



# IT STRATEGY

2022 → 2027

## 01 TASK

"To develop an IT strategy that is attractive to potential partners, supports reductions in overhead costs and improves the quality of learning and teaching across the Trust"

## 02 PURPOSE

With the ultimate aim of improving outcomes for young people, we will set out how we will work in considered and creative ways to continuously redefine how we use technology

## 03 VISION

"To develop a digital community, curriculum and infrastructure that enhances the quality of learning and teaching across the Trust and readies our young people to be at the forefront of a transformational future"

## 04 STRATEGY COMPONENTS



### iLearn

- Creating the Work Flow model for the schools in collaboration with Chris Game (iLearn Education Lead).
- Further developing the use of Jamf.
- Document the technical processes that have been created by the PKAT IT Team.
- Stuart @ Breathe to be trained as the Jamf specialist in the Breathe Support Team allocated to PKAT.
- Implement Azure AD For user management/authentication.
- Define how the use of API's can automate tasks.
- Tech Staff Training on Jamf creating a process / work flow and then implementation and training.



### IT Security

- Engage with a security specialist to ensure the best advice and guidance on best practice (Breathe Technology has been engaged).
- Perform a security risk assessment as specified by the National Cyber Security Centre and other best practice organisations such as the SANS institute. This should be done for each school in the Trust.
- Each school should be audited.
- Implement a security best practice system – SANS Top 20 and ISO 27001 principles.
- We need to consider an updated approach to security that considers the 'distributed network model' (systems at PKAT HQ, other Schools that are connected, home working and learning, Cloud based systems). Policies, Security Systems and Backup should cover all locations including the Cloud.
- Write an IT Security plan that is approved by the Trust management team. Not only IT.
- Write a Backup, Business Continuity and Disaster Recovery Plan that is approved by the Trust.



### Leveraging the Trust

- Adopt an Enterprise IT approach, as we are an Enterprise from a technical architecture point of view.
- Maximise the use of Cloud Services where possible across the trust with centralised management and licensing.
- Design a topology that allows the Trust to share resources and bulk buy systems, licenses etc.
- Any staff member should be able to visit any school within the Trust and be able to access their IT resources.
- The IT look and feel should be standardised across all the schools.
- All schools should have access to everything IT empowering the schools as part of the Trust.



### Next Generation Infrastructure

- Single Managed WiFi System across the Trust as standard. We have started this process but not all schools are standardised as yet. Common physical network design managed by Aruba Central with standardised deployment methodologies including VLAN setup.
- Review the connectivity backbone at each school (driving for a 10GB backbone and 1Gb to the desktop and AX/WIFI6 technology for wireless devices).
- Connectivity should be robust to support the cloud strategy and larger network approach, with all the schools in the Trust sharing resources, especially the backup connection at each site and should be fit for purpose.



### Cloud First

- Embrace the cloud and define what works best in the cloud vs on-premise.
- Ensure that the IT system is robust and secure enough to include the cloud strategy.
- Create a documented architecture design for the Trust, including a standardised design for a secondary and primary school.
- Consider the use case for remote desktop based on the IMS/Elementary possibly changing and 4matrix migrating to the web-based version. It may no longer be required.
- If the IMS does not change consider moving the relevant services into the cloud and increase security:
  - IMS – Private Cloud
  - Sage/Payroll – private Cloud
  - Remote Desktop – Windows 365
- Develop a 'PKAT School Hub' as a next generation intranet site



- Add Apple TV's Management to Jamf.
- Prepare for Firefly being decommissioned and any impact on iLearn or Jamf.
- eBooks integration with Jamf.
- Microsite for PKAT showcasing the Jamf success to prospective new schools and students.
- Trust Wide, online knowledgebase and resources library for iLearn.
- Develop and make available Training Resources library for iLearn.
- Create a standardised deployment environment and demo space in the new IT Services Office.
- Supporting the Trust with the iLearn sustainability and scalability piece.



- Implement the updated backup and disaster recovery plan.
- Assume that we may experience a breach at some point and plan for it (Creating obstacles and deterrents for the attacker. Have acceptable methods of recovery under the worst circumstances).
- Deploy Two factor Authentication or Multi Factor Access where ever possible.
- Sophos Anti-Virus is up for renewal and a vendor review will be performed.
- Remove any unsupported or open-source systems that are classified as core IT systems.
- Enhanced Data Protection is achieved using Conditional Access.
- Perform Risk Analysis and Mini Audit on primary schools. Support Jason Bird and engage with the Primaries to get them on board with our strategy.
- Perform a Penetration Test and then agree an annual perimeter scan.
- Achieve Cyber Essential Plus to confirm our systems and processes and have evidence.



- As part of the design, define IT systems that work better locally vs shared or in the cloud. Everything else should be shared, centrally managed and cloud hosted.
- Design a system that allows the primaries and other new schools to benefit from systems and larger infrastructure that they wouldn't normally have on their own, adding value.
- Maximise the larger organisation's buying power to ensure that better IT is procured at absolute best value.
- Assist Jason Bird to create a standardised model for the primaries with a refresh schedule and migration plan (long term plan).



