### A Digital Journey Towards a Future-Ready Campus





#### **Quick Facts about NP**

14,800

Full-Time Student Population

3,000

Part-Time Student Population

1,800

Staff Strength

148,000

Alumni Network

44 Full-Time Courses >

90 Part-Time Courses >

9 Academic Schools

1 CET Academy >

100

Student Clubs & Societies >



### 4 PST INITIATIVES

We innovate and serve citizens better

We go digital

We skill up and adapt

We engage citizens better

**Going Digital** 





Principal, Clarence Ti

#### Principal's Message on Transformation

Chances are you woke up to an alarm clock from your phone this morning, the last photo you took was a selfie, and the last song you played was digital. Our private lives are very much in the 21st century. It is time to bring our work life there as well.

Resources are going to be tighter, so we have to work smarter. There is really no other choice since working harder and working longer are both less desirable. The good part about working smarter is that we get to play with new technology and design away some of the most repetitive, mundane and frustrating parts of work.

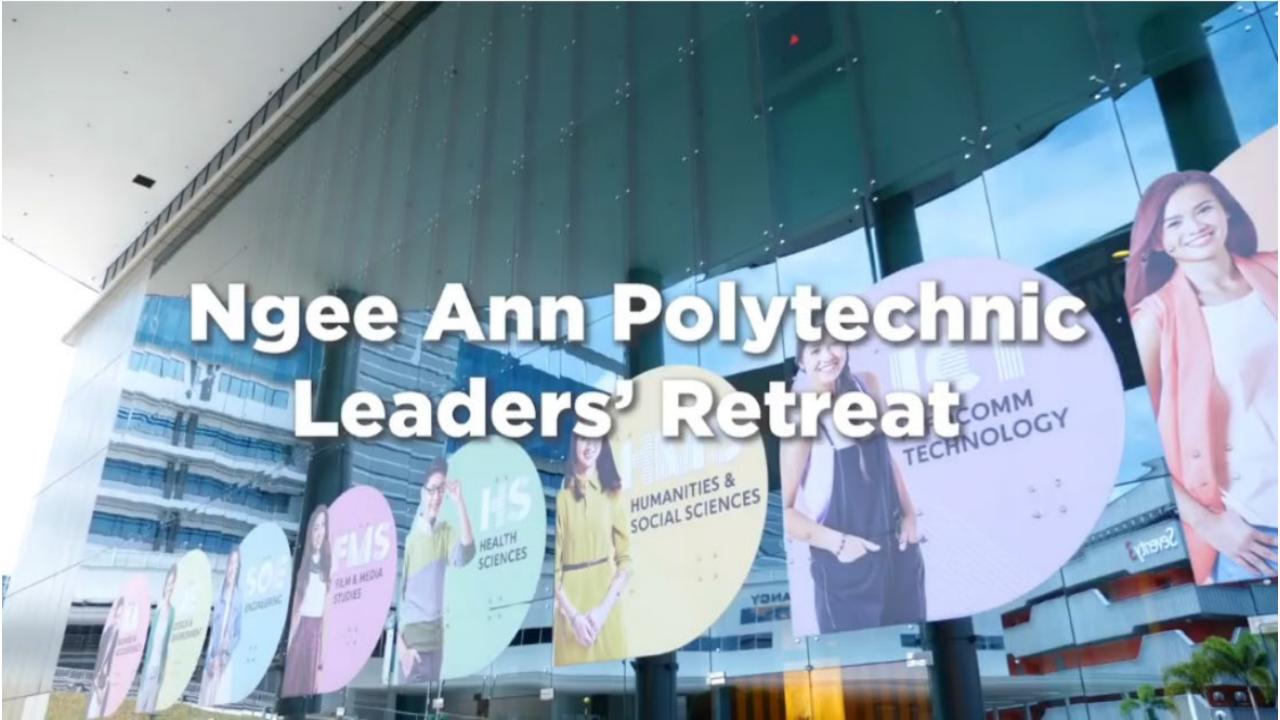
There's really no need to be afraid of transformation. We have been through it all before and thrived. Remember the days of OHPs, transparencies, typewriters and night soil collectors? Adapt quickly, don't be afraid to ask questions and try new things. Learn to be lean, agile and digital.

