

# How Does Blockchain Improve IoMT Asset Management?

## *Culinda's Blockchain integration*



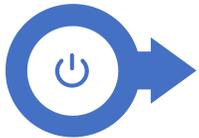
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Medical devices or IoMT devices often find themselves in different locations or organizations throughout their lifecycle. Take healthcare systems or hospital networks for example; some of these organizations include hundreds of geographically dispersed hospitals and clinics. A single IoMT device can be placed and utilized in different hospitals or buildings and rooms throughout its functioning life, across a single organization. There is also the obvious reselling of IoMT devices between different organizations.

When a single device can move between locations in distributed organizations or even hop from one organization to another, it becomes hard and sometimes impossible to track and know the true history and status of the device.

Culinda, the first company to incorporate IoMT data with blockchain technology, has solved this problem. With the use of their blockchain technology, Culinda is able to provide the consistent and continuous asset information and history.

After the initial registration of the device in blockchain a block chain ID is generated that stays with that IoMT device for its entire lifespan. Then, if an organization purchases the IoMT that had previously been utilized by other organizations or other branches and locations of the same organization, upon looking up the device's blockchain ID a plethora of information on the history and life of the IoMT will be available.





This information will not only be thorough but will have complete integrity due to the usage of blockchain. Anywhere the IoMT device goes, it can be traced by its Blockchain ID.

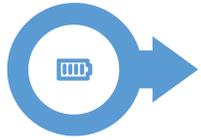


Due to the tight and necessary regulations surrounding the healthcare industry and medical devices, every medical device and vendor must be “cleared” at a minimum in the form of in-depth security assessments. This process can be time consuming, require specialized talent, and have a high cost to organizations specially as the number of IoMT in an organization increases. However, with Culinda’s blockchain integration, any IoMT that has been registered will have its entire history as well as previous security assessments attached to it which means current owners and support staff of an IoMT device can see the history of security assessments

and where and when that device had been “cleared” by others. Equally as important is the fact that due to the use of blockchain this information will be inherently immutable and have complete integrity.

With this system of tracking IoMT and all the meta data associated with it, the job of IT security and risk management teams, in securing IoMT, become much easier and effective, reduces the need for expensive asset management and risk management tracking software for IoMT, and compliance with applicable regulations and controls becomes more streamlined. IoMT and Medical devices are obviously critical tool for physicians, surgeons, nurses, and other healthcare professionals. They not only allow accurate monitoring of patients’ health but can directly affect patients in the ER, OR, or in the form of insertables like pacemakers. If a piece of this vital





equipment goes down, at best the quality of care may decrease and at worse patient safety maybe critically compromised. Properly maintained medical devices are safer for patients and staff alike. When IoMT is routinely inspected and serviced, potential problems can be identified before they cause the device to cause malfunction or cause harm.



Culinda's integration with blockchain technology allows for ever preventative maintenance and repair to be documented and instantaneously available to the staff supporting these medical devices. As well all quality assurance tests and calibrations are available on demand and most importantly the information can be completely trusted as blockchain technology nullifies any attempt to manipulate the data and information surrounding IoMT managed by Culinda.

# Culinda's Integration with Blockchain (CIB) Model

