

#### 23 May 2023 | San Diego, CA

In the run up to the Future IoT & Smart Pharma Summit we undertook a survey drawing upon the experiences of various IoT and Smart Pharma leaders across North America. Over 150 took part and this infographic gives a real insight into IoT and Smart technologies in the Pharmaceutical sector in 2020.

# WHAT IS YOUR CURRENT ROLE AND FUNCTION WITHIN THE SECTOR?



#### WHAT DO YOU SEE AS THE BIGGEST CHALLENGE WITH GETTING IOT & SMART PHARMA INITIATIVES OFF THE GROUND?

Lack of internal knowledge and experience 13% Timescales and resource required to tailor and integrate new technology and processes 8%

Size of investments required **7%** 

Regulatory pressures **10%** 

Data integrity **7%** 

Defining the value proposition for technology investment **9%** 

Gaining buy in from stakeholders and funding 9% Transitioning and implementing new solutions within existing operations





Availability and standardization of suitable technology **6%**  Keeping pace with rapidly evolving technology and selecting suitable vendors 7% Change management and bridging the skills gap with a limited external talent pool **11%** 



#### HOW DO YOU SEE IoT IMPROVING THE SECTOR?

"Significant for data transparency" "Better availability of data leading to better informed decisions" "The use of IoT should identify hidden unmet medical needs" "Making it possible to improve home health care" "Faster time to market, accurate patient follow up, adherence and much more"

to complement manual intensive clinical trials processes" "More knowledgeable leaders"

"Always-on automatic data collection

"True connected care, focused on outcome based delivery mixing the pharma and the IOT for outcome improvement"

"Educating proactively. Involving stakeholders early and often"

"There is much innovation and focus on getting closer (1on1) to the consumer. IOT devices are a foundation step that will increase the voice of the consumer and hopefully also positively impact UX"

"Potential to increase speed of communications between production, QC and QA within Company"

"Error reduction in data capture and analytics, removal of repetitive tasks" "Reduced errors, increased yields, Rising safety" "Improved visibility"

setting" "Advances in systems and system outputs creates the availability of real time data, real time decisions and real time data, time actions"

"IoT could help automate many of the tedious data capture aspects in a lab

"If we are willing to embrace the technologies, our data management can be more efficient and compliant"

time actions

"It will help in decision making and time spent making those decisions" "As an element of a greater AI strategy. AI will replace all IT and ERP systems within the next decade. Full traceability 24/7 of all elements of the supply chain no longer requires transactional based systems"
"Increased efficiency and lower error rates in the laboratory"
"More realtime measurements to integrate into experiments"
"Efficiency of data sharing"
"More compliance and reduced long term cost"
"Elimination of most time based PM. Using AI to see trends that are not visible now"

## HOW HAS IoT & SMART TECHNOLOGY HELPED YOUR BUSINESS IMPROVE?

"Accessing novel methods to monitor GMP quality requirements and performance criteria remotely"

"Advance process understanding"

"Improve business decisions and time to market"



"Reduce geographical restrictions and expand coverage" "Quicker access to data for business decisions, improved

Provides rich data, trends etc for decision making and action taking"

#### "Reduction of errors and increase outputs"

"Reducing waste"

"We are able to combine global data to get a holistic picture of our company in real time. This allows for us to navigate the waters of our market with precision" "Monitoring KPI and accessing potential"

"Less mistakes and more effective work"

"Automate calculations control instrumentation

"Time saving & perfection"

#### AT WHAT STAGE ARE YOU WITHIN YOUR IOT, TECHNOLOGY AND DIGITAL TRANSFORMATION JOURNEY?



WHAT ARE THE BIGGEST CHALLENGES RELATING TO PLANNING, DESIGNING AND IMPLEMENTING YOUR IOT STRATEGY?



27%



#### WHAT DO YOU EXPECT TO BE THE BIGGEST ROI FROM YOUR IOT PROJECTS?



#### WITHIN THE NEXT 2 YEARS WILL YOUR BUDGETS FOR IOT AND SMART PHARMA BE:



### WHAT TYPES OF TECHNOLOGY ARE YOU LOOKING TO INVEST IN?









#### WHAT CAN THE VENDOR COMMUNITY DO TO SUPPORT THE PHARMA SECTOR IN ACCELERATING THE ADOPTION OF IOT TECHNOLOGY?

"Continue to pursue opportunities to enable products to be manufactured where they are consumed" "Plug and play standards common platform to allow connection of many solutions" "Help in understanding the added value of using their solutions - Why should we use them?"

"Keep costs low"

"Standardize platforms and increase interoperability"

"More clear value propositions to make our selection process easier"

> "Communicating successful implementation examples and caser studies"

"Come to us with experience in handling not only the tech, but the privacy as well as understanding that this needs to work all the time, true 24/7/365"

"Provide more support in building ROI business case and sharing use cases related to our business and indications"

"Sharing of information, the more we know the better"

"Share the Success Stories... real application...rather than simulated /hypothetical examples.....let it be with actual facts no matter ...small incremental improvement in a short

period of observational period

"Educate us"

"Cheaper, faster, better, easier to adapt"

"Detailed ROI examples"

"Demonstrate integration with platform applications such as ELN, LIMS, etc. If there is continuity in data flow from IoT to the data capture system, I can see rapid adoption of IoT devices"

"Significantly improve security, compliance, and data integrity"

"Spread the word! Tell us why with examples why we would need to use it?"

"More friendly applications"

"Provide customizable solutions for different needs in a cost efficient manner with after sale support"

"Vendor community should develop tailor made solutions in consultation and collaboration with industry"

"Reduce the cost"

"Demonstrations of equipment functionality"

"Case studies that have a confirmed ROI"

"More use cases"

2



23 May 2023 | San Diego, CA

Leveraging Disruptive Technology to Revolutionize Life Science Manufacturing Processing and Supply

Increasing global demand for accessible, equitable, and high-quality medicine is driving Pharma and Biotech manufacturers to embrace digitalization and Pharma 4.0 initiatives.

Join industry experts in May to collaboratively discuss, share insights, and gain the necessary tools to streamline your transition towards the smart manufacturing facilities of the future.