

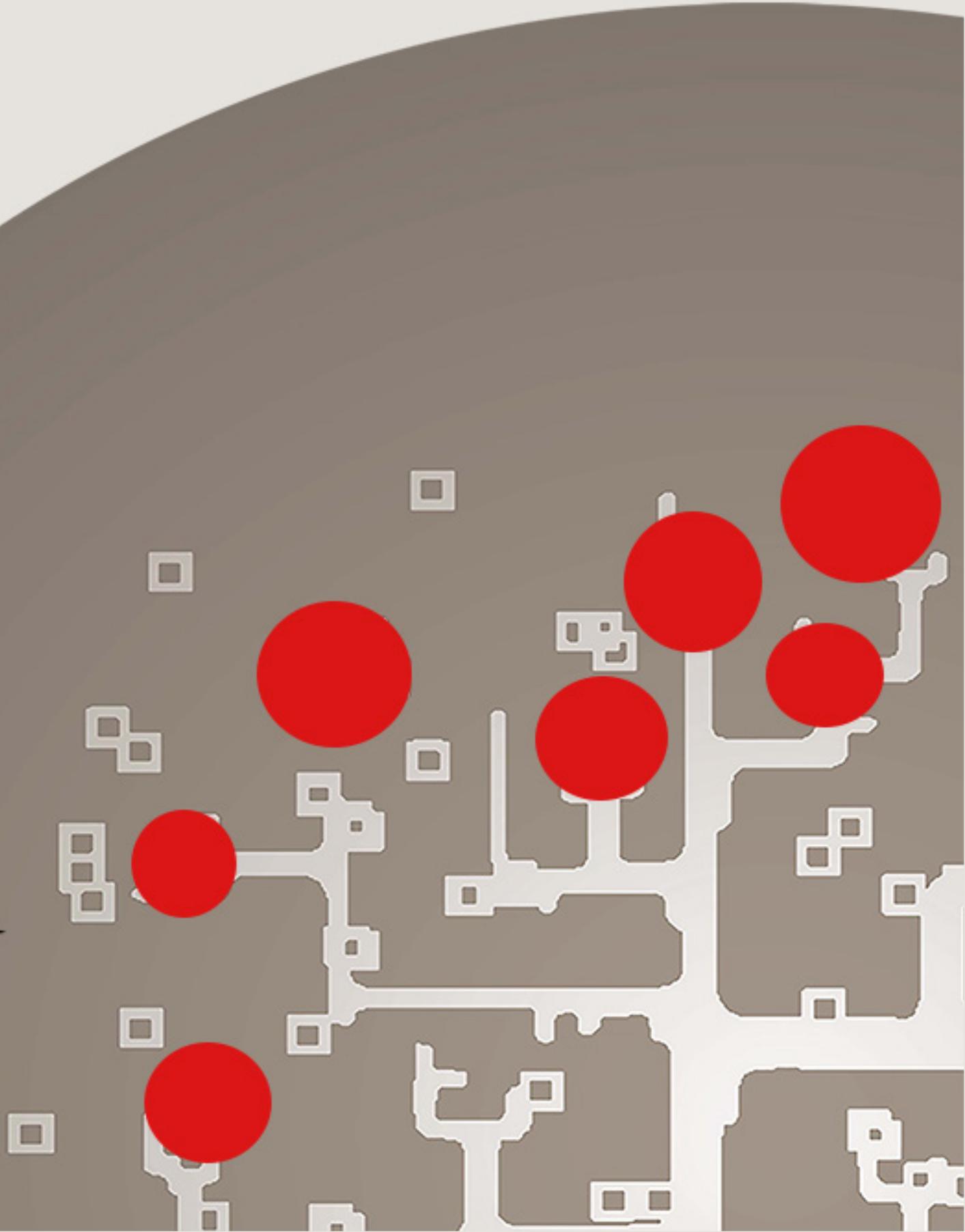
wired@IT

Delivering the IT Promise



NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

MAY 2016 Edition





Preface

Prof. Frickie van Niekerk

The NWU Internal Success Model aims at positioning IT@ NWU as strategic differentiator

Strategy

04

The 7 Success Factors

eResearch

06

BIG Data and Internet of Things

08

Africa Research Cloud

Learning & Teaching

10

Bilingual Lecture Capture

12

Apereo: Technology Trends

Contact us

Website

<http://www.nwu.ac.za/ithome>

Feedback

Talk2IT@nwu.ac.za

Projects

14

Amicell Bulk Sms System

16

DevMAN Fundraising solution

18

Locky Virus: All you need to know

20

Newly developed software, benefit students

22

Phishing: don't get hooked

24

Wifi: How much do you know?

Social

30

Personalia

32

Our New Look

Services

26

IT Support Model

28

Collaborative success: IT and UODL

Best-in-class Information and Communications Technology: enabling seamless, virtual, open and integrated teaching and learning capability and experience, as well as research delivery and communication, access to rich data sets, reliability and availability exceeding world-class benchmarks, architecture supporting multi-campus real-time teaching, bespoke and integrated systems and solutions at discipline level, optimum level of standardisation, at the edge of new developments and breakthroughs, cost effective and efficient systems (equipment, networks, solutions), strategic advantage and transactional excellence, best and balanced use of all media, speed and integration focus, user-focus i.e. user-friendly interfaces and user-competence developed, leveraged to reduce support service transaction cost (incl.

optimally paperless) whilst improving service quality to staff and students including response and turnaround times, user satisfaction index. ICT measurement to foregoing criteria >80% The competitive strategy of the NWU will be to further strengthen and/or develop e-learning (i.e. technology-supported multi-modal teaching and learning), e-research, and e-business as IT market differentiators. eResearch can be defined as "computationally intensive, large-scale, networked and collaborative forms of research and scholarship across all disciplines, including all of the natural and physical sciences, related applied and technological disciplines, bio-medicine, social science and the digital humanities" [1] and has become

a critical activity for research-focused institutions. It enables transformation and innovation across the complete range of research disciplines. The most fundamental aspect of eResearch that should be broadly adopted and understood, is the fact that it not only includes the IT department of a university, but rather refers to a strong and functional partnership between IT, Library Services, the Research Support Office, as well as researchers across all faculties. Successful imple-

mentation of an eResearch strategy at the NWU relies heavily on development and expansion of such a partnership as well as partnerships with other national and international research and industry entities. Successful implementation of an eResearch strategy will ultimately accelerate research outcomes and impact at the NWU. At NWU we are proud of our IT team. The team is recognised in the sector and beyond. IT@NWU strongly believes in partnerships with internal and external role players to unlock the full potential of IT for NWU to achieve its lofty goals.