Building Capabilities for Organisational Transformation





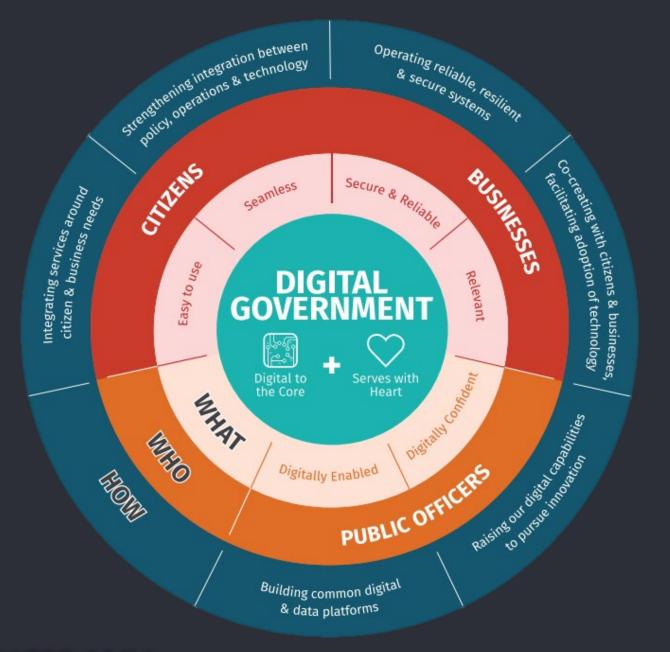




AmbitionFuture Ready CampusAlignmentCulture of CollaborationActionDigitalisation







**Digitalisation** is a key enabler but it is not an end goal in itself.

Being "digital to the core" is about using **data**, connectivity and **computing** decisively to **transform** the way we serve citizens and businesses and

the way we **enable** our public officers to contribute fully to their work.







### Data-empowered Future-ready organization

Every NP process is digital to the core.

Every NP staff is **data-empowered** to leverage on data to **transform** the way we work and serve.





# Lean Core Data Analytics Team

**Drive and facilitate** NP's DA development

In **partnership** with schools, departments and data custodians.





## Lean Core Data Analytics Team

Develop "Citizen Data Scientists" to perform selfservice data analytics (Prepare, Analyse. Distribute).

In every school and department.





