After his Group’s acquisition of Sabari Indian School in 2015, Ashith Piriyattiath, Group Head of IT at Al Masah Capital Management, knew he had to make significant technological improvements to raise the rating given to the school by Dubai’s Knowledge and Human Development Authority (KHDA).

“Incorporating technological innovation for learning is key factor in improving a school’s KHDA rating so we were eager to introduce eLearning, and iPad-based course delivery. We also wanted to save our students the trouble of having to carry a 5 to 6 kg bag to school each day,” he explained.

SEEKING AN ENTERPRISE- GRADE SOLUTION
The School’s existing Wi-Fi infrastructure was inadequate to support its ambitions. Built on products meant for small businesses, it offered poor coverage and low capacity. Therefore, Access Points (APs) regularly hung when supporting more than 15 simultaneous connections. Due to this, the School had to restrict Wi-Fi access to staff alone.

“We wanted to get an iPad into the hands of each student, and for this we needed an enterprise-grade, high-density solution. Of course, keeping in mind that Al Masah Group is an investment organization, we had to be very mindful of cost-effectiveness too,” said Piriyattiath.

ALL THE FEATURES AT A COMPETITIVE PRICE
Working through a comprehensive evaluation process, Piriyattiath and his team selected Aruba as the company offered a solution that not only met each of the School’s technical criteria but also proved to be extremely attractive from a budget standpoint.

“As a large Group, we have deployed Wi-Fi solutions for a number of our subsidiaries. For the education segment in particular, Aruba is highly cost effective and we found its solutions cost up to 50% less than competitive offerings for the enterprise market,” Piriyattiath stated.

While Aruba’s solution was very cost-effective, it still incorporates the very latest 802.11ac industry standard. It will therefore be capable of meeting our requirements for years to come and will allow us to utilize new and innovative educational technologies.

ASHITH PIRIYATTIATH
GROUP HEAD OF IT AT AL MASAH CAPITAL MANAGEMENT

‘Instant’ and intuitive campus-wide deployment
With the support of a Dubai-based systems integrator, Sabari Indian School deployed 59 Aruba IAP-220 access points in its classrooms and indoor facilities, while just 4 Aruba IAP-215 Outdoor APs were sufficient to provide complete coverage of the football, volleyball, basketball courts, cricket nets, and other outdoor areas.

In just five months, the teams completed planning, design and implementation across the entire campus. Aruba Instant allowed controller-less setup of the entire Wi-Fi network, without compromising security, performance, visibility, or ease of management.

“With Aruba Instant, a single AP distributes configurations to the others. This dramatically cut down implementation time and means that future expansions and changes can be easily managed in-house by our team,” said Piriyattiath.

A clear and seamless path
Both the IAP-210 and IAP-220 access point ranges feature Aruba’s ClientMatch technology which automatically transitions devices between APs as users roam, giving them a seamless connectivity experience.

“Day-to-day activities call for students and staff to move frequently between classrooms, labs and the recreational areas. Seamless
roaming means their devices stay connected without any manual intervention or need to reconnect,” explained Piriyattiath.

These AP ranges are also designed to work well with Aruba Beacons, a technology that Piriyattiath and his team is keen to innovate with in the near future.

**A NEW AND INTUITIVE LEARNING TOOL**

With the high-performance Wi-Fi network in place, Sabari Indian School rolled out its eLearning initiative. “It was incredible to see just how excited students, and even staff, were about the new approach to education,” beamed Piriyattiath.

“We have managed to make learning more interactive, intuitive and fun than ever before. It is a fine example of innovative technology being leveraged to revolutionize education,” he added.

**Curriculum in the cloud**

With the move to iPad-based learning, Sabari Indian School now utilizes a ‘curriculum in the cloud’ model. Students no longer carry heavy textbook-filled bags to school and instead rely on their devices for access to all educational material.

“The success of this model however, is entirely dependent on reliable high-speed wireless connectivity. Aruba has given us the confidence we need to make the move to cloud-hosted educational services,” said Piriyattiath.

The feedback from students and staff has been overwhelmingly positive. “Each Aruba AP easily supports over 40 simultaneous connections so we no longer face performance issues even though students and staff are essentially connected from the time they enter the premises till the time they leave,” he explained.

**Keeping it all under control**

As early as Grade 1, students are provided with iPads by the school. So, the need to control internet usage is absolutely imperative. “A combination of a Firewall and a Mobile Device Management (MDM) solution is being used to restrict and filter content. As both of these are essential, we were particularly impressed by how easily Aruba’s Wi-Fi solution integrates with these technologies,” said Piriyattiath.

Aruba’s solution also enables partitioning of the wireless network with unique SSIDs, each with its associated permissions and privileges, provided to staff, students and guests.

In addition to restricting access to objectionable content, this network segregation has allowed the School to split its 100Mbps line capacity between these three user bases in a manner that best suits the bandwidth needs of each group.

**Rapid realization of ROI**

“The balance between features, value, future-proof architecture and cost as well as the return on investment potential of the Aruba solution made it the most viable choice.” said Piriyattiath.

As a result of this and the critical role that the technology will play in improving the School’s KHDA rating, Piriyattiath expects that the ROI for the wireless infrastructure will be achieved in less than two years.

**A FIRM GRASP ON THE FUTURE**

Following the successful rollout at Sabari Indian School, Al Masah Capital Management has already implemented Aruba’s wireless infrastructure in Horizon International School Dubai and Horizon English School Dubai.

“At this initial stage, we are establishing a world-class Wi-Fi infrastructure, fitting of the high-calibre of our institutions. As with Sabari Indian School, this will then act as a platform to support on-going innovation,” said Piriyattiath.

**Centralized management aids IT consolidation**

One of the major IT initiatives for the Group is the establishment of a cloud-based centralized data centre. This consolidation of IT will help reduce manpower requirements at individual schools and will simplify the Group’s IT infrastructure.

“The ability to centrally manage and control the Aruba wireless network makes such consolidation possible. From a single pane of glass, our network team can monitor and control APs at each institution, irrespective of their actual physical location,” Piriyattiath stated.

**Plenty of innovation in the pipeline**

Piriyattiath and his team are also keen to explore Aruba Beacons. “We see great potential for this technology such as its incorporation within student ID cards. This would enable tracking of students on school premises to make sure they are safe and attending classes,” he said.

“We would also like to extend Beacon-based tracking capabilities to our transport buses so parents can be informed of the whereabouts of their children as they commute to and from school,” he added.

The School is also working with Aruba to explore how Beacons could be used to develop an eWallet system that is integrated with the ID cards so that students can make trackable cashless transactions at facilities such as the School’s canteen.

**A SOLID BASED FOR ON-GOING ADVANCEMENT**

“While Aruba’s solution was very cost-effective, it still incorporates the very latest 802.11ac industry standard. It will therefore be capable of meeting our requirements for years to come and will allow us to utilize new and innovative educational technologies,” said Piriyattiath.

“Thanks to Aruba, Sabari Indian School is the first Indian school in the UAE to introduce iPads in classrooms. We are confident that with their support, we will continue to maintain this technological edge and further revolutionize learning,” concluded Piriyattiath.