THE 7 SUCCESS FACTORS

of the IT Strategy

As a modern university, we do a lot of complex things. And almost everything we do is becoming increasingly dependent on IT - placing IT right in the middle of all our activities. While this puts tremendous pressure on our extremely limited IT resources, it also uniquely positions IT to contribute tremendous value to our success. Or, as we state in our success model, to apply IT as a strategic differentiator.

But IT can't make much of a difference by delivering low-value support services from a distance. We need real-ly close involvement. And because we don't have unlimited resources at our disposal, we have to choose carefully where we make our IT investments. And, if that's not enough, we also have to be flexible enough to adapt to the changes that

are rapidly reshaping our world - not only limited to technology. This is exactly what we are trying to accomplish with this strategy.

By positioning IT close to our core activities, and cultivating strategic relationships towards shared understanding, we aim to not only remove the existing barriers towards value creation, but also ensure that we invest our resources where it will really make a difference.

CONTINUOUS IMPROVEMENT

Continuously improve the current IT services to ensure higher availability and reliability thereby increasing productivity and user satisfaction.

SUPPORT MODEL

Improve the IT support model to provide differentiated support and enabling self-support while facilitating freedom of choice. Strive towards operational excellence.

CYBER INFRASTRUCTURE

Improve the provisioning of ample and appropriate computing capacity storage for large data, broad and ubiquitous connectivity, and specialised and IT-integrated capturing and analytical instruments.

STAKEHOLDER ENGAGEMENT

Engage with different stakeholder groups, building mutual trust and understanding to ultimately become strategic partners. Openness and transparency will be key in this strategy.

LEARNING & TEACHING

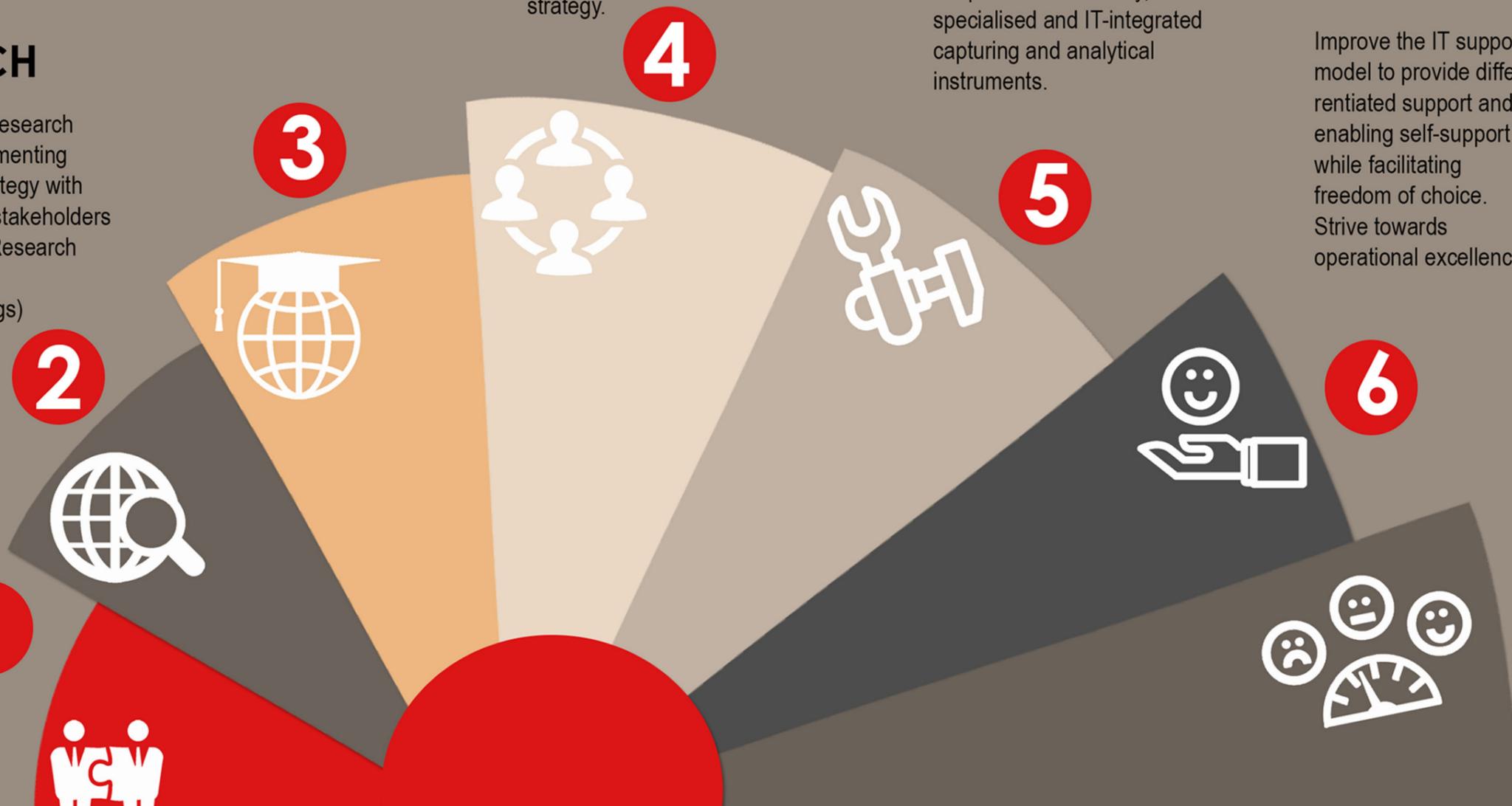
Position IT as a key enabler with the operationalisation of the University's Learning and Teaching Strategy.

RESEARCH

Add real value to research activities by implementing an eResearch strategy with all the necessary stakeholders (Research DVC, Research Office, IT, Library, Research groupings)

STAFFING

Implement an agile staffing strategy that will improve the IT value proposition (aligned to the NWU success model) and have a balanced approach to the core activities of the University.



African Research Cloud

COLLABORATIVE RESEARCH

To rise to the challenges of the new big data era, the research community must develop new infrastructure, tools and approaches that enable collaborative research among distributed teams around an ecosystem of big data. The ARC will be the solution for a network of South African, African and very likely non-African researchers.

The ARC will allow researchers in Africa and their collaborators to access research data storage and compute facilities from anywhere in the world, while ensuring the data lives in Africa and remains the intellectual property of scientists on the continent. It will combine distributed data storage, compute resources, other cyber infrastructure, and skills development among the partners into a seamless research and development platform.



