Best practices in the automation and digitisation of academic administration
to reduce face-to-face student services on campuses

The points that will be discussed (aligned with the theme the conference)

- The drive for automation and digitisation

- Understanding 'best practice'

- Automation and digital transformation basics

- Guidelines for the digital transformation of an organization

- Digital transformation and services

- Face-to-face academic services

- Finding the best practices for digitisation and automation

1. The drive for automation and digitisation

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- Where did it all begin?
- The four industrial revolutions, - increased innovations
- For administrative services, the first step was to be paperless.

Going green globally started in 1960

- Less paper in administration
- Less pollution
- Caring about resources that are not renewable (forests)
- Sustainable development

1. The drive for automation and digitisation:

- The NWU started its own efforts around 2013

- The slogan for this project was:
  GO GREEN OR GO HOME!

It was an enormous challenge, to say the least

Because:
- 95% of all processes required paper
- Face-to-face services were long queues and system freezes
- Our response could only be that we should go home
- Of course, it was not an option for any of the staff
- (well, until March of 2020)

1. The drive for automation and digitisation: continued

The 4th Industrial revolution is known for:

- its disruptive technologies
- the challenge for businesses to keep up
- The rise and fall of giants
  - Kodak and Nokia
  - Uber, Airb&b, Apple and Microsoft

- AI, which is growing exponentially with threats such as:
  - o replacing employees at companies
  - o self-learning that may lead to destructive behaviour
- The latest development is creating a storm- ChatGPT

1. The drive for automation and digitisation: continued

I asked Chat-GPT what the role of digital transformation is at universities.

In seconds it gave me this response:

AI Digital transformation can lead to some changes in job roles and responsibilities, but it does not necessarily mean that less staff members will be needed. Instead, it can free up staff members to focus on higher-value tasks that require human skills, such as creative problem-solving, innovation, and critical thinking. Digital transformation can also create new roles and opportunities for staff members who have the skills and knowledge to work with digital technologies, such as data analysts, user experience designers, and cybersecurity experts. Overall, the impact on staffing will depend on the specific digital transformation initiatives that are implemented and the needs of the organization.

2. Understanding 'best practice'

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- Is there a definition for 'best practice' for administrators?

Administrative procedures are defined as:

- Rules that govern the procedures for managing an organization
- Aimed at efficiency, consistency and accountability

(study.com)

'Best practice' is defined as:

Finding and using the best ways of working to achieve your business goals
(https://www.infoentrepreneurs.org/en/guides/best-practice/#1)

For this discussion today the goal is:
Automation and digitisation to reduce face-to-face services

3. Automation and digital transformation basics

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Lessons learnt in our office

- The late Prof Kwadi had a dream, and it came true soon after he took office.

- In 2017 the NWU unitary model was established.

- The central theme was the alignment of programmes, services and resources on all three campuses.

- Our office, the Higher Degrees Administration, was established in 2017 too.

- So, we were to provide aligned services to all M and PhD students.

- The risk and the challenge were:
   The sending of files across campuses (in paper)
            .. It was already a risk to do it on one campus

(Google.com-animation)

3. The basics (continued)

The solution:

We used an electronic filing system, electronic forms, shared drives and strict filing protocols.

The result:

- We were able to work in a paperless environment
- We worked seamlessly across campuses by the end of 2018.
- In 2018 only we were able to meet a 2013 goal to go green.

BUT

By then new goals were on the horizon:

Automation and digitisation were the new buzzwords.

And we were behind again.

3. The basics (continued)

The lesson we learnt while using what we had:
Working paperless and working on electronic platforms
are far from automation and digital transformation.

 In 2021, the NWU embarked on a strategy:
Digital Transformation and a Digital Business Strategy
was developed.

In a short while, NWU replaced:

•   our email system with Outlook,

•   our telephones with Skype for business,

•   and a new student system was procured

These three actions, amongst others, announced DT at the NWU.

(@NWU, 2023)

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3. Basics continued - 'Digitize or drown'
(Schreckling and Steiger, 2017)

- Jeff Bezos, founder of Amazon said:
In today's era of volatility, there is no other way but to re-invent. The only sustainable advantage you can have over others is agility. That's it. Because nothing else is sustainable, everything else you create, somebody else will replicate."

CEO of Twitter, Elon Musk said: Some people don't like change, but you need to embrace change if the alternative is a disaster.

We can take from their comments, it is 'digitize or drown', 'adapt or die'..

3. The basics (continued)

- The new competitive edge for a business is agility.
  (Adapting to a changed environment when it is needed)
- Digital Transformation requires innovation and re-thinking
- Alon Valiskakis coined the term: perpendicular thinking.
- It is looking at a current situation from a fresh perspective

It means turning it upside down if you must
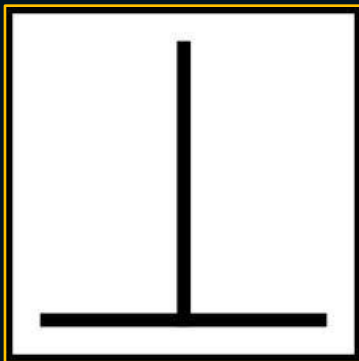
The goal is to be technologically ready, for the new expectations regarding services in a computer-dominated world, when it is needed.
Your experiment: The mirror walk...

