



NANYANG
TECHNOLOGICAL
UNIVERSITY
SINGAPORE

Revolutionizing User Experience through Proactive and Automated IT Support at NTU Singapore

*Supporting Document for
Global CIO “Project of the Year”*

(Last updated: 05 Nov 2025)

This information is prepared by NTU Singapore solely for the purpose of reference for the Global CIO “Project of the Year”. It is not to be shared/copied/reproduced without NTU Singapore’s prior written consent.





NSS^{IT}

Our promise to create the best outcome for our stakeholders

Uninterrupted Lessons at NTU

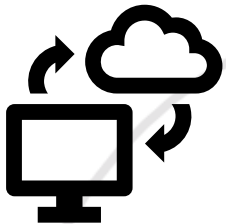


Proactive and Automated IT Support

Triaging, Basic Troubleshooting, Technical Support
Transforming NTU IT with Service Delivery 1-2-3

NSSIT

Live Monitoring of Audio-Visual Systems in Common Teaching Areas



Integrated Troubleshooting Guides on Touch Panels for Reduced Support Tickets



Radar. Auto Pilot. Agents with AI

servicenow
Automated Service Catalogue



Expert Remote Assistance for Field Engineers



Fast-Track IT/AV Support with Location-Based QR Codes



Real-Time Resource Monitoring & Control via Overview Dashboards

Who we serve



300,000 Alumni



35,000 Students



8,000 Faculty & Staff

NTU Community



Revolutionizing User Experience through Proactive & Automated IT Support

Real-Time Resource Monitoring & Control via Overview Dashboards

AV Assets - IOT Monitoring

Network Assets - IOT Monitoring

With pre-emptive overview dashboards, **NSS IT** actively monitor AV systems in all 275 common teaching areas, identifying and resolving potential issues before they impact users.