DISTRIBUTIVE DATA STORAGE

The ARC combines distributed data storage, computing resources and other cyber infrastructure and skills development into a network platform for different research disciplines like Digital Humanities, Bio-informatics, and Data-intensive Radio Astronomy.



BIG DATA

PROVIDING RESOURCES

To address this challenge the North-West University (NWU) and the University of Cape Town (UCT) recently signed a Memorandum of Understanding (MoU) that will support researchers through the Africa Research Cloud (ARC). The MoU commits the NWU and UCT to co-operating and providing the necessary resources for the design, build, maintenance and support of the ARC, which is based on the Openstack and Ubuntu free and open-source software platforms for cloud computing.



COMPUTE AND STORAGE FACILITIES

The project reached a very important milestone a week or so ago when the two nodes (UCT and NWU) were "connected". This means that NWU researchers can use the compute and storage facilities at UCT and or NWU from their desktop through the ARC. Unfortunately the service is not available for everyone to access at this moment, but there are two Proof of Concept projects approved. One of these projects is a NWU-Genomics project, where we are going to utilise compute power on the ARC and the other one is a UCT-SKA project.



Designed by Freepik

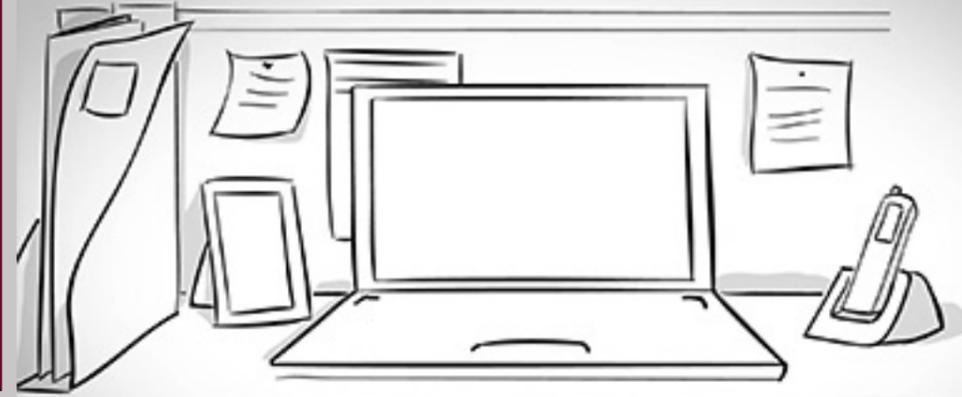
NWU THE PIONEERS

The NWU was the first University, nationally and internationally, to address bilingualism with regards to lecture capturing. We proved that the concept could work by implementing it successfully during production. Universities from Germany were eager to find out how this concept worked as they clearly wanted to follow suit.

SUCCESSES SO FAR

41 more videos were recorded in the first semester of 2016 than in the second semester of 2015, showing an increase of 30%. We successfully addressed the bandwidth issue in order to meet the expectations and deliver on our IT promise.

Bilingual lecture capture a global first for NWU



BEST PRACTICES

As with any technology, there are limitations. We try to motivate lecturers to make use of:

- PowerPoint slideshows and a document camera. Any writing on the whiteboard appears very small. The document camera is helpful for its zooming capability.
- Please use a lapel microphone and ensure that the batteries are charged. While sound without visuals may still be useful, the videos will be useless without the audio.
- Adobe Connect and Skype can also be utilised in conjunction.

If all of the above mentioned are borne in mind and adhered to, the available features should be sufficient to allow for the successful compilation of a video.

REVEALING THE BENEFITS

The biggest advantage at this stage is that students have a tool with which to enhance their overall academic preparation. In other words, it supplies them with the means to better understand the course content; accessibility is significantly improved and it is possible to recap whatever was missed in class. Not all students are able to effectively listen and write simultaneously during a class. These students will now have peace of mind knowing they may revisit a particular class.

WHAT ABOUT POST GRADUATES?

Part-time postgraduate students will benefit most from the system. They will have the same experience as students who were able to attend the class. Lecturers will save time, as the same information won't have to be repeated in numerous sessions.

1

TRADITIONAL WAY OF STUDYING



2

RECORDING LIVE CLASSES

BEFORE USING THE SYSTEM...

- Visit the IT Service Catalogue or, alternatively, use this link <http://www.nwu.ac.za/it/sc/lecture-capturing>
- The availability of interpreting will have to be verified with IT
- The only prerequisite is a classrooms equipped with the necessary functions
- After all of the above have been confirmed, the session can be scheduled via eFundi.

3

MAY WATCH A LECTURE REPEATEDLY



AVAILABLE TRAINING

Training and information sessions are currently delivered on demand.

How to request this service:

The Lecture Capture tool is available in eFundi. It must be selected by the creator of the eFundi page

How to report a problem with the service:

Log a [ticket](#) or contact your [IT Service Desk](#) at your various campuses

WHAT DOES APEREO DO?

(for our software communities and our communities of interest)

- Licensing and Management of intellectual property (the most important aspect they focus on)
- Technical and Community infrastructure; events; lists
- Programs; Fellows; Teaching Innovation Awards (we run recognition programs for the many thousands of volunteers, who contribute to our community. That is something we want to see expanded. Example if there is lecturers that does something really powerful in eFundi they can be enrolled there. It will be great to see a winner from South Africa.
- Banking, Accounting, Administration
- Incubation – helping develop new communities (We have an incubation process – Our software does not drop from the sky fully formed... our communities grows our software from essentially being a good idea, to software that is being usable by institutions around the world.
MORE DETAILS ON THEIR WEBSITE

WHY OPEN-SOURCE?

"We are creators and sustainers of Open-Source software. Then years ago... When Higher Education really started to use Open-Source software, a librarian at the University of Michigan – Paul Courant – did some funded work... He interviewed some Higher Education leaders – Mainly in North America – not entirely IT leaders, Institutional leaders also and they pointed out during this conversations – three real reasons why Higher Education began to use Open-Source. The first of those was:

- 1) Suitability – Often Higher Education is presented with Business software that does not really meet the need of Education
- 2) Cost – clearly was an issue. In South Africa the way that the Rand is performing at the moment – cost plays a big part. Especially license costs and software costs. If I can give an example: 42 million dollar to implement a finance system – to give you the ability to administer yourself. This is just an indication.
- 3) Control – there is 2 aspects to this. Open-Software that will allow an Higher Education Institution to control its own destination to a greater extend. That ranged from the fact that Open-Source communities don't drawn from the fact that they drive you down an upgrade path. They don't say we are turning off support for the ver-

sion 3 because we are now on a version 3.5 or 4. Typically there is a longer trail for Open-Source community support. Not the case with commercial proprietary software. Secondly the control of the ability to innovate. There is a relation between Openness and innovation."



