

**Arizona State University
Office of University Audits
Strategic Partnership – Hye Tech
March 4, 2022**

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

Summary: The Strategic Partnership audit of Hye Tech Network and Security Solutions was included in the Arizona State University (ASU) FY 2022 audit plan approved by the Arizona Board of Regents (ABOR) Audit Committee and ASU senior leadership. The audit focused on key operational and financial requirements of the agreement and the underlying business processes to ensure the intended objectives are met through the partnership. This audit is in support of ASU's mission of effective management of financial resources and efficient operations at all levels of the university.

Background: The University Technology Office (UTO) contracted with Hye Tech in 2019 for integrated technology collaborative managed services in support of upgrading and expanding the university connectivity infrastructure. Hye Tech is a Phoenix based company offering professional and managed services in the network and security fields. In 2021, Hye Tech had approximately 84 employees and contractors supporting ASU with half being fully dedicated staffing for ASU.

The contract consists of a Master Service Agreement (MSA) that contains general operational requirements such as specifications for statements of work and change orders, payment terms, provisions for personnel and contractors and other obligations, and the original statement of work that contains the specifics and pricing of the services to be provided and service level agreements (SLAs) for performance in multiple areas including incident and request management. The initial 3-yr term of the MSA and original statement of work is effective through June 2022. In addition to the MSA and original statement of work, seven existing statements of work with Hye Tech were incorporated under the MSA and two additional statements of work were subsequently signed between Hye Tech and ASU including one for services related to bond funded infrastructure projects. Each statement of work has requirements for deliverables and SLAs as applicable for the service to be provided; however, some contain the same SLAs for incident and request management as the original statement of work.

The leadership of UTO and Hye Tech have developed an integrated structure for the oversight and management of services under the MSA and various statements of work. Specifically, management of the relationship is owned by UTO's Chief Operating Officer and is supported by the Director of Network Operations who has primary responsibility for oversight of the MSA with Hye Tech and the Director of Network Growth who is primarily responsible for the coordination of specific projects. Additional fiscal oversight is provided by the UTO Budget and Forecasting team.

Audit Objective: The objective of this engagement was to assess compliance with key requirements associated with the agreement, in addition to underlying business

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

processes to ensure the expected objectives and goals are met through the partnership. Specifically, the following areas were assessed:

- Assess the adequacy of oversight by UTO leadership to ensure the overall objectives of the partnership are met
- Verify fiscal controls are in place to ensure payments are authorized and made according to the agreement
- Assess compliance to key requirements of the agreement related to service level agreements, personnel changes, personnel screenings, business continuity planning, and insurance
- Identify opportunities for improvement

Scope: The scope of the audit focused on the processes and related controls in effect for managing the agreement primarily during FY2021. The effectiveness of IT control activities performed by Hye Tech was not in the scope of the audit.

There was a scope limitation related to the financial reporting to UTO leadership on bond fund activity. UTO used an internal financial application until October 2021, that contained inaccurate reporting. A comparison of the bond reporting at October 2021 to transactions directly from Workday indicated that encumbrances were overstated by \$1,031,825 due to a combination of inaccurate encumbrance lines included in the reporting and encumbrance release lines missing from the reporting in addition to actual expenses being understated by \$39,626. In November 2021, UTO began using financial reporting from the data warehouse for various reasons including the known issues with updates and inaccurate data with the internal application. Testing was limited to point in time procedures to validate the accuracy of the revised reporting.

Methodology: The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing promulgated by the Institute of Internal Auditors and accordingly consisted of tests of procedures necessary to provide a reasonable basis for expressing our opinion. Specifically, audit work consisted of interviews with the leadership and staff of UTO and Hye Tech, observation of work processes, review of documented policies and procedures and substantive tests including the following areas:

- Assessing the general oversight by UTO leadership through the following:
 - Evaluating processes over management of the agreement
 - Evaluating procedures for significant areas of the agreement
- Reviewing the key requirements of the Master Service Agreement from 2019, subsequent amendments, and related proposals/statements of work

