



*"When a man is tired of London, he is tired of life"*  
Samuel Johnson, 1771



# **A Zero Capex Sample Management Solution for Low Cost, Ethically and Regulatory Compliant Biobanking**

**By**

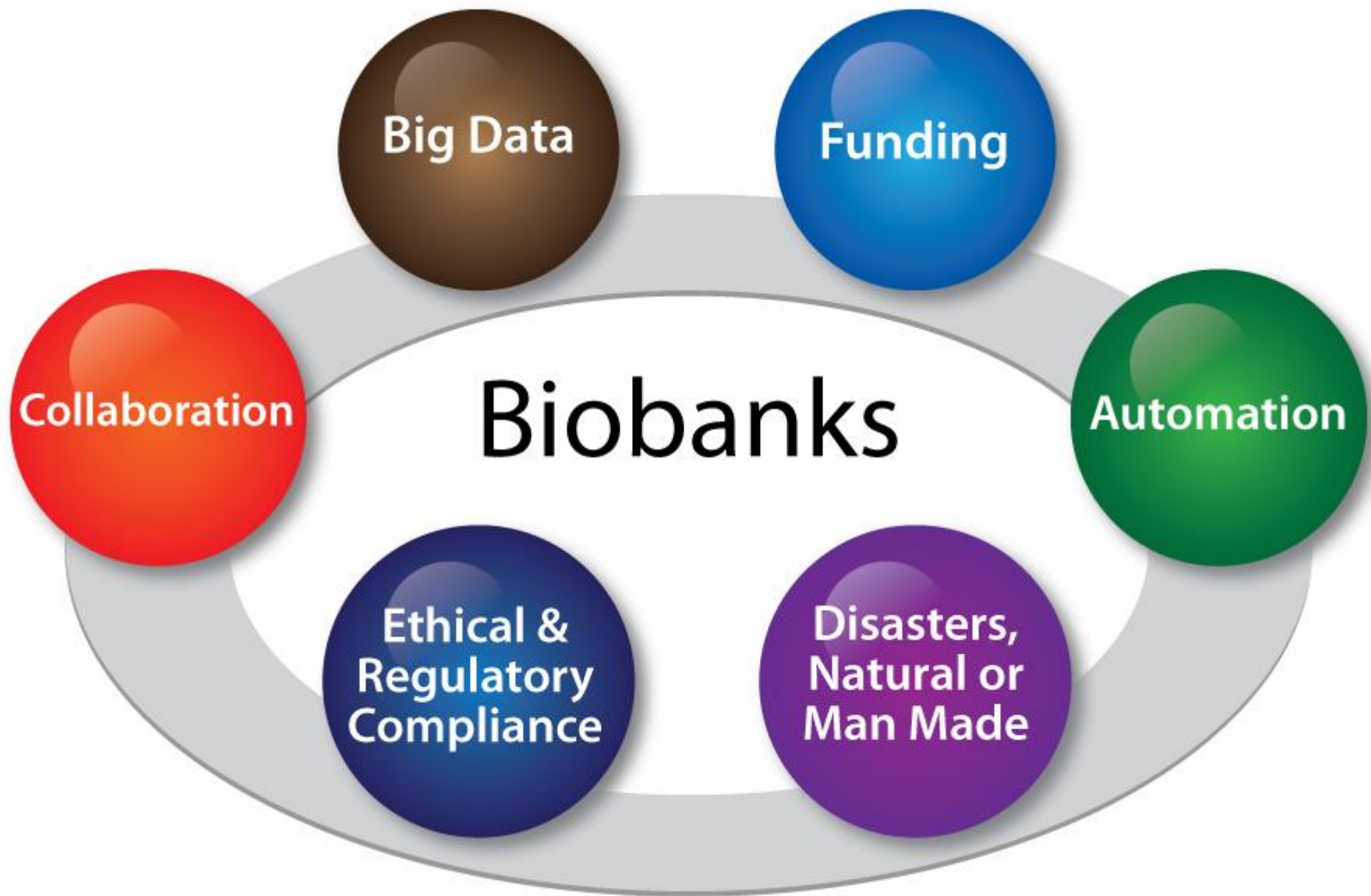
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# Challenges Faced By Biobanks



# Automation

## Managing biological specimens using spreadsheets program & lab notebook tools:

- **Laborious and time consuming**
- **More likelihood of human errors**
- **Unorganized labs**
- **Delay in project completion**

# Funding

## Funding issues for developing and managing biobanks:

- **Expensive**
- **Funding shortages**
- **Short term funding by government organizations such as universities and hospitals**
- **No or limited budget for informatics support**

# Big Data

**Large biological data sets (e.g. tissues, blood and derivatives, other body fluids, cells, DNA, etc. and associated data results in:**

- **Data variation (Heterogeneous data set)**
- **Data complexity**
- **Data storage**
- **Data searching and visualization**
- **Data access and sharing of information**
- **Data management**
- **Data privacy and security**

# Collaboration

**Sharing of data is imperative but posed by several challenges:**

- **Significant variation persists among the legal and ethical norms within the different biobanks**
- **No data sharing with collaborators in real time**
- **No inter-connection between network of biobanks**
- **Delay in decision making**

# Ethical and Regulatory Compliance

## Ethical and regulatory compliances in biobanking:

- **Informed consents**
- **Regulatory compliances HIPAA, 21 CFR Part 11  
European Directives**
- **Research ethics**
- **Data encryption**

# Disaster Management

## Disaster Management Issues:

- **Loss of samples and associated data**
- **Ineffective backups**
- **No support services**



# Overcome Challenges using Cloud Technology

- **No operational expenses, no need to buy, setup and maintain hardware**
- **Scale as your needs grow**
- **Access through any browsers anytime anywhere just as accessing Gmail, Facebook and Twitter.**
- **Data sharing with collaborators in real time**
- **Reduces burden on internal IT staff**
- **Cloud services are now compliant with HIPAA**
- **No interruption in services & speed up the research**