We are excited to invite you to 1 of 2 sessions on Technology trends in Teaching and Learning on 11 March 2016:

Session 1: 9:00 - 10:30 : More strategic

Session 2: 11:00 - 12:30 : More technical

Place: Building D1 room 305/ Connect@NWU [click here](#)

They are in South Africa for the Apereo Africa conference on 9 and 10 March, and are only available for a visit on the morning of 11 March.

Charles Severance (involved in IMS Global that sets standards for T&L) and Ian Dolphin (CEO of Apereo foundation), two authorities in the Technology in Teaching and Learning field, are visiting the NWU on Friday 11 March.

NEW ANALYTICS PLATFORM

Our community is developing an Open Learning Analytics Platform. With a series of components that range from – effectively place warehouse analytics data, through to how to process it, how to sur-

face that data in a series of dashboards or applications.

WHY PLATFORM BASED?

"Well if we look at what Commercial-Proprietary vendors are doing at the moment – they will say your student information systems... we've got the answer for learner Analytics, it is a plugin to our student information systems, and this will solve your Learner Analytics problem... It tends to be close and proprietary. The applications owns the data. While Learning Management Systems (LMS) for (example such as eFundi) don't "own" the data."

NOT BUILDING A SUITE

"We are not building a suite..."

The connections between our software are really about the Institutions that use our software – banding together with others – to help make those connections. That's why it is great to see projects like the Mobile Application (eFundi Moove) in South Africa. Where Institutions are collaborating to meet specific needs... That's the why that we will build connections between our software not according to a grand plan..."

The Apereo Foundation, a non-profit organization which sponsors a range of open source projects such as **Sakai (known on our 3 campuses as eFundi)**

The Apereo Foundation was formed by the merger of Jasig and the Sakai Foundation in late December 2012.

Sakai and Jasig had pioneered the production and adoption of open source software for higher education for over ten years. Apereo will take that work further, providing a more rational and improved organizational umbrella for a range of projects and software communities serving higher education. The core mission of the Foundation is to "assist and facilitate educational organizations which collaborate to foster, develop, and sustain open technologies and innovation to support learning, teaching, and research." Learn more at www.apereo.org.

AmiCell our New SMS system

THE SMS IMPI SERVICE EXPIRED ON 30 APRIL 2016

WHAT ARE WE USING NOW?
"AMICELL IS THE NEW PRODUCT THAT CAN BE USED FOR SENDING BULK SMS'S."

HOW TO REQUEST THE SERVICES?
FOLLOW THE STEPS IN THE AMICELL PROCEDURE.

HOW MUCH DOES IT COST?
SMS IMPI 40c;
AMICELL 24c FOR EACH SMS SENT.



HOW TO REPORT A PROBLEM?
CONTACT AMICELL AS INDICATED IN THE EMAIL RECEIVED FROM AMICELL.

AVAILABLE ONLY TO STAFF

DEVMAN™ - IT@NWU'S SOLUTION FOR FUNDRAISERS

Non-profits and tertiary institutions rely heavily on fundraising for their sustainability. DevMan supports your mission by accommodating your specific requirements and centralising your grant making and donor management activities.

With an easy-to-use interface and all your information interlinked and recorded and in one place you can use the financials, key relationships and group affiliations for future decision making, growing your information into knowledge for increased income generation. [read more](#)

BENEFITS

According to me. Celeste du Preez, marketer/fundraiser/Systemsuser for BEK and the Institutional Advancement:"the system's possibility to eliminate *donor fatigue, pose to be a big advantage." The system contributes to:

- beter financial reporting
- unifying the work flow on all 3 Campuses
- Keep all data in one easy accessible place

