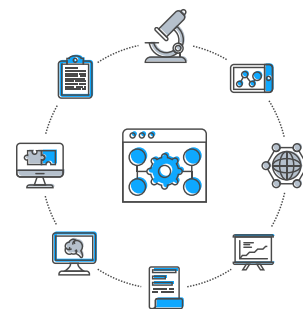
Championing digital research services

Magdalena Getler

ISG is undertaking a project that will make it easier for researchers to find digital research services at the University.

As well as providing new ways to improve the visibility and discoverability of digital research services, the project will also recruit a network of research champions (Research Facilitators and Research Ambassadors based at Colleges) to promote the services across the University and ultimately enable researchers to enhance their research and practice.

We will conduct co-design sessions with service providers, both within ISG and at national level, in developing the mechanism to support researchers. We will also carry out contextual interviews to ensure that what we offer, above all, relies on a deep understanding of researchers' needs and wants.

Dealing with Data

Robin Rice & Kerry Miller

One hundred researchers from across the University came together to present work in progress and discuss many tricky issues they face in 'dealing with data' at a Research Data Service-sponsored annual event in November. A theme that emerged from this year's event was around approaches to balancing the drive to make data open with the increasingly restrictive ethical and legal requirements for non-disclosure of personal data from research subjects.

Videos of speakers and links to presentations may be viewed at:

edin.ac/dealing-data-17
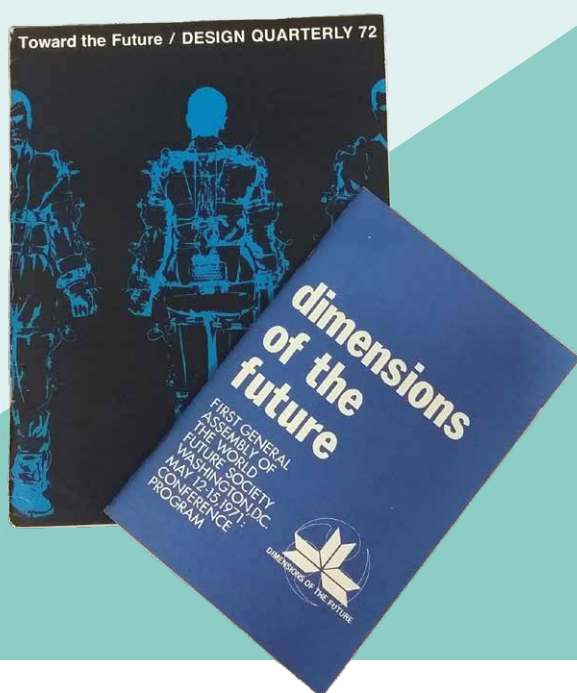
The Future is now …
and then

Rachel Hosker

The University has always had an eye on the future, and we've found evidence from our collections that work was undertaken on Futures research from the 1960s. The Future Studies and the School of Man-made Future were themes championed by Professor Waddington of the Institute of Animal Genetics, someone who saw the implications of technology, science and innovation on both the human population and natural world.

Waddington and colleagues looked at the data that could be amassed and suggested the use of contextual mapping and relevance trees showing different types of person, and the qualities required such as depth of thought, informational retrieval, technological revolution, global society and flexibility.

The relevance and potential of this knowledge within our collections for Futures research is massive. Our teams have been discussing with Future researchers about collections they can examine for trends, thoughts and ideas. Collections content can be viewed as both big data and small data sets to be examined, analysed and manipulated. This allows for understanding transition, technology growth, human behaviour and society.

Re-examining and viewing collections content in a contextual way, rather than purely as historical narrative, provides a rich hunting ground for Future thinking for our researchers and students, detailing trends and providing data and narratives that can only help us understand where we've got to and where we're going to.

You're helping us to
help you

Gavin Anderson & Lauren Tormey

User Services have successfully utilised incident statistics and user testing to drive many service improvements and direct our 'shift-left' agenda to increase levels of self-service.