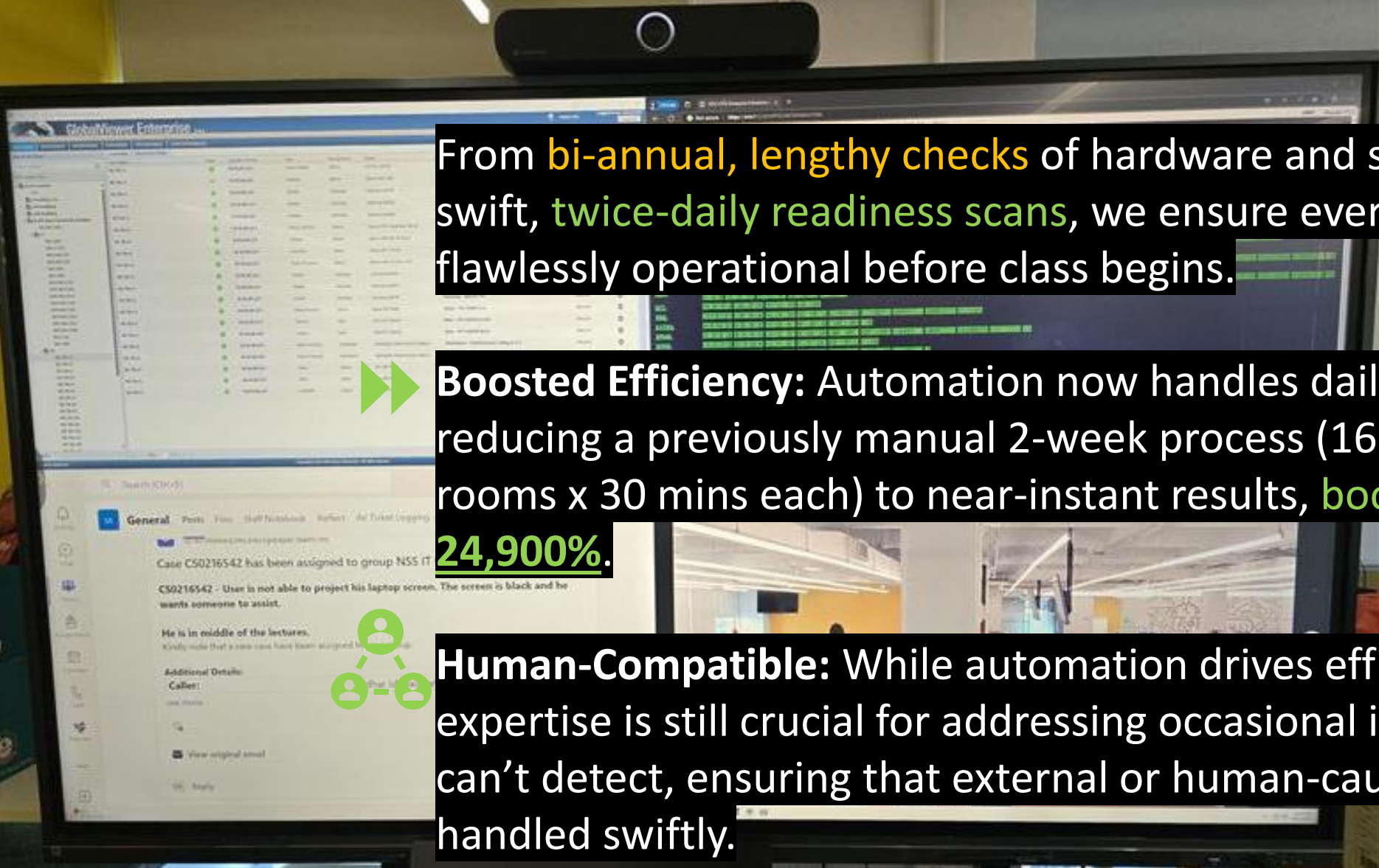
QR and Scripts Monitoring

Live Agent View

This means minimized disruptions and a consistently reliable learning environment. Guided by "**We make things right, for you**", **NSS IT** has redefined IT support to prioritize a smooth, hassle-free user journey for **the Day the Lecture Didn't Stop**.



Real-Time Resource Monitoring & Control via Overview Dashboards



From **bi-annual, lengthy checks** of hardware and software updates to swift, **twice-daily readiness scans**, we ensure every teaching space is flawlessly operational before class begins.



Boosted Efficiency: Automation now handles daily checks twice a day, reducing a previously manual 2-week process (16 team members, 275 rooms x 30 mins each) to near-instant results, **boosting efficiency by 24,900%.**



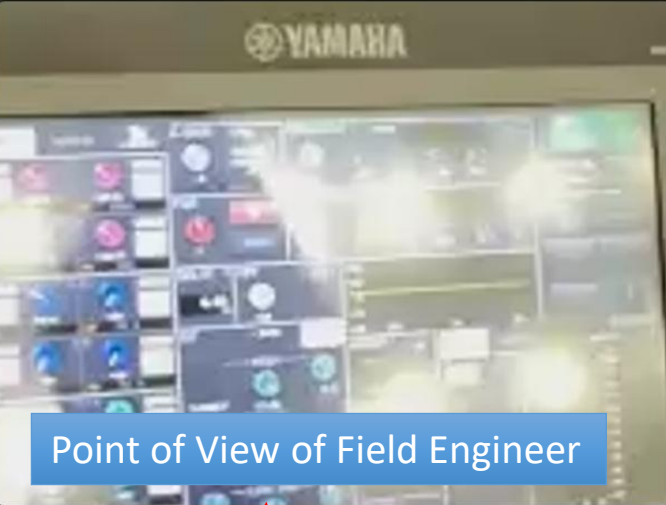
Human-Compatible: While automation drives efficiency, human expertise is still crucial for addressing occasional issues that scripts can't detect, ensuring that external or human-caused errors are handled swiftly.