### Lean Core Data Analytics Team

Core Data Analytics
Team
Data Stewards

Dept/School
Content Consumers

Dept/School
Content Authors

Dept/School
Content Consumers

Dept/School
Content Authors

Dept/School
Content Consumers

Dept/School
Content Authors

IT Department
Database Administrators
Data Engineers







Plan

Production

Subject Matter
Experts /
Department
Content
Authors

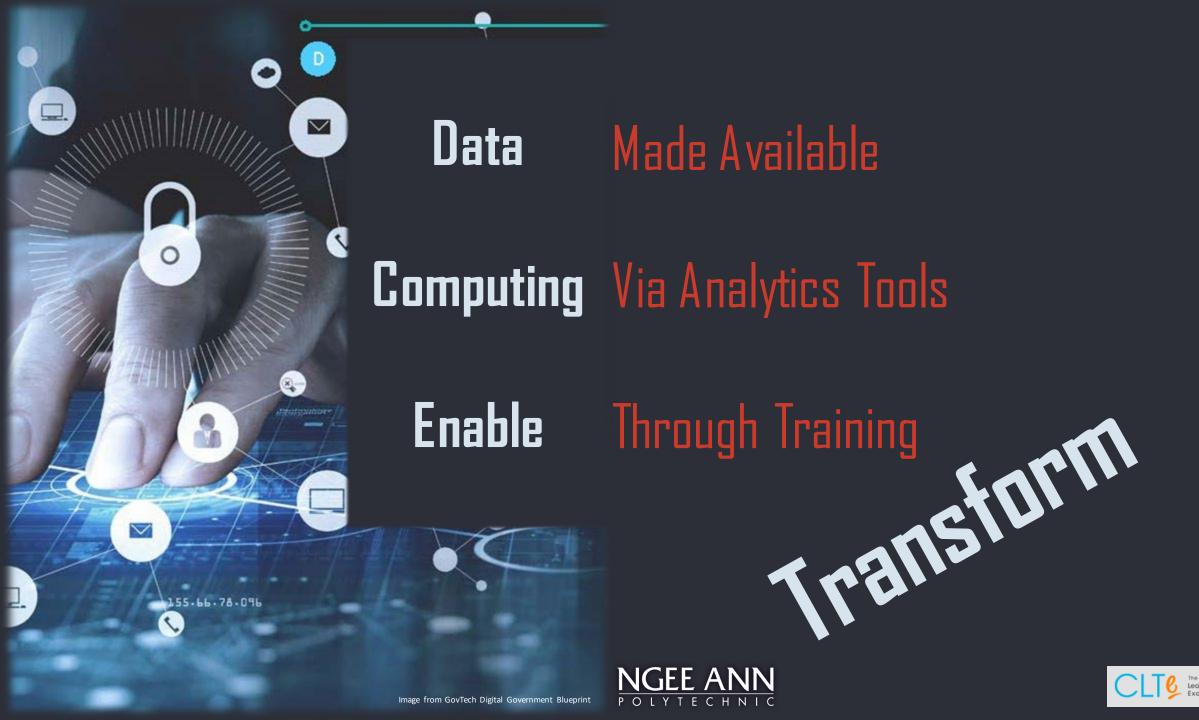
Develop

User Acceptance

Test











### Governed and Trusted Data



Data Stewards

Dept Content Authors







Publish



Trusted Content

Dept Content Consumers





View/Interact





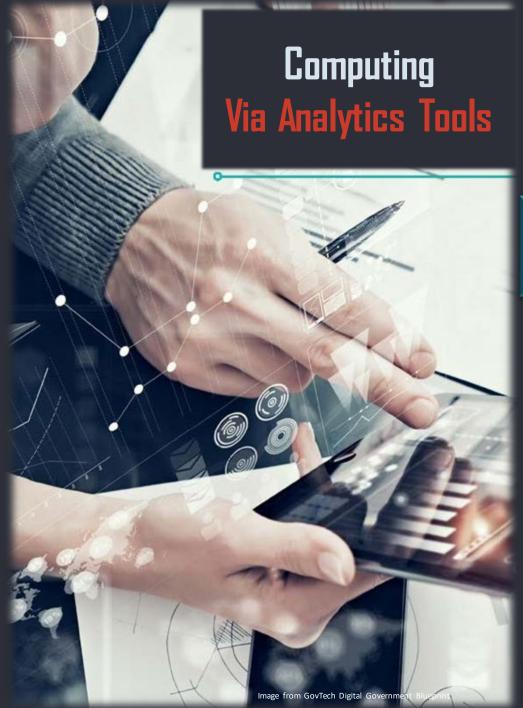












**Previously** 









Data Prep

Analyse

Distribute

Now

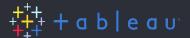
Data Science and Machine **Learning Platforms** 

**Analytics and Business** Intelligence Platforms

alteryx puthon (R)







Automated, Secured, Interactable





#### Enable Through Training

End Users' Training

**Consultation Clinics** One-to-One

Best

4

Sharing

Enhanced Courses **Onboarding Courses** Identified content authors

Primer Courses for all staff

















Transforming the way we work



DATA

Improve Productivity



#### **Student Journey**

Outcomes

**Learning Performance** 



Graduate

Course Design, Delivery & Assessment

Student Profile





Academic Quality Data Analytics

	Start Ground Zero	Phase 1 Data Exploration	Phase 2 Data Groundwork	Phase 3 Data-enabled	Phase 4 Data-empowered
Platform & Data	Excel, PowerPoint	Tableau Desktop	Set up Data Marts Tableau Server Pilot	Enhance Data Marts Scale up Tableau Server	Alteryx Designer for Advanced Analytics
Application	Static Reports	Corporate Dashboards	Self-Service Dashboards	Self-Service Dashboards scaled to <b>all</b> schools	Predictive Modeling
People	No Data Analytics Capabilities	Built up internal capability in CLTE	Identify Data Analysts Enable Self-Service	Sharing of best practices Customised Training and Clinic	Ongoing sharing, training, clinics
		2015	2016	2017	2018 onwards
	—		<u> </u>		

# Work Smarter Help Each Other

#### **Key Takeaways**



Place analytics as a strategic priority



Establish a central analytics team



Strengthen analytical capabilities across departments



**Build up community** of practice







### Thank You