- Switching to be standardised at each school to HPE Aruba with Aruba Central Cloud Management.
- Next Gen UTM Firewall, H/A pair.
- Firewall to connect via 10GB Fibre to Network Backbone/Core switch.
- Improved Safeguarding reporting.
- Investigate the option of having a single integrated system for Gateway, Cloud and End-Point.
- Decommission the Hybrid Exchange Email system, to be Office 365 only.



- (HTML and SharePoint).
- Standardise Teams / SharePoint use across the Trust and communicate.
- Deploy a centrally managed, Trust wide End Point solution for all schools. (Anti-Virus and Anti-Malware).
- As part of Microsoft A3, deploy Azure AD and Intune (policies and security management) in an effort to reduce the reliance on physical hardware such as servers.
- Migrate user documents to OneDrive, removing the requirements on the H: and physical on-premise storage. They will still function as My Documents, but the documents will reside in the Office 365 Cloud storage.
- Centralise M365 A3 Licensing for all schools.
- Reduce hardware where possible (replacing with cloud and Trust Services).



### Trust Communications

- IT resources should be made simpler to access from a single location for each school using the 'School Hub Intranet'. The school hub will have the option to display themes or messages from the Management Team.
- Deploy a Central email System for all schools based on Office 365 with single management tenant.
- BT are moving away from copper. Our systems should be fibre based. This includes internet and telephony.
- The telephone system at Jack Hunt urgently requires replacement.



### Centralised Systems

- The SIMS Management Information System is currently under review. Further investigation regarding SIMS is required and is currently led by Gemma Buckland (Data Manager). Additionally, the option to make it Cloud hosted would become relevant in the event that the Trust remains with the vendor. Jack Hunt is currently using SIMS and the Primary Schools use Scholar Pack. A single cloud solution should ideally be implemented across the Trust. Work is underway to look at a single system focusing currently on process.
- New Finance solution to be implemented to incorporate FMS,



### Fast Safe Connectivity

- The E2Bn contract is due for renewal in Q4 and will be reviewed in Q2 due to the lead times in any changes required.
- A single content filtering system should be deployed with relevant safeguarding reporting. This is currently provided by SmoothWall at Jack Hunt, Protex at the Primaries and Lightspeed on the iPADS.



### The IT Organisation

- Integrate the Breathe IT Team to support the internal PKAT Team.
- Review the IT organisation roles and responsibilities.
- Formalise the use of the IT Support Help Desk, with access for Breathe and the PKAT Team.
- A simple change management process to be designed, that will avoid any miscommunication and changes made that have a negative effect by either Breathe or PKAT. Based on what exists and works well in other schools.



### Equipment Deployment & Refresh

- An annual IT refresh priority document will be created by Breathe, with the input from the PKAT Team. Each year the available budget will be used against the plan and the plan updated again to ensure a long term plan of improvement is in place, and the best use of budgets are being made.
- At Jack Hunt School, the following areas have an urgent requirement for improved IT:
  - Design Tech
  - Art
  - Computing
  - Music
  - DT



### Process Efficiencies & Meeting Requirements

- In order to ensure that we meet our requirements, we need to firstly understand what is expected. A review of our stakeholders and their specific requirements from the IT department will be carried out.
- Various processes have been identified for improvement. These are not all specifically IT processes, but have an impact on IT or is supported by IT. The processes will be reviewed with the relevant department heads and their teams, with the aim of the IT Teams supporting them. This topic should be reviewed as a higher-level topic with Trust management input as there is an opportunity to streamline the processes, improve efficiencies and reduce the overhead across the various schools within the Trust.



- Ideally, as part of the overall strategy, the various systems across the schools in the Trust should be centralised, as with the rest of the IT Systems. This does not mean replacing the hardware, but rather joining the schools to a centrally managed cloud back end. This will provide the ability for free calls between schools, transferring calls between schools and allow both the Trust and individual schools to have individual numbers and auto attendants. This is not an urgent requirement, but rather a strategic objective.



- The 'Snipe IT' Asset Management system has undergone testing and will be deployed in a phased approach. Starting with the IT Department and then deployed in phases across the trust.
- Investigative work on other harmonised and centralised systems such as HR and leveraging benefits of current systems (such as SharePoint workflow).

- Parent access to LightSpeed or a new alternative to be provided giving parents the responsibility 'to manage their child's iPad internet activity as the student works on the iPad at home and at the school. It's therefore, no longer purely a school responsibility.

- Setup 'Standard Reporting' that will assist with management and analysis.
- Breathe to update the IT Department documentation and make it available to the wider team (IP Address List, Support Information, Refresh Schedule/Priorities, Topology Designs, Renewals Schedule).
- Breathe to implement the pro-active maintenance schedule, in order to standardise maintenance at all schools.
- The ICT Service Centre – remodelling of the IT Support office in Summer 2022 to provide a more suitable space.

- Thorpe Primary School - Review the current ICT suite.
- Longthorpe Primary School - Review the current ICT suite.

- The processes initially identified include:
  - Staff onboarding and offboarding
  - Staff Absence
  - Expenses
  - Admin Processes
  - Finance
  - Other Online Processes
  - GDPR