Our IT Support Desk in the Main Library was introduced last year after analysing our level of engagement with the student community. We've also been collaborating with Website & Communications to continuously improve the quality of support pages on the ISG website through a process of usability testing and content enhancements. This work has included developing a new contact form which encourages users to try to self-serve their issue first and thus reduce the number of support queries fielded by IS Helpline.

Read more on the collaboration:
edin.ac/helpline-ux-collab

Data skills **training**

Kevin Ashley

Potential shortages of those with data skills is a worldwide concern. The Digital Curation Centre has been working with others to better define the problem, describe the skills needed for particular roles and do something to help people acquire and practise those skills. Work has included:

• producing a report for the Wellcome Trust in 2016 on skills development;

• defining data competencies in the European Open Science Cloud (EOSC) Pilot project for people like data stewards and helping people to acquire those skills;

• promoting and developing open research skills where data plays a key role through FOSTER+.

Shaping **VLE Standards**

Ross Ward

The VLE Standards Project aims to review the current use of Blackboard Learn, the University's main virtual learning environment, and develop strategies to ensure greater consistency in its use. In addition to user consultation and usability studies, the Learn Service are reviewing a range of system data that, when broken down by School, helps provide visualisations of how courses are presented. This data will help identify similarities and differences in how courses are currently presented to students, and assist in making recommendations for consistent course approaches at University and School level.

Improving decision making with **Business Intelligence**

Jonathan Tjia

ISG uses comprehensive Business Intelligence (BI) systems to ensure that everyone in the University can efficiently gain access to data, information and insight in order to improve their decision making.

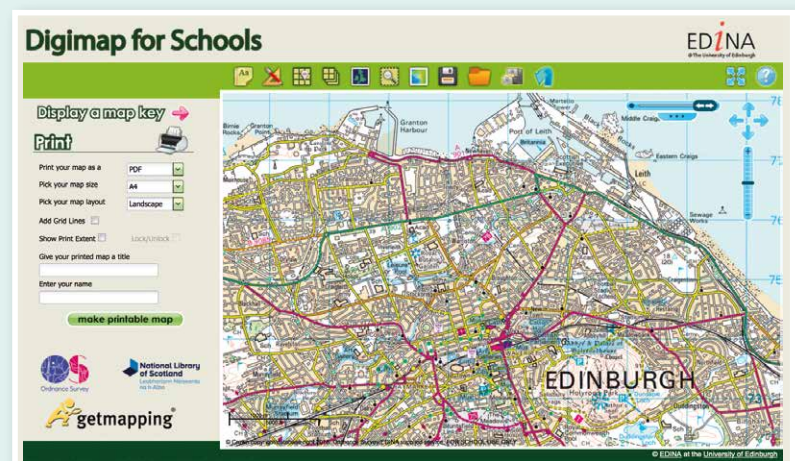There are currently three different programmes optimising the University's BI systems:

- **API Modernisation** – optimises the communications between currently operational IT systems, increasing the University's interdepartmental efficiency.

- **Data Warehouse** – extracts data from the University's array of Business Systems and pools it together into a data warehouse, creating a consistent and secure source for data, usable throughout the institution.

- **Business Intelligence Tools** – designs and assesses the tools used to present BI. It is aimed at creating a supportive environment for these tools to operate in and to assess their efficiency in achieving the University's goals.

These programmes work together to ensure the University can run their data efficiently.

How do students see Learn?

Access Learn by device
Site Traffic 2016/17

86%   **14%**

Use personal laptop / Smartphone for Study in HE
JISC Digital Tracker - 2017

88%   **84%**

85% via MyEd

THE UNIVERSITY of EDINBURGH | Learn

Extended Digimap for **Schools**

Anne Robertson

EDINA is aiming to deliver a new Digiscience collection to the 3,000 primary and secondary schools across Great Britain that currently subscribe to the Digimap for Schools service. Digiscience will include census data and a curriculum-relevant IoT (Internet of Things) module to enable pupils to ask critical questions about the characteristics of their local place in comparison to societal data at a regional and national level. Digiscience is aimed at helping to set the foundations for a data literate society by instilling key data literacy competencies in children. The collection will initially be rolled out to schools in the City Deal region.
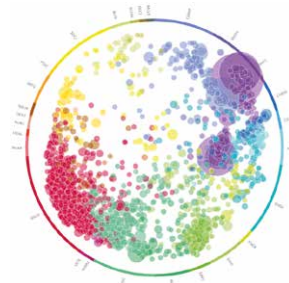
SciVal: analysing research metrics

Theo Andrew

ISG has recently licensed an institutional subscription to SciVal. SciVal is an online tool, which analyses publication metrics, to give an overview of the research performance of our institution. The tool can help you:

- **Benchmark:** Compare your research institution and teams to others based on their publication metrics, and model different test scenarios.