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

- Creating a master schedule of the agreement, amendments, and proposal/statements of work including service level agreements to validate the completeness and reasonableness of the invoicing
- Examining all invoices payments made to Hye Tech in FY2021, excluding payments related to network services for Sun Corridor, totaling approximately \$14.3 million, verifying accuracy based on the statement of work and/or quote and appropriateness of funding from either the infrastructure bond or operations
- Validating approvals in Service Now for a sample of 25 purchase requests for proper authorization
- Verifying performance to the service level agreements for incident management and request management for soft MACDs for the calendar year 2021 through the following:
 - Reviewing the performance results reported on NextGen Dashboards
 - Assessing and recomputing the performance measurements by month from the Service Now data used for the NextGen Dashboards
 - Comparing the performance results to the performance targets from the proposals/statements of work
- Assessing the business continuity policies of Hye Tech to the requirements of the MSA and reviewing documentation of the last plan implemented in 2020
- Determining whether Hye Tech obtained written approval for reassignments or replacements of employees supporting ASU
- Confirming background checks/fingerprinting was completed by Hye Tech for a sample of 27 employees, and verifying separate fingerprinting was performed by UTO for Hye Tech employees where required based on level of access
- Evaluating whether Hye Tech employees completed training for FERPA, HIPAA, Information Security and Driving on the Mall
- Confirming network access was removed for the six Hye Tech employees/contractors that were terminated during the review period to verify access was removed timely
- Confirming current insurance coverage of Hye Tech to the minimum requirements under the MSA

Conclusion: Overall, UTO has established sufficient oversight of the partnership with Hye Tech to ensure the various services from the statements of work and hardware purchase for network related projects are managed at a level that achieves the expectations of the MSA including accurate and complete invoicing. There is close coordination between UTO and Hye Tech leadership on key aspects of the agreement including network operations support and monitoring, network upgrades and expansion, issues with the network, and purchasing and invoicing. However, the collaborative approach and expertise provided by Hye Tech employees has resulted in a general reliance on the processes and controls of Hye Tech. As a result, UTO has not

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

implemented adequate controls and validation of some key aspects of the agreement including performance targets of the service level agreements, business continuity efforts, employee screenings (background checks/fingerprinting), and required training. This has been further compounded by turnover in key UTO leadership positions responsible for core oversight and interaction with Hye Tech increasing the overall reliance on Hye Tech for managed service functions.

Specifically, it was noted that Hye Tech has not consistently met the performance targets of the service level agreements, and while the NextGen Dashboards developed by UTO and Hye Tech provide useful information, there was not appropriate visibility to UTO leadership related to the missed targets. It was also noted that the existing tracking and measurement functionality on which the dashboards are based does not support the accurate calculation of the performance targets under the service level agreements. This is in part mitigated by the close coordination between UTO and Hye Tech including reviews and discussions of the more critical issues and ongoing project work.

Testing confirmed that Hye Tech meets the required business continuity provisions of the agreement; however, UTO has not implemented appropriate oversight of their plan and how it aligns and augments ASU's overall business continuity efforts. Improved oversight is necessary given the importance of their managed services, especially as it relates to the critical 1 applications and overall network support.

Testing also identified that Hye Tech has generally relied on the screenings (background checks/fingerprinting) completed by other clients to which the employees had been assigned previous to ASU without obtaining copies or retaining confirmations of completion. This practice coupled with UTO not consistently completing separate fingerprinting of Hye Tech employees increases the risk of bad actors having administrator level access to the network, systems and university data. In addition, while the MSA requires compliance with data privacy laws including FERPA and HIPAA, the training expectations on ASU requirements, policies and procedures have not been established for Hye Tech resulting in overall low completion of required ASU training.

Finally, while testing indicated that access is removed timely for Hye Tech employees, it was noted that procedures have not been implemented to govern access for Hye Tech employees and contractors, that are not fully dedicated to ASU's account. It is recommended that this process be formalized with Hye Tech to ensure administrator level access is appropriately restricted.

The control standards University Audit considered during this audit and the status of the related control environment are provided in the following table.