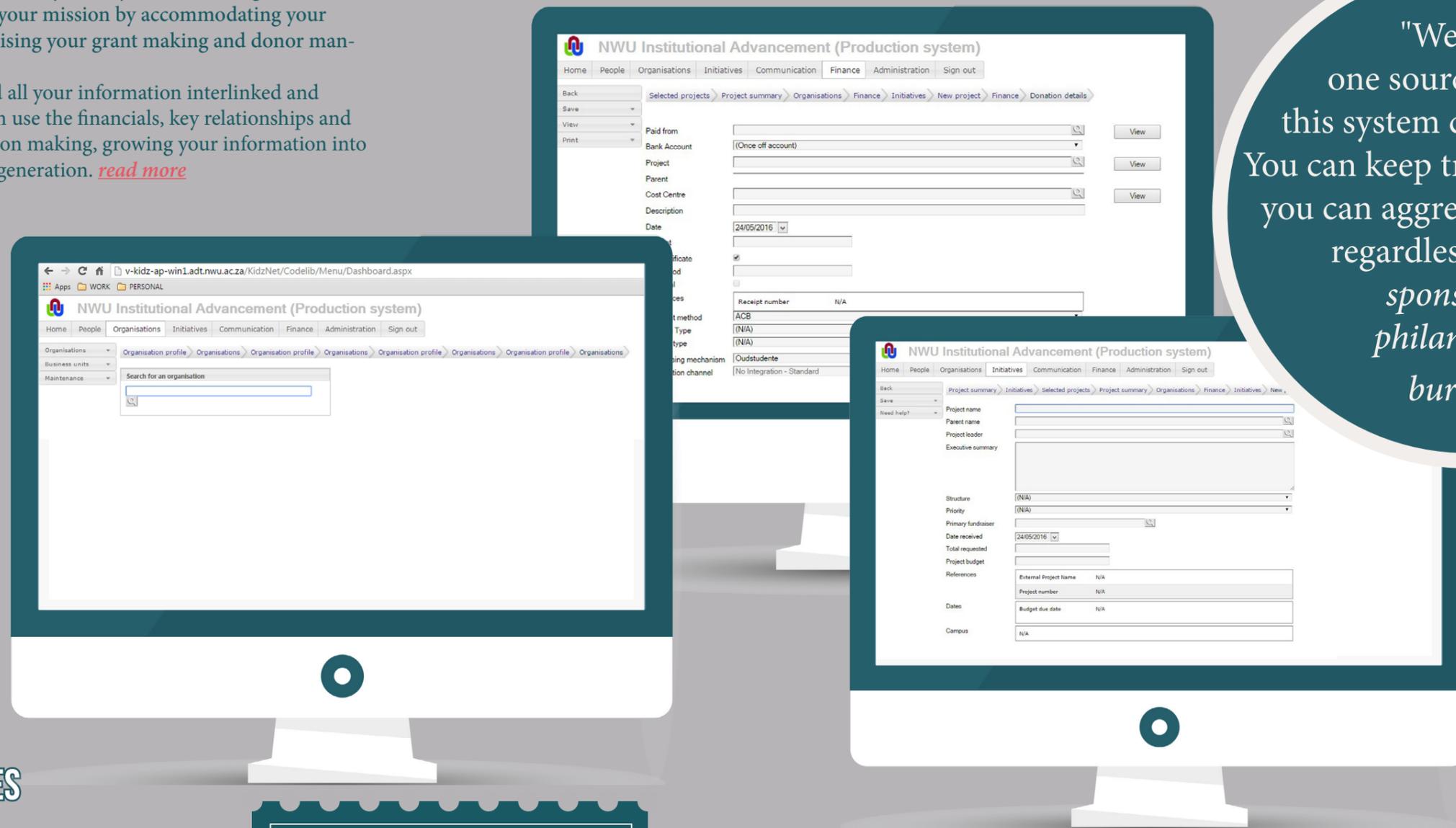
MEASURING SUCCESSES

Celeste conveys that with the system she forsees in the near future, there will be the possibility to see:

- how fundraising had increased
- to see who contacted a donor
- which project was addressed
- the funding amounts

EASE OF USE

"DevMan is a typical Database system. Although you don't need a degree to operate it" Celeste says, you will definitely need training.



"We need one source of truth, this system can provide it! You can keep track of the funds you can aggregate one report regardless the type: sponsorship philanthropic bursary"

HOW TO REQUEST TRAINING

APPLY TO USE SYSTEM
 Me. Celeste Du Preez
 F21, G04
 x992546
 APPLY FOR TRAINING
 Me. Celeste Du Preez
 F21, G04
 x992546
 TRAINING DURATION
 3 hours
 Depending on user needs

WHAT OTHER UNIVERSITIES HAVE TO SAY.... ABOUT DEVMAN [read more](#)

What particularly impresses me is about DevMan is how it continually adapts to changing needs and trends. I keep that it already has everything until the next update provides something new to inspire me. I also have to mention that in the 7 years I have used DevMan the Kidz Africa team has never disappointed me they have consistently proved to be highly skilled, knowledgeable and approachable.

Natasha Lowe - Researcher at University of KwaZulu-Natal.

I can confirm that DevMan is undoubtedly the best local Advancement database. Having worked with the system for over 10 years, I have seen it develop and adapt to suit industry needs and usability requirements. The KidzAfrica team is dedicated to excellent customer service and always available to assist with queries and training when needed. I cannot imagine managing our Advancement Office without DevMan to assist us in keeping track of all alumni and fundraising relationship and financial records.

Linda van Wyk - Deputy Director: Advancement at University of Pretoria

* a lessening of public willingness to respond generously to charitable appeals, resulting from the frequency of such appeals.

THE LOCKY RANSOMWARE VIRUS IS HERE EVERYTHING YOU NEED TO KNOW

LOCKY SPREADS THROUGH SPAM EMAIL ATTACHMENTS!!

NEED MORE HELP
Contact your
IT Service Desk

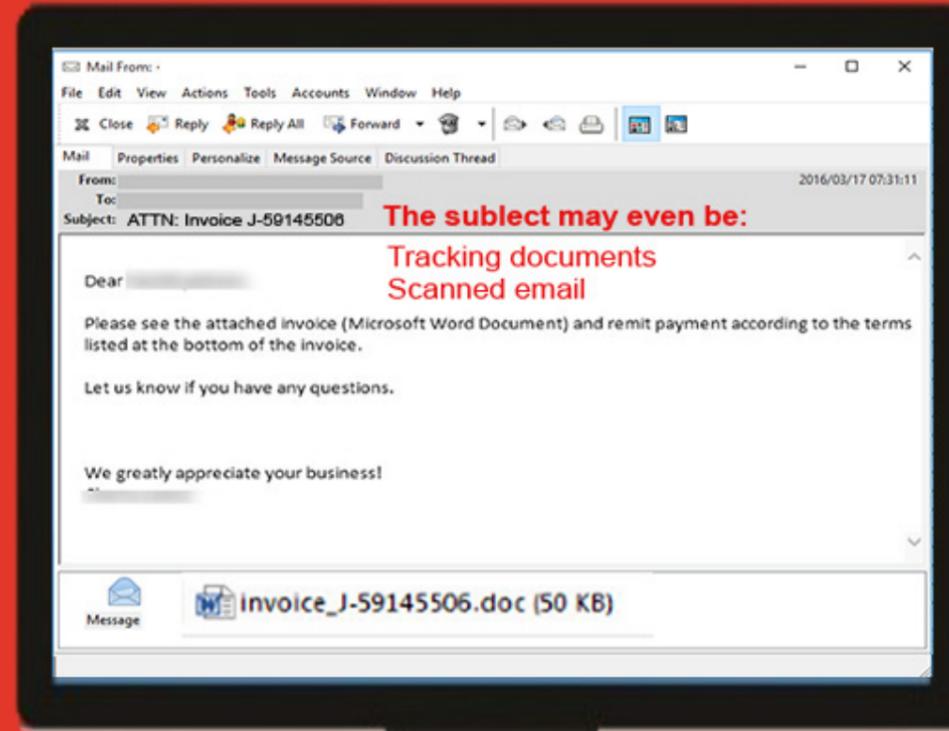
MORE ON LOCKY VIRUS
[The Hacker News](#)
[Techsupport](#)

WHAT IS THE LOCKY VIRUS AND WHAT DOES IT DO?

- It encrypts the file and change the file extension to .Locky – example Report.docx will now be Report.Locky
- They will ask money – example 0.5 Bitcoin to 1 Bitcoin which is equal to (± \$200 to \$400)
- If you have no backup of your data – you might feel to pay – Do not pay the money!
- It even encrypt your network-based backup files. Keep sensitive and important files in a third party storage.
- It encrypts your files on all your DRIVES (not only C) – example USB (flash drives), external drives, P drives, mapped drives and shared drives such as: ONE DRIVE, DROP BOX, GOOGLE DRIVE

PLEASE SEE INFOGRAPHIC FOR MORE DETAIL...