- **Collaborate:** Identify and analyse existing and potential collaboration opportunities and partners. See who others are collaborating with.

- **Spot trends:** Analyse research areas to find top performing universities, authors and journals. Identify growing and declining topics in the field.

Check out our SciVal getting started guide: **edin.ac/scival**

This particular Wheel of Science produced by SciVal gives an overview of the research output of the University. The rim of the Wheel shows subject classification, and the colour represents the dominant journal category. Each circle represents a Topic, while the size correlates with number of publications. The more central the placement of the Topic, the more interdisciplinary it is.

Using click analysis to optimise the University homepage design

Nick Daniels

Where do people click on the University homepage? Website & Communications recently produced a report looking at click-tracking data gathered since 2010. The findings, which were fed through to Communications and Marketing, help us understand what people want to do when they arrive at the University website.

Read about the findings on the Website Programme blog:

edin.ac/homepage-clicks

> ### Niall Bradley, Head of Marketing
>
> Click analysis has been really helpful over the years, informing decisions on the evolution of the homepage. This latest insight feeds into upcoming changes.

Heatmaps have shown that news items have always received relatively few clicks. This finding informed the space dedicated to news when the homepage design changed in April 2016.

Software Development Community of Practice update

Iain Fiddes & Marissa Warner-Wu

Over the past year, ISG has run events specifically aimed at the Front-End Development Community including:

- talks from leaders in the software development industry
- community lightning talks
- accessibility and creative workshops

We've had an impressive total of 354 attendees. One of our goals this year is to expand the core group to include students and share vocational and realistic insights with them of what the professional software development industry is like. This is on top of creating workshops, learning opportunities and collaborative work for the community.
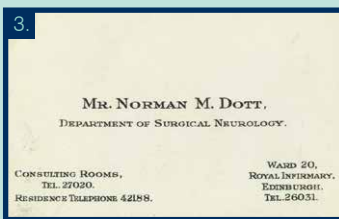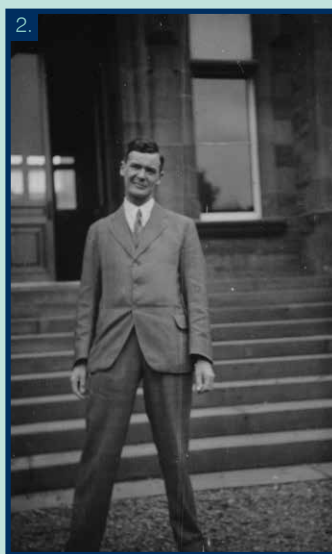
blog.swdev.ed.ac.uk

Cracking the
Case Note Conundrum

Louise Williams

Last July, Lothian Health Services Archive (LHSA) celebrated the launch of the public catalogue to their unrivalled collections of cases from Edinburgh neurosurgical pioneer Norman Dott (1897-1973). Delivered through Collections.ed, the catalogue is the culmination of a Wellcome Trust-funded project to describe archival case notes through XML in a way never attempted before in UK archives. Researchers often overlook case notes: their technical language is difficult, they are often confidential and individual collections can be huge. LHSA's catalogue is an innovative 'way in' to these documents as research resources, describing each case without compromising patient anonymity.

The catalogue represents a real joint effort, combining work from LHSA, the Centre for Research Collections and Library Digital Development. This close partnership was further evidenced at the launch event, where potential researchers mixed with University staff, fellow archive professionals and even Dott's descendants, learning more about the surgeon's remarkable achievements, testing the catalogue and competing for brain-themed prizes.

collections.ed.ac.uk/lhsacasenotes

1. An early angiogram from the case notes showing blood vessels in the brain (c.1930s)
2. Norman Dott on the steps of the Royal Infirmary of Edinburgh (1937)
3. Norman Dott's business card – case notes are not just medical!