Revolutionizing User Experience through Proactive & Automated IT Support

Expert Remote Assistance for Field Engineers



End-to-end encrypted



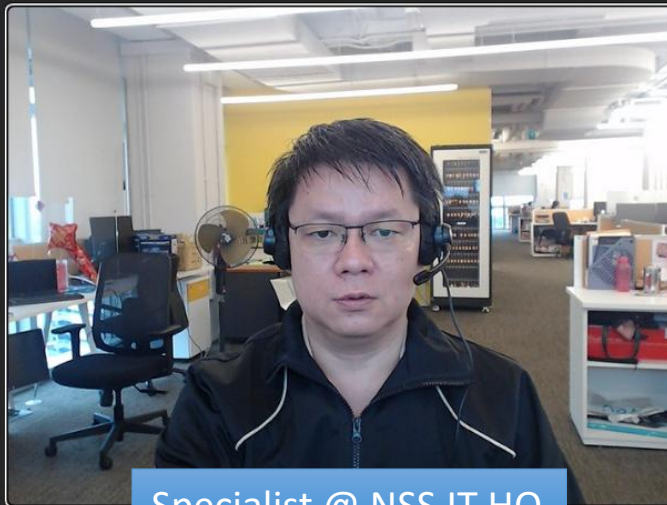
Point of View of Field Engineer



Specialist @ Tech Lounge



Field Engineer @ Lecture Theatre



Specialist @ NSS IT HQ

✓ **Hands-free AI:** Meta Glasses offer hands-free access to Gen-AI for AI-powered incident response.

✓ **Remote Expert Guidance:** Field engineers can receive real-time visual guidance from specialists through the glasses.

✓ **Key benefits:**

Faster problem resolution



reduced downtime



increased productivity



Revolutionizing User Experience through Proactive & Automated IT Support

Proactive AV system monitoring via overview dashboards

Globalviewer Enterprise 2.9.8

HELP DESK | SCHEDULING | MONITORING | REPORTING | SYSTEM MENU | USER PREFERENCES

Search for Room: Select a Room

GVE Location Tree

- Root Location
- LT5
- Recording LTs
- LHS Building
- LHN Building
- North Spine Academic
- South Spine Academic
- SSC Building
- SPMS Building
- ABN Building
- RTP Building
- N2.1 Building
- ABS GAIA Recording
- ABS GAIA
- ABS LT 1
- ABS LT 2
- ABS LT 3
- ABS LT 4
- ABS LT 5
- ABS LT 6

Room Name	Status	Controller IP/...	Type	Manuf...	Model	Device Name	Port	Bi-Dire...
ABN Conference Roo...	●	10.96.87.60	Touch Di...	Extron	TLP Pro 725T	TLP Pro 725T : 192.168.254.251	Ethe...	
ABN Confere					MediaPort 200 v3.0		Serial	
ABN Confere					RG-300H v1.7		Serial	
ABN Confere					OU v1.1		Serial	
ABN Confere					CrossPoint 82 4K I...		Ethe...	
ABN Confere					UT640S Tv1		Ethe...	
ABN Confere					LG Electronics 55...	LG UT640S Tv2	Ethe...	
ABN Conference Roo...	●	10.96.87.60	Controller	Extron	IPCP Pro 355M	IPCP Pro 355M : 192.168.254.250	Ethe...	
ABN Confere			Controller	Extron	IPCP Pro 355M	IPCP Pro 355M : 10.96.79.117	Ethe...	
ABN Confere					TLP Pro 725T : 192.168.254.251		Ethe...	
ABN Confere			Other	Extron	Extron MediaPort ...	Extron - MediaPort 200 v3.0	Serial	
ABN Confere					v1.7		Serial	
ABN Confere					Epson EB-L510U		Serial	

Event Alert List

Field Engineer checking on Potential Issues alerted from the AV monitoring system.