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

General Control Standard (The bulleted items are internal control objectives that apply to the general control standards, and will differ for each audit.)	Control Environment	Finding No.	Page No.
Reliability and Integrity of Financial and Operational Information			
<ul style="list-style-type: none"> • Payments to Hye Tech are accurate, authorized and paid according to the agreement, statements of work or quote as applicable. 	Reasonable to Strong Controls in Place	5	11
<ul style="list-style-type: none"> • Payments to Hye Tech using bond funds are appropriate. 	Reasonable to Strong Controls in Place	N/A	N/A
Effectiveness and Efficiency of Operations			
<ul style="list-style-type: none"> • Hye Tech is generally meeting the required expectations based on the MSA and amendments. 	Reasonable to Strong Controls in Place	N/A	N/A
<ul style="list-style-type: none"> • Hye Tech is meeting the performance targets of the service level agreements for incident management and request management for soft MACDs. 	Opportunity for Improvement	1	7
<ul style="list-style-type: none"> • Hye Tech has a business continuity plan that meets the requirements of the agreement. 	Opportunity for Improvement	2	8
Safeguarding of Assets			
<ul style="list-style-type: none"> • Hye Tech obtains written approval from UTO for the reassignment or replacement of employees supporting ASU. 	Opportunity for Improvement	3	9
<ul style="list-style-type: none"> • Hye Tech completes screenings of employees 90 days prior to their performance of service. 	Opportunity for Improvement	3	9
<ul style="list-style-type: none"> • Training requirements of Hye Tech employees on ASU requirements, policies and procedures have been established and training completed. 	Opportunity for Improvement	4	10
<ul style="list-style-type: none"> • Deactivation of access is promptly requested by Hye Tech and removed by UTO for terminated employees. 	Reasonable to Strong Controls in Place	NA	N/A
<ul style="list-style-type: none"> • Hye Tech secured insurance as required by the agreement. 	Reasonable to Strong Controls in Place	N/A	N/A
Compliance with Laws and Regulations	Not Applicable	N/A	N/A

We appreciate the assistance of EOSS representatives during the audit.

Lisa Grace, Executive Director, University Audit and Advisory Services
Sadie Petterson, CPA, Assistant Director, University Audit and Advisory Services

Audit Results, Recommendations, and Responses

1. Hye Tech has not consistently met the Service Level Agreements and the existing tracking and measurement functionality does not support the defined SLA criteria.

Condition: Hye Tech has not consistently met the performance targets of the Service Level Agreements. Furthermore, the existing tracking and measurement functionality using Service Now and Analytics does not support the accurate calculation of the performance targets according to the defined SLA criteria, potentially impacting the performance results.

Criteria: The MSA and various statements of work contain several different SLAs, including for incidents and requests, depending on the scope of service. Section 2.11 indicates that Hye Tech is to provide all Services and Deliverables in strict accordance with the applicable SLAs.

Cause: In an effort to meet the reporting needs of UTO leadership as well as the performance targets of the SLAs, UTO and Hye Tech developed a set of dashboards in Analytics to report on the tickets in Service Now. However, it was determined that Service Now has limitations and data issues that impact the tracking and measurement of performance results. Specifically, the time counters cannot be paused or stopped for delays that are not under the control of Hye Tech and differences in time zones were noted on tickets, thereby impacting the average times to acknowledge and resolve.

Effect: The performance targets of the Request Management SLA for soft MACD requests and the Incident Management SLA were not consistently met. Testing identified:

- For requests, the performance target of 3 days was not met for any month in the calendar year 2021. The average for the year was almost 10 days.
- For incidents, the performance results varied depending on the severity level of the incidents and the performance target of time to acknowledge or time to resolve.

Although the performance targets are not consistently met, the results reported through the dashboards are monitored and used to guide discussions with Hye Tech, and tickets with a higher severity level are reviewed regularly.

Recommendation: UTO and Hye Tech should re-evaluate the performance targets of the SLAs from the various statements of work, taking into consideration the reporting needs of UTO leadership. Either the performance targets and SLAs should be modified to facilitate more accurate reporting from Service Now, or separate processes and

procedures should be established for the tracking and measurement of results to the performance targets.

Management Response:

UTO agrees with this finding and has taken the following steps to address this finding:

- UTO leaders and HyeTech account team conducted a review of the operational metrics. The teams agreed to bring the existing operational dashboard up to date in Service Now and include these metrics in a monthly report for UTO executive visibility.
- Quarterly review meetings with UTO executive leadership and HyeTech account managers will continue, with an added focus on SLA and operational metrics.

2. UTO leadership has not had visibility to Hye Tech’s business continuity plan to ensure it aligns and augments ASU’s efforts as expected.

Condition: Although testing confirmed that the business continuity policies of Hye Tech meet the general requirements of the business continuity provisions, UTO has not implemented appropriate oversight of the plan.

Criteria: Section 15 of the MSA requires Hye Tech to have a business continuity plan for the performance of its obligations during a public or institutional emergency, and allows ASU to request the plan. Oversight of the plan is necessary given the importance of their managed services, especially as it relates to the critical 1 applications and overall network support.