Information
Security Policy refresh

David McClelland

ISG is introducing a number of enhancements over the coming months to help improve our security and protect our people and data. Part of this includes a refresh of the University's Information Security Policy to better reflect the external issues we face. It introduces a multi-tier governance framework that includes the new policy, together with supporting standards and procedures. The policy applies to everyone in the University who accesses University information assets or technology.

edin.ac/infosec-policy

Data-driven
decision steps

Dominique Green

The PlayFair Steps initiative began with an initial data-gathering task. More than 300 ISG staff responded to our Gender Equality Survey. The results provided the ISG Senior Management Team with key data to promote equality and diversity in the workplace going forward. The data also helped us to deliver the Gender Equality Plan, set SMART targets, manage our communication strategies, gather evidence of progress and explore new ideas.

Our focus on data-driven decision making has led to important policy changes being implemented within ISG. We've implemented a policy requiring all staff involved in recruitment to participate in unconscious bias and diversity in the workplace training. We set a short-term goal for 25% of staff in ISG to participate in Equality and Diversity training. Between October 2016 and February 2017, we surpassed this with 44.5% of staff in ISG having participated.

The success of the PlayFair Steps depends on the involvement of everyone. Basing our decisions on data, we have a unique opportunity to implement policies that will support and benefit all staff. This, in turn, allows us to have the most inclusive workplace we possibly can.

Featured thesis

Gavin Willshaw

This edition's featured thesis is by Benjamin Rush, one of the US Founding Fathers and signatory to the Declaration of Independence. Rush (1745-1813) was a physician, politician and close friend of Benjamin Franklin. He obtained his medical thesis from Edinburgh in 1768 before becoming heavily involved in the independence movement. Later in his life, he wrote extensively on mental disorder, becoming one of the most influential names in American psychiatry.

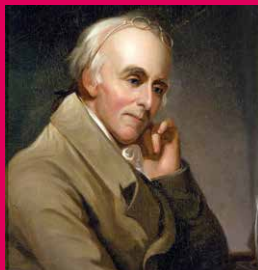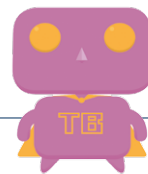Read his thesis 'De coctione ciborum in ventriculo' at: **edin.ac/rush-thesis**

Image: 'Benjamin Rush' by Charles Willson Peale – Independence National Historical Park, Public Domain: **commons.wikimedia. org/w/index.php? curid=433622**

Modern **Apprentice**

Fran Baseby

> **My favourite part of working here is doing research enquiries. I'm endlessly surprised by the range of items we have in our collections, and I love doing 'detective work' to fulfill a request.**

In 2017, the Centre for Research Collections welcomed Caspian Reid, ISG's first Modern Apprentice. The apprenticeship programme is a key element of the University's Youth and Student Employment Strategy. Caspian is employed full-time for one year while working towards a SCQF level 6 qualification in Customer Service. He is an integral member of the CRC User Services team, and recently arranged an event for LGBT History Month. The event highlighted LGBT stories in the collections, including material relating to W.H. Auden and Christopher Isherwood, Dr James Barry and the archive of the Take Care campaign (1968-2000), aimed at raising awareness of HIV and AIDS in Edinburgh and the Lothians.

Bits about bots

Stratos Filalithis

There are a number of ISG projects focused on using chatbots and AI technologies to improve the distance learning experience, automate administrative processes and provide 24/7 user support. To learn more about the projects we're working on, contact:

stratos.filalithis@ed.ac.uk

Healthy Working Lives

Kathryn Mackay

Callum Kerr's winning photo

The winners of our annual ISG Photography competition were announced in December. Congratulations to the winners Callum Kerr and Anthony Hawkes and to the runners up Norman Rodger and Karen Stirling.