HOW THE LOCKY VIRUS IS SPREAD Email Attachments



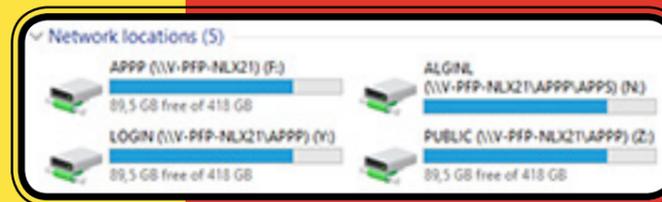
tip

TURN
GROUPWISE

VIEWER
OFF

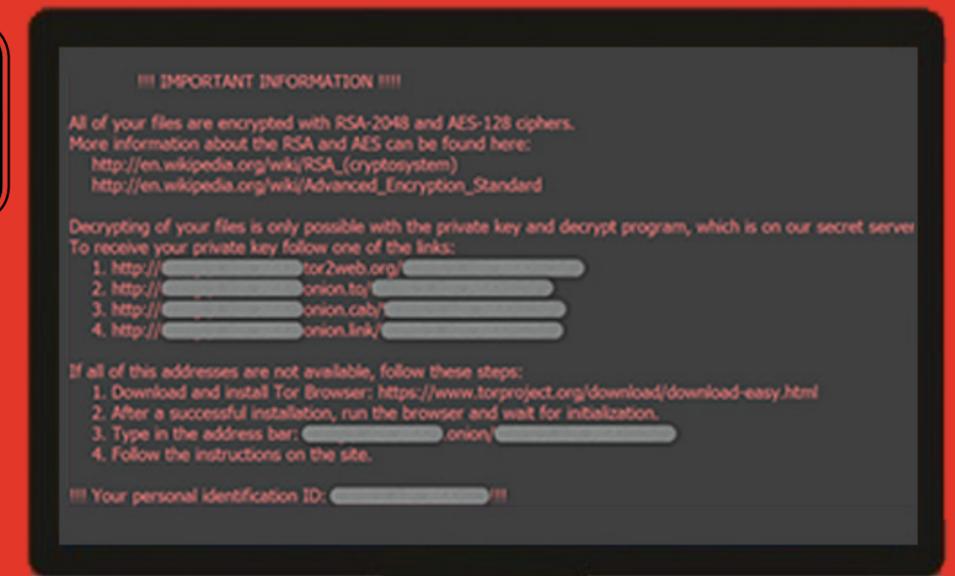
*in Grouppise go to to view,
untick Quick Viewer*

EXAMPLE OF MAPPED DRIVES



HOW DO YOU KNOW THE PC IS INFECTED?

You will have a display message like in this example



A NEW POSSIBILITY TO INCREASE STUDENT THROUGHPUT FIGURES

UPLOAD THE OUTPUT FILE ON EFUNDI AND VOILA!

Dr Tiny du Toit, senior lecturer in Computer Science and Information Systems, created a computer program that provides students as well as lecturers with more insight into the state of their overall marks. The detailed output file is placed on eFundi's Resources, and students can access it whenever they need to. The most recent marks and insights are displayed in every class, allowing students to remain updated on their progress.

“... wondering, isn't there a way to give the students more insight into their marks...”?

BACKGROUND

The system started off as a hobby, but after “7 Years of developing the program... I am still busy tweaking it here and there...” Tiny admits that he is crazy about programming. He always believed that computer technology, if properly utilised, could facilitate the space between lecturers and students.

STUDENT MARKS

“I have been lecturing for quite a while now and every time when you present the students with their results – it's like a sea full of marks...” The students don't always understand the marks presented to them. They try to make sense of it all by:

- 1) checking to see if their marks were correctly entered;
- 2) calculating their averages to see where they stand overall.

CALCULATING MARKS

The trouble is that students are not always aware of the specific weights that the lecturers assign to various marks, so their expectations of participation marks are not necessarily realistic.

HOW THE SYSTEM IS USED?

“During every class session I reveal their marks. These marks include class participation, theory assignments, class tests, the semester test, and practical marks.” The program then extracts the marks from the Excel file, does the calculations, and writes the results back to the Excel file.

“The system helps the lecturer and the students to understand their marks at any given point in time, for instance: the system ranks every student according to his/her marks - it works on the same principle as a ranking list in sport. This ranking allows the students to see how they are performing in comparison with the rest of the class. Thus, if they have written a difficult class test they can see how it has affected their ranking. “I also calculate preliminary participation marks (based on different weight formulas) for every class from the beginning of the semester. The minimum of these participation marks are then revealed to the students. “It becomes clear quite early on in the semester which students are in trouble, and I can then attempt to motivate them to work harder.”



CONFIRMING COMPETITION STIMULATION

Tiny was one of the speakers at the annual Teaching & Learning conference (UOIT) in 2015, and according to him the feedback was very positive. It was mentioned that, from an educational point of view, this ranking list system has the potential to motivate students to perform better from early on in the semester.

INCREASING THROUGHPUT FIGURES

We all know how expensive it is to study. Universities nationwide are struggling with throughput numbers. Only a relatively small number of students complete their studies within the minimum prescribed period.

“I do believe that by using this system one can warn students to pay attention to their progress from early on in the semester. The longer a student waits, the less they can do to improve their situation. I, on the other hand, can motivate them to go for facilitation while there is still time.”

HELPING PARENTS

“This system also helps to keep parents updated. I can show parents where their child ranks on the list, and what his or her class participation mark is. Once parents are aware that this list is displayed in every class session, they realise that the students are fully aware of their academic status. So – not only does this program keep the student well informed, it also limits the possibility of blame shifting.”

GUARANTEED ANONYMITY

No student names or numbers are revealed. So how do they know what their marks are? “Well, students choose their own aliases or pseudonyms. The only way that somebody else in class will know what your alias is, is if you reveal it yourself.”

COMMERCIALISING THE PROGRAM

Tiny's great dream is to commercialise the program. The plan was to apply for Scholarship of Teaching and Learning (SoTL) funding this year, but the application was not ready in time.

The system was developed in Python, a language Tiny favours. If he decides to commercialise the system, he has two priorities:

- 1) Creating a graphical user interface (GUI);
- 2) Developing and providing training.

The GUI will make the system much more user-friendly. The training is necessary as the user will need some background information before diving into the system. The system is very stable at the moment. As soon as it becomes commercial, the hard work will begin to maintain it.

Don't let **PHISHING EMAILS** hook your **EMPLOYEES**

Employees who click on phishing emails could introduce malware to your organisation network.

WHAT IS PHISHING? (phish•ing/fishing/noun)
A hacker sends thousands of fraudulent emails, hoping a few will click on attached links, documents, or pictures.

WHAT IS MALWARE? Any software that tries to gather your sensitive data or maliciously gain network access.

MALWARE CAN BE FOUND IN:
Attachments/links: Innocent-looking attachments or hyperlinks that, if clicked, download an executable malware file.
Fake webpages: Links direct to a fake web form (such as a bank login) that looks legitimate, but steals entered information.