Cause: UTO leadership has not exercised the provision of the agreement that allows ASU to request the business continuity plan.

Effect: The business continuity plan of Hye Tech may not meet the expectations of UTO or sufficiently align with ASU’s business continuity efforts to ensure there is a coordinated approach to recovery. This could result in delays in service, insufficient staffing, or duplicated efforts in the event of an emergency.

Recommendation: UTO should review Hye Tech’s current business continuity plan to ensure that it meets expectations and aligns with ASU’s overall business continuity efforts. UTO should also implement procedures for the ongoing oversight of the plan.

Management Response:

UTO agrees with this finding and has taken the following steps to address this finding:

- UTO has requested the most recent business continuity plan from HyeTech. This MAS review will be scheduled in April of 2022.
- After April 2022, an annual contract review will now include requesting evidence of business continuity plans being maintained and updated by HyeTech to ASU.

3. Adequate processes and oversight have not been implemented to ensure background checks or fingerprinting is completed before Hye Tech employees are assigned to ASU or that the reassignment and replacement of employees is properly authorized.

Condition: Adequate processes and oversight have not been implemented to ensure screenings, including background checks or fingerprinting, are completed before Hye Tech employees are assigned to ASU or that the reassignment and replacement of employees is properly authorized.

Criteria: Section 6.3 of the MSA requires Hye Tech to complete various screenings of their employees including background checks and fingerprinting no later than 90 days prior to their performance of services and in accordance with ACD126. UTO also has defined internal procedures to conduct fingerprinting of Hye Tech employees who are to be provided with the highest level of access to the network and systems.

Additionally, section 6.2 requires Hye Tech to obtain written approval to reassign or replace employees who support ASU.

Cause: Hye Tech has generally relied on the screenings (background checks/fingerprinting) completed by other clients to which the employees had been assigned previous to ASU, but has not obtained/retained documentation evidencing the screenings. UTO has not consistently conducted the internal fingerprinting of Hye Tech employees who are provided with the highest level of access.

The reassignment and replacement of Hye Tech employees has generally occurred through discussions between Hye Tech and UTO leadership; however, the notification and approval of employee changes has been informal and at times after the change has occurred.

Effect: For a sample of 27 Hye Tech employees, a background check/fingerprinting completed before the date of hire was provided for one employee. For the remaining

employees, Hye Tech provided screenings completed in January 2022 for 25 employees, and the screening for one additional employee was pending. Of 47 Hye Tech employees with the highest level of access and an activation date in calendar years 2019 through 2021, 18 had separate fingerprinting completed by UTO.

Recommendation: UTO should clarify the expectations under the MSA for screenings of Hye Tech employees before they are assigned to ASU, including the required screenings (background checks, fingerprinting, etc.), retention of supporting documentation, and any related reporting to ASU. Requirements deemed necessary by UTO should be formalized and necessary training completed to ensure controls are performed consistently. UTO should implement monitoring procedures to confirm screenings by Hye Tech comply with ACD126 at a minimum, including retaining documentation.

Additionally, UTO and Hye Tech should formalize the process and documentation for the reassignment and replacement of Hye Tech employees who support ASU to ensure the changes are properly authorized.

Management Response:

UTO agrees with this finding and has taken the following steps to address this finding:

- To be included in the pending April MSA review to be scheduled, a review of HyeTech's operational practices will be requested as well.
- Together UTO leaders and HyeTech account teams will re-design the proper review of MSA requirements
- To be completed by June 30th 2022, UTO and HyeTech will collectively agree to an updated process of on-boarding and off-boarding HyeTech staff and this will include having an opportunity to weigh in on new hires and staffing allocations to project work.

4. The expectations for non-technical training of Hye Tech employees related to ASU requirements, policies and procedures have not been established.

Condition: Training of Hye Tech employees on ASU requirements, policies and procedures, such as FERPA, HIPAA, Information Security, and/or Driving on the Mall has not been performed in a consistent manner but rather has been completed on an as-needed basis determined by Hye Tech or the specific circumstances of the service being provided.

Criteria: Hye Tech employees should receive training to ensure they are aware of the university standards and best practices. Hye Tech employees generally have equivalent or greater access to the network, systems and data of ASU than ASU employees who are required to complete such training. Section 12.1 further requires Hye Tech to comply data privacy laws including FERPA and HIPAA.