On 'Blue Monday', 15 January, which is claimed to be the most depressing day of the year, the Healthy Working Lives committee decided to bring a bit of colour to Argyle House. With the help of the knitting group and members of the Healthy Working Lives group, we made and set up pompoms to 'yarn storm' the staff common area. We also had a guess-the-weight competition with a unicorn cake donated by Calum Robertson. All money raised in this competition went to Mind, a charity that supports people experiencing mental health problems.

60 seconds with **David Fergusson**

Head of Research Services

"

The University takes the role of data guardian very seriously.

Tell us about your position.

I am the Head of Research Services in IT Infrastructure Directorate. We aim to facilitate the work of researchers by ensuring they have access to the best computational and storage resources. We manage Eddie 3, one of the largest high-performance computer clusters available in the UK. We also manage seven petabytes of data storage and support desktop drives. Last year we launched Eleanor, a private Research Cloud, to help researchers carrying out computational and digital research.

What are the challenges of your job?

One challenge at Research Services is to keep up with technological change; another is to understand the needs of researchers to support their research effectively. We help researchers to understand the value of their own data, showing them that it is worth investing in protecting.

What do you find most exciting about it?

I enjoy experimenting with technology, but what I find most gratifying about my job is supporting world-class research. I started my career as a biomedical researcher and I moved into computing provision, as it became more central to that domain, to provide researchers with the best resources available.

Why is it important for the University to have the Data Safe Haven (DSH)? How safe is it?

The DSH will be crucial to the safe storage and handling of sensitive data. The University not only stores data belonging to students and researchers, but also sensitive data from institutions like the NHS and industrial partners. We take the role of data guardian very seriously, and the DSH will allow our institution to better comply with the statutory requirements for Data Protection. Having a safe storage space for sensitive data will allow researchers to prove that data is protected and thereby secure more funding.

The DSH will provide storage space that is appropriate for different kinds of data. Thanks to micro-segmentation, every system on the DSH is isolated from the others and can be customised. We are going live with initial projects and expect to expand the range of projects over the summer.

The DSH is very safe. It has its own firewall and is isolated from the University network. It is located in a secure facility with controlled access.

Tell us about your professional background.

I have a PhD in Biochemistry/Ecotoxicology and a Master's in IT. I worked at the Moredun Research Institute, the Beatson Cancer Research Centre and the Wellcome Unit for Molecular Parasitology in Glasgow. After working at a spin-out Bioinformatics company at the University's Easter Bush Campus, I became Deputy Director at the National eScience Centre at the University, working in part to help manage the global Large Hadron Collider computational provision. I founded and run my own cloud consultancy firm and worked setting up the Francis Crick Institute as Head of Scientific Computing.

What do you like to do outside work?

I love spending time with my two sons. My strong interest in nature and for understanding natural environments has made me passionate about bird watching, nature photography and fly-fishing.

The Basic Material Is Not The Word But The Letter

Liv Laumenech

To coincide with the 50th anniversary of the Main Library at George Square, artist Nathan Coley has created a new site-specific sculpture for the building, named *The Basic Material Is Not The Word But The Letter*. The phrase was found in the Archives at the Centre for Research Collections, where Coley conducted research for the sculpture. The exact meaning of the phrase, and therefore the artwork itself, is open to the interpretation of those viewing it. Sited within the Main Library foyer, the work clearly resonates with the function of the building, but is this a celebration or an interrogation?

Nathan Coley is based in Glasgow and was nominated for the Turner Prize in 2007. His work has been exhibited all over the world and is represented in numerous public and private collections.

Photos by Digital Imaging Unit © Studio Nathan Coley

Festival of Creative Learning
The Siege of InfoSec

David Creighton-Offord

As part of the Festival of Creative Learning 2018, the Information Security team trialled a different approach to teaching security awareness. Through the use of tabletop wargaming concepts and medieval castle design, we illustrated security concepts such as defence in depth, vulnerability patching and anti-virus signatures.

Over the course of the workshop, participants designed castles, explored their nation state's 'Data Wealth' in terms of what data they held, what data was held about them and where it sat. They also learned about the threat actors that would compromise that and the tools they use.

The event proved to be a great proof of concept for more playful and interactive security awareness sessions going forward.