HOW TO SPOT A PHISHER

FISHY EMAIL DOMAIN
JESSICA.WHITE@
COSTCO122.COM

CLASHING URLS

REQUESTS SENSITIVE INFO
WE NEED YOUR
BANK ACCOUNT INFO!

GRAMMAR MISTAKES
PLEASE SEND US YOUR
ACCOUNT INFORMATTION

UNSECURE LINKS
DIFFERENT LINKS
WHEN HOVERING

DESIGN MISTAKES
FAKE LOGO

UNSOLICITED ATTACHMENTS

**PHISHING BEST PRACTICE:
WHEN IN DOUBT,
DON'T CLICK!**

IF YOU RECEIVE A PHISHING EMAIL...



DON'T CLICK
on any links
or pictures.



DON'T OPEN
attachments.



DON'T REPLY
to the sender.



FORWARD
the scam to
spam@uce.gov.



DELETE
the email from
your computer.



HOW MUCH DO YOU KNOW ABOUT WIFI?



Wi-Fi has become an integral part of our increasingly digital lives. Everything from our laptops to our wearable devices require dependable Wi-Fi connections to work. Wi-Fi has become so important that, according to Forbes, it is the primary factor in choosing hotel accommodation when we travel. But sometimes, this easy-to-use technology can cause untold frustration when it doesn't work as expected.

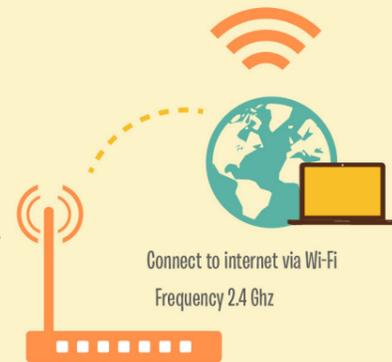


Unable to connect
Intermittent connections
Slow speed
Poor signal

"What actually happens when things go wrong?"

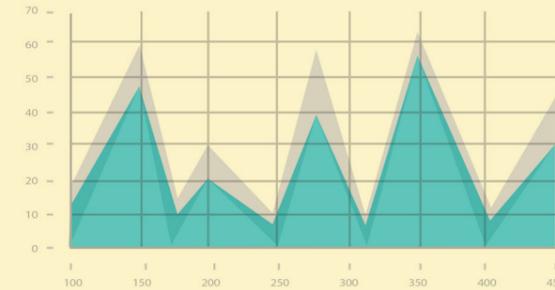
1 INTERFERENCE

Wi-Fi connections can be disrupted or connections slowed by a number of different devices in the same area. Other devices like remote controls, cordless phones, security cameras, and even microwave ovens share the same radio frequency with Wi-Fi, and can cause interference with our Wi-Fi signal that renders it unusable.



2 BANDWIDTH AND RANGE

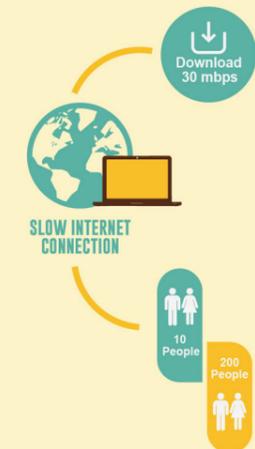
Because Wi-Fi essentially uses radio frequency, the same rules that determine the quality of ordinary radio reception, also applies to Wi-Fi. While



Wi-Fi signals can travel through walls and other obstacles, we shouldn't expect the quality of the signal to remain perfect. The same goes for the distance to the access point - the further we move away from the access point, the weaker the signal will become.

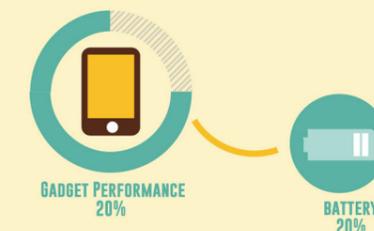
3 NUMBER OF CONNECTED USERS AND DEVICES

Wi-Fi has practical limitations on the number of users that can be serviced by a single access point. This is especially notable in cheaper access points. These access points usually lack the features of enterprise grade equipment, which was especially designed for intensive use. Better quality equipment is not immune to this problem, but they degrade much more gracefully in these situations, with much less notable degradation in performance.



4 BANDWIDTH CAPACITY

Wi-Fi is dependent on the capacity of the infrastructure behind it, as well as the capacity of our devices that connect to it. We can't expect a slow internet connection on the back-end to magically become faster when it passes through a Wi-Fi connection, and neither can we



expect to get the same performance from an entry-level

tablet than we get from a high-end laptop.

IT SUPPORT MODEL

IT ADAPTING AND REINVENTING TO ACCOMMODATE CHANGE

STRICT STANDARDISATION

For many years IT followed a strict standardisation policy, but with end-user devices becoming more personalised (especially in the mobile arena), users are increasingly making decisions based on personalised and custom needs, making strict standardisation impossible.

MORE FLEXIBILITY

The new IT support model abandons strict standardisation and allows for more flexibility and variety, but does have drawbacks in terms of the depth of support that IT can offer for all these various devices.

VARIETY OF DEVICES

In short: IT supports a greater variety of devices but can't maintain the depth of support previously offered when the number of models/devices was more limited.

HARDWARE RECOMMENDATION

- IT recommends that users purchase hardware from a leading brand such as HP, Acer, Dell, etc.
- IT discourages the buying of any hardware in foreign countries, unknown brands, or hardware that does not have a SA vendor support base.
- IT recommends the following specifications per level laptop/pc.
- IT will no longer downgrade the operating system of a laptop/pc. For example, if a laptop is bought with Windows 10, that laptop will not be downgraded to Windows 7.

SOFTWARE RECOMMENDATION

The IT support status regarding the operating system and web browser for each service can be viewed on the service itself (see the [IT Service Catalogue](#)) or on the IT Service [Support Matrix](#). The following statuses are defined:

1 Users have greater choice, but with greater choice come greater user responsibility and implications for choice, e.g., leading-edge or unique device users must anticipate more unresolved problems and will have to wait longer for IT and the industry in general to resolve these problems.

2 As a common basic service, IT endeavours to connect any and all staff and student devices to the NWU-network and Internet. Users should, however, bear in mind that some devices may pose incompatibility issues.

3 In the past IT would replace factory-supplied operating systems (especially on desktop PCs) with custom NWU images to increase supportability. This practice will be stopped and supplier images will be used by default.

1 Not Tested: IT has not tested these software applications, and does not recommend the use of these software applications. IT might only advise on a possible solution.

2 Testing in Progress: IT is currently researching and testing these software applications, but does not recommend the use of these software applications. IT might only advise on a possible solution.