Cause: The expectations for training of Hye Tech employees have not been established nor training coordinated between UTO and Hye Tech.

Effect: The training records of the 41 Hye Tech employees who are fully dedicated to ASU indicate the following completion rates:

- 0% for FERPA training
- 29 (71%) for HIPAA training
- 3 (7%) for Information Security training
- 2 (5%) for Driving on the Mall training

Recommendation: UTO should clarify the expectations for training of Hye Tech employees on ASU requirements, policies and procedures, particularly FERPA, HIPAA and Information Security. UTO should establish which training is required for each position group if different, when training should be completed, and if refresher training is necessary. Procedures should also be established for tracking completion dates including training provided by Hye Tech outside of the ASU modules.

Management Response:

UTO agrees with this finding and has taken the following steps to address this finding:

- To be included in the pending April MSA review to be scheduled, a review of HyeTech's operational practices will be requested as well.
- Together UTO leaders and HyeTech account teams will re-design the proper review of MSA requirements
- To be completed by June 30th 2022, UTO and HyeTech will collectively agree to an updated process of on-boarding and off-boarding HyeTech staff and this will include having an opportunity to weigh in on new hires and staffing allocations to project work.

5. The internal procedures of UTO for the approval of purchase requests in Service Now and review of financial documents require improvement to ensure they are authorized and accurate.

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

Condition: Testing of approvals of purchase requests in Service Now and financial documents including proposals/statements of work/quotes, purchase orders, and invoices identified the following:

- Of 25 purchase requests reviewed, seven (28%) requests for over \$10,000 did not have the second-level approval in Service Now as required by UTO.
- Monthly invoices for project management services in FY2021 were \$7,114 less than the proposal/statement of work resulting in the overall expense being understated by \$92,480.96 for FY2021 and \$28,456 in FY2022 for services through October.
- A manual reclass was processed to remove \$173,894 of expense for Hye Tech (representing five purchase orders and nine invoices) posted to the bond account in error; however, the journals to reclassify the expense did not include the related taxes totaling \$14,085.
- The sales tax charged on four invoices from Hye Tech was inaccurate at 8.6% instead of 8.1%. The total overpayment was under \$100.
- One instance of travel was noted where Hye Tech did not meet the ASU travel policy as specified in the statement of work. This was invoiced/paid by a department other than UTO.

Criteria: UTO has implemented additional fiscal approval requirements above standard Workday business rules to ensure spend is appropriate and authorized. In addition, effective review controls ensure invoices are accurate prior to processing.

Cause: The existing controls are designed appropriately to provide UTO leadership of material spend; however, the control is currently not being executed as intended. Other issues noted appear isolated but may warrant additional training and review with involved staff.

Effect: Without proper approval of purchase requests, UTO leadership may not have adequate visibility to extent and significance of the orders being placed with vendors, including as Hye Tech. Without proper review of financial documents, incorrect rates or charges may be included without being detected, resulting in under or overpayments to vendors.

Recommendation: UTO should perform additional training to ensure staff involved are aware and understand the additional fiscal approval requirements and implement monitoring controls to ensure the control is operating effectively. Additionally, general training may be warranted to ensure individuals approving invoices are aware of the verification steps they should perform to ensure invoices are accurate and in accordance with the MSA and statements of work.

Management Response:

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

UTO agrees with this finding and has taken the following steps to address this finding:

- UTO Operations leads have conducted a full purchase order approval review.
- The Ops leaders presented the internal activity in a meeting on March 4th 2022 with the CIO, and confirmed that UTO will update internal approval thresholds to be in alignment with overall University procurement standards.
- UTO is opening a work request with the Service Now team to programmatically design the approval process to be restricted to those who have the right level of authority based on the internal thresholds approved by the CIO. For now, this task will address the audit finding through a manual process and will be effective on March 14th 2022, with possible automation being added to reduce errors.

Arizona State University
Strategic Partnership – Hye Tech
March 4, 2022

Distribution:

Arizona Board of Regents Audit Committee

Michael M. Crow, President

Morgan R. Olsen, Executive Vice President, Treasurer and Chief Financial Officer

Nancy Gonzales, Executive Vice President and University Provost

Lev Gonick, Chief Information Officer

Jess Evans, Chief Operating & Digital Transformation Officer

Jorge De Cossio, Director, Network Operations

Justin Alonzo, Director, Network Growth

Greg Holmes, Executive Director, Budget and Forecasting

Internal Audit Review Board