(https://www.sarahboxx.com/innovation-the-power-of-perpendicular-thinking/)

4. The guidelines for the digital transformation of an organization

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For administrators, the most relevant digital transformation is:
The student system that we use daily.

There is a list of the top 10 mistakes when acquiring a system
(Ndlovu, NWU, 2021)   Only listing the 6 for this discussion:

1) Not determining the business needs first
   Finding a suitable vendor was a huge project at the NWU that took almost a year

2) Assuming the infrastructure is ready
   Discussions and preparations are made at the NWU daily for readiness

3) Using a subjective evaluation process when selecting a vendor
   Administrative staff participated in identifying the selected vendor

4) Disregarding regulatory requirements
A committee has been established to review our academic rules

5) Skimping on training for users and support staff
Training sessions are already planned in preparation
the go-live date

6) Underestimating the complexities and the needs of the support needed by the Research Environment (Higher Degrees)
(Ilse Botha – on the new system experience)

George Westerman (MIT) said this about Digital Transformation:
"When digital transformation is done right, it's like a caterpillar turning into a butterfly, but when done wrong, all you have is a really fast caterpillar"

5. Digital transformation and services

5. Digital transformation and services:

Understanding the term 'service':

1. A service is intangible - it does not have a physical form

2. It is perishable, it is consumed when it is delivered

3. It is inseparable from the consumer of the service

4. It is variable – not every delivery is the same as the previous one

The common denominator here is the customer experience

5. Digital transformation and services:

It is the variability of services that is important for this discussion

Causes of the variability of services:

- Fatigue of a staff member
- Personality clashes
- Long working hours
- Biological factors
- Psychological factor

(Heksever & Render, 2017)

5. Digital transformation and services:

It is the variability of services that contributed to the need to reduce face-to-face services

The benefit of computerised services are:
- There is no fatigue
- The system can run 24/7
- There is no need for leave or biological breaks
- Computers do belong to labour unions
- It does not respond to emotions
- Superior data storage and extraction of information

5. Digital transformation and services (continued):

The downside of DT

The initial capital to buy the needed technology is huge.
For a big institutions like universities there are more risks:
-Finding the correct processes to give the services
-More expenses to develop and use it for your institution
-Labour intensive initial set-ups and configurations
-Software updates and support needs as result
-By the time you buy a system it is already outdated
-Breakdowns, malware, hacking
-Restricted access and ownership

6. Face-to-face academic services

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Is it all bad?

Huh?

Face-to-face interaction can also be important
Potentially the competitive edge of an organization.

Imagine a world of BOT services, with only automated responses no matter what your request is.

Any experience with such a BOT recently…

Effective, personalized services that are client-centric should not viewed as value adding to your institution.

6. Face-to-face academic services

uh?

Finding a new balance in a digital world:

Face-to-face services can be done via Skype or video call

Meetings can be virtual, reducing costs

Future decisions must include a new balance between digitisation and the customer experience because:

Remember: Bots and computers:
- can not give a smile at a customer
- can not give advice to a student in distress
- do not create a warm and welcoming service

Pre-programmed services alone will never suffice for rendering student type services

We all know by now how creative students are in creating unique scenarios.

7. Finding the best practices for digitisation and automation

7: Finding the best practices for digitisation and automation Huh?

As mentioned before: 'Best practice' is defined as:

Finding and using the best ways of working to achieve your business goals

Goals 6: NWU Strategic Plan 2015-2025

The development and implementation of a digital business strategy to create a competitive advantage for the university and ultimately unlock alternative revenue streams.

(https://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/corporate/2020.Revised-NWU-goals-and-Success-Model.pdf)

7: Finding the best practices for digitisation and automation

Huh?

Ayel Greyevski (2016)
" There is a time and place for each to fit in,
   but it all depends on the proper balance between human intelligence
   and artificial intelligence".

AI generates data using computer algorithms and historical data,
but only a human mind can handle the complex thinking needed
   to navigate complex decisions. "Ingenuity is a uniquely human trait,
   at least for now."

7: Finding the best practices for digitisation and automation

Huh?

Grandy & Morris (2023):

- Functionality is by far the most important of robotic services
- it is the greatest determinant of customer experience
- It can give customers false hope for efficient and error-free performance
- as with any technology, glitches and user errors occurs

The balance to find with human or computerised services are that
It should:
Both should enhance the customer experience
Computers or AI systems should support services by humans

Best practice would be to find a balance, not discard the one for the other

//hbr.org/2023/03/robots-are-changing-the-face-of-customer-servicen frustrate the experience.

Thank you

Huh?