3 Limited Support: IT has not yet tested these software applications fully, but will attempt to solve problems associated with these software applications within time and expertise constraints. Testing newly released or unknown software requires extensive research, and such support calls will not receive high priority. A resolution might not be available soon. Software in this category is recommended by IT.

4 Full Support: IT tested these software applications for use at NWU, and will attempt to solve any problem associated with it.



Only in very rare cases, and in consultation with the user, will factory-installed images be replaced with custom images. NOTE: Provisioning of software for privately owned hardware may be limited. Rules and guidelines Read more on IT@NWU's [rules and guidelines](#).

A BIT OF HISTORY

Students who traditionally participated in paper-based distance learning are now spontaneously starting to submit assignments electronically as well, work-flow systems have to evolve to prevent the necessity to print electronically submitted assignments in order to have it marked by hand. During 2015, the UODL Assignment and Examination Department processed approximately 375 000 paper assignments and examination scripts. These numbers may increase as other faculties at NWU are now joining ODL offerings.

1 INTERNET RELIABILITY

Since no interactive whiteboard lectures can take place if the Internet fails, NWU IT has assisted UODL in providing improved Internet reliability to the ten multimedia venues and monitor facilities at B11a through multi-path provision, including an additional fibre optic link. At forty of the UODL regional centres, NWU IT has already improved Internet provision through installation of advanced remote monitoring and control equipment including alternative connectivity and automatic switch-over to mobile networks in case of primary network failure. Previously installed ADSL lines have been transferred to the Tertiary Education Network (TENET) and WiFi is now available to students at these centres.

2 IMPROVED COMMUNICATION

Improved communication with NWU IT now includes weekly on-site meetings between IT and UODL regarding IT matters, direct inclusion in status reports, network condition updates and closer collaboration around IT Help incident reporting and remedy status tracking. UODL

NWU IT AND UODL'S COLLABORATIVE SUCCESS FACTORS



NWU IT AND THE NWU UNIT FOR OPEN DISTANCE LEARNING (UODL) HAS RECENTLY FOCUSED ON A CLOSER WORKING RELATIONSHIP WITH INCREASED COLLABORATION AND RECIPROCAL COMMUNICATION.

3 now also participates in IT Service Management Meetings.

Collaboration between NWU IT and UODL now focuses on solutions to electronic marking requirements and transfer of multiple choice answer sheet results, work-flow management, electronic on-screen marking of electronically submitted as well as scanned paper submitted assignments and examination scripts. An improved customer relations management system (CRM) is also considered for the UODL telephone and social network student support call centre.

4 DEDICATED ACCESS

NWU IT has provided UODL Operations and Administration staff dedicated access to the virtual learning environment to manage flexible open distance learning services to students, in line with what has been routinely possible in paper-based environments.

5 ADDRESSING PROCESSES

NWU IT and UODL intend to

collaboratively develop all affordances of technologies addressing processes from submitted assignments and completed examination scripts to publication of marks, learning analytics, expediting the enormous process of marking hundreds of thousands of assignment and examination scripts in order that ODL students may enjoy improved learning experiences. To enable ODL students' access to resources, learning activities and improved user experience on mobile devices when not connected to the Internet, NWU IT arranged and

coordinated the development and testing of an application (app) called eFundi MOVE.

UODL BACKGROUND

The NWU UODL, situated in building B11a on the NWU Potchefstroom campus, supports more than 30000 open distance learning students across Southern Africa.

The majority of these students consist of unqualified or under-qualified practicing teachers, improving their qualifications through Open Distance Learning. Many of these students live and

work in deep rural areas in Southern Africa where internet access is limited, computers are not always easily available and students often need support in using information communication technologies (ICTs).

63 REGIONAL TUITON CENTRES

UODL has established sixty three regional tuition centres across all nine provinces of South Africa including four in Namibia. Here students may attend synchronous interactive whiteboard lectures and benefit from access to information and support. Each of these centres has up to four interactive whiteboards to which synchronous computer mediated conferencing lectures are conducted to students, many of which travel great distances to attend and interact with lecturers at Potchefstroom.

UODL OFFERS...

All participants to interactive whiteboard lectures share audio and whiteboard space as if in the same venue, listening to what is being said and watching what is shared electronically or written on the interactive whiteboard. Anyone may ask questions and participate by also writing simultaneously or consecutively on any or all of the interactive whiteboards joined to a session. At the same time, lectures including participation activities are recorded and students may watch or electronically download these lectures afterwards. Participation in open distance learning through UODL is being extended to students of various other NWU faculties and some of these students already participate in interactive whiteboard lectures and other electronic learning activities from their own computers or mobile devices, also using the NWU learning management system, eFundi.

By: Dr. Hennie Esterhuizen



New Positions

1. Mr. Johan Badenhorst
2. Me. Phindile Mathibela
3. Mr. Ashwin Soois
4. Mr. Gerhard Goossen
5. Mr. Ivan Koortzen
6. Mr. Jimmy Venter
7. Mr. Heinrich Knop



Congratulations

Jenny Cloete on the birth of her daughter Lorika Jansen and Thacks Mazibuko

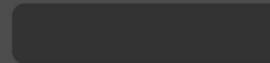


both on the birth of their baby boys



Happy Birthday

to each and everyone who had their birthday during this time!



Long Service Awards

1. Mr. Paul Buys
2. Me. Chrissie Blume
3. Riaan Marx
4. Alvera Visser



IT@NWU Personalia



NEW LOOK

IN SUPPORT OF OUR IT@NWU PROCESSES



The University of the Future will differentiate itself from the others by the innovative use of Information and Communication Technology for all of its activities. At IT@NWU we proud ourselves to follow a well-informed, structured, but agile process to formulate strategy and to plan the project, product and service portfolio.

We acknowledge the fact that there are macro forces that will influence our strategic thinking, for instance the economic changes in higher education since

#FeesMustFall.

We keep abreast of IT trends and practices, acknowledge hype and embrace appropriate new technologies despite budget and staffing constraints.

In formulating our own goals and policies we have to understand national strategies, for instance the goals set out for universities and IT in the government's National Development Plan.

We work closely with IT departments from various other academic institutions in South-Africa and internationally, to keep us connected and up to date with broader developments.

Guided by advisory bodies, internal demand, processes, quality and most recently the success model, we can formulate an aligned mission statement, focus areas and strategies.

Within this broad framework we can set priorities, focuses for a year and plan the projects we need to do. New projects will usually inform new services and could even change the product portfolio.

All of the above is supported by a group of highly motivated people, their skills and approaches.

Delivering the IT Promise