18 Device Notifications

0 Controller Notifications

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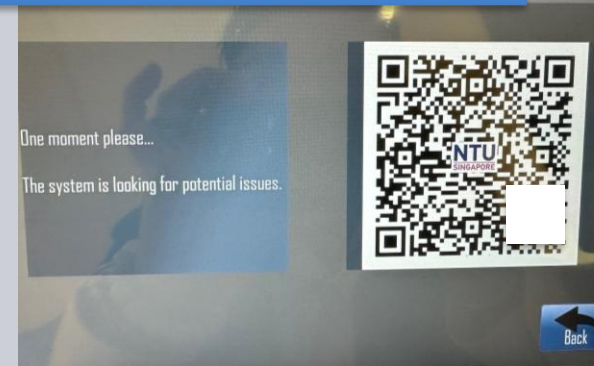
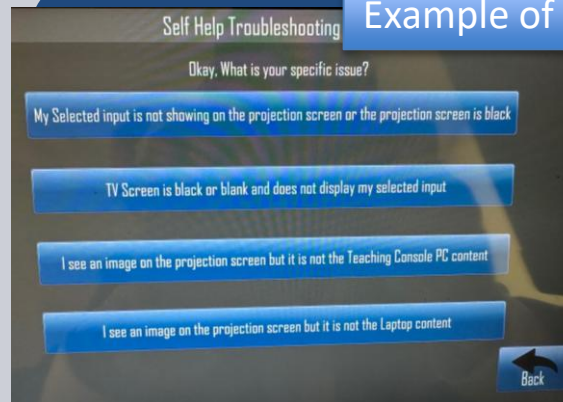
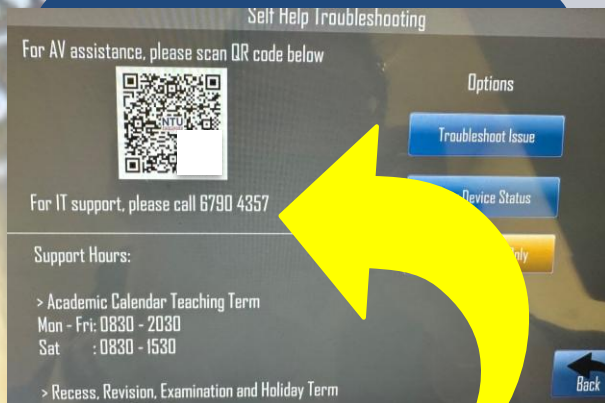
Displaying Devices 1 - 100 of 3722

Revolutionizing User Experience through Proactive & Automated IT Support Integrated Troubleshooting Guides on Touch Panels

Self Help

First-Outside-US integrated **Self-Help portal** in common teaching spaces - tutorial rooms:
Reduced Classroom support tickets by 10%, empowering users with self-service solutions.

Example of a Self Help Troubleshooting flow



As a final tier, **location-based QR codes** in NTU's common teaching spaces provide instant access to fast-track IT/AV support, ensuring minimal disruption. **Decreased average ticket response time by 10 minutes.**





AI Voice Agent AI-IVR

24/7 Continuous Support: Every query is addressed.

High Efficiency: 75% resolution rate.

Enhanced Accessibility: Engages in their preferred local language.





ServiceNow Incident Ticket Automation: 'Snow White'

ServiceNow Ticket Automation

Generative AI automates ticket triage by categorizing and suggesting responses, speeding up IT support.

Impact and Benefits

AI implementations reduce workload, improve response times, and enhance user satisfaction in IT services.

>50%

Time reduction to **resolve** an incident

>90%

Overall incident categorization **accuracy**

>80%

Response **relevance**

Revolutionizing User Experience through Proactive & Automated IT Support

**"WE
DID
IT!"**

55%

**year-over-year
reduction in overall
support tickets**

100%

**fast-track IT/AV
support coverage
via QR codes**

200%

**increase in user
satisfaction &
compliments**

10%

**Reduced classroom
support tickets with
self-help portals**

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NTU Shared Services

Trailblazing a Digital Future



"Unlocking Your Customer Service Self-Efficacy"

The Self-Efficacy program ensures that as processes become more digitized, the staff are better equipped to handle the remaining human interactions with confidence, empathy, and skill.

Foundation for Excellence: Supports overall service quality improvements & contributes to high Customer Satisfaction (CSAT >90% for related services).

THANK YOU

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