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Samsung's focus has been to offer tech innovations to enhance diagnostic confidence

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Samsung is committed to its mission of providing health and wellbeing through the latest technology, delivered by innovative medical device. Atantra Das Gupta, Director, HME Business, Samsung India talks about the new tech innovations of the company, plans for the APAC market and more

How has the imaging technology market evolved in India during the COVID-19 pandemic?
The imaging and radiology sector is going through a paradigm shift with advanced technologies being offered in the market for an early and accurate diagnosis. The pandemic has played a very critical role in helping us understand the importance of technology in improving patient care. An important trend will be the regulatory control on the medical device industry like patient safety and radiation control.

We see a definite shift happening from traditional analogue X-ray machines to Digital X-ray machines which offer an opportunity for a much faster and accurate diagnosis with their high image quality.

There is also a demand for X-ray machines through which patients are exposed to very low levels of radiation.

Over the last two years, we have seen a rising interest among hospitals across the country for Samsung’s AI-enabled Mobile Digital X-ray Machines that offer superior image quality with low radiation levels, which is safe even for pediatric patients. These machines come with Advanced Assistive Intelligence features and have inbuilt Li-ion batteries that allow the machine to run without electricity, delivering 200 X-rays in one full charge. To offer comfort to doctors and technicians, the machine comes with a motor so that it can be moved from one location to another with ease.

Advanced technology and groundbreaking innovations are constantly benefitting the healthcare sector and digital health and artificial intelligence will be the driving force for the radiology and imaging industry.

The Government of India has already indicated that healthcare will be an important part of their planning and budgeting. We shall see a surge in primary care home monitoring technologies, telecare technologies and diagnostic devices which means a huge scope for a boom in this industry.

What new tech innovations are we likely going to see from Samsung in this space?
Samsung's focus has been to offer technological innovations to enhance diagnostic confidence. Our R&D has worked and is working on advanced AI features and our upcoming products will be equipped with better and better healthcare solutions.

Samsung is committed to its mission of providing health and wellbeing through the latest technology, delivered by innovative medical devices. Our focus is on state-of-the-art technology offerings that encourage market adoption of Digital Radiography (DR).

Samsung X-ray machines are not only technically advanced but also environmentally friendly.

For example, lead-acid batteries are quite common in the healthcare industry. These batteries have poor efficiency and are not environmentally friendly. Samsung uses lithium-ion batteries in the mobile DR system to power the motors. Rechargeable lithium-ion batteries are easy to maintain, have a longer life and are easy to recharge.

What are the new features of recently introduced advanced imaging tech in X-ray machines?
The key advantages of DR technology are superior image quality and low radiation levels. Samsung specialises in low dose and offers advanced assistive intelligence features, which is a competitive advantage. Samsung has been a pioneer in the introduction of AI-based diagnostic features in DR and has migrated some of the features from higher modalities such as CT/MRI to enhance user experience, comfort and offerings.

Our mobile DRs come with inbuilt Li-ion batteries that allow the machine to run without electricity. These machines deliver 200 X-rays in one full charge. To offer comfort to doctors and technicians, the machine comes with a motor so that it can be moved from one location to another with ease.

The innovative features of these X-ray machines are designed to offer quality, precision, and convenience to doctors as well as patients. Some of the unique features are:

- **Low Dose Technique** – Patients are exposed to very low levels of radiation, ensuring their safety while also offering improved image quality.
- **ALND (Automatic Lung Nodule Detection)** – It marks the regions with lung nodules and helps to have a precise diagnosis.
- **Paediatrics Dose Management** – Unique technique that offers a selection of doses for Pediatrics based on body weight and not just age.
- **S-Align** – A feature that aligns the detector with the X-ray Tube to be parallel so that repeat X-rays can be avoided.

How will this new device create an impact on the healthcare sector?
We see a definite shift happening from traditional analogue X-ray machines to Digital X-ray machines which offer an opportunity for a much faster and accurate diagnosis with their high image quality.

There is also a demand for X-ray machines through which patients are exposed to very low levels of radiation.

These needs are fulfilled by Samsung Digital X-ray machines
Samsung has always pioneered in advanced technology and by using AI technology, we foresee a paradigm shift in the usage of DR systems from just taking routine X-rays to a more value-added Self-diagnosis system, which will not only help the radiologist but also the technicians and the patients in general. The waiting time for the patient and the quality of diagnosis gets enhanced drastically.

Are these devices provided to government hospitals apart from private ones? In which healthcare institutes have these devices been provided?

Samsung devices have a footprint across both government hospitals and private hospital chains. In terms of government institutes, we have installed devices in AIIMS, Army Hospitals, Greater Mumbai Municipal Hospitals and many other medical and research institutions. In the private sector, we cover 10-12 chains of hospitals like Max hospitals, Apollo Hospitals, Tata Memorial Hospitals, Fortis hospitals etc.

As part of our CSR initiative Samsung Smart Healthcare, we work closely with government hospitals across the country to make healthcare available at the grassroots level. In the last year alone, 56 new Samsung Smart Healthcare centres were added in hospitals across 19 states. These centres are equipped with modern Digital X-ray and Digital Ultrasound machines made by Samsung.

What will be Samsung's plan for the Indian and Asian markets five years down the line?
Despite being the newest in the market in the medical imaging segment, Samsung is now recognised as one of the most preferred brands of Ultrasound and DR machines. Our user base is spread across all the leading hospitals in the country.

Our R&D team is continuously working on developing innovative healthcare solutions/products to improve healthcare delivery across markets. Our key focus will be on the use of AI in early and accurate diagnosis, product designing which enhances both patient comfort and user comfort.

WRMD (Work-Related Musculoskeletal Disorder) is becoming a major cause of concern for ultrasound users. So, our design team is conducting various research works to understand the pain points and develop a product to reduce WRMDA.

How has been the company's performance during FY20-21 and what are the growth expectations this year?
We did extremely well in FY 2020-21 with our market share in the ultrasound segment growing by 200 basis points. In the digital X-ray segment, we continue to be one of the leading players. Looking at the kind of strong demand for our products, we expect to continue this growth momentum in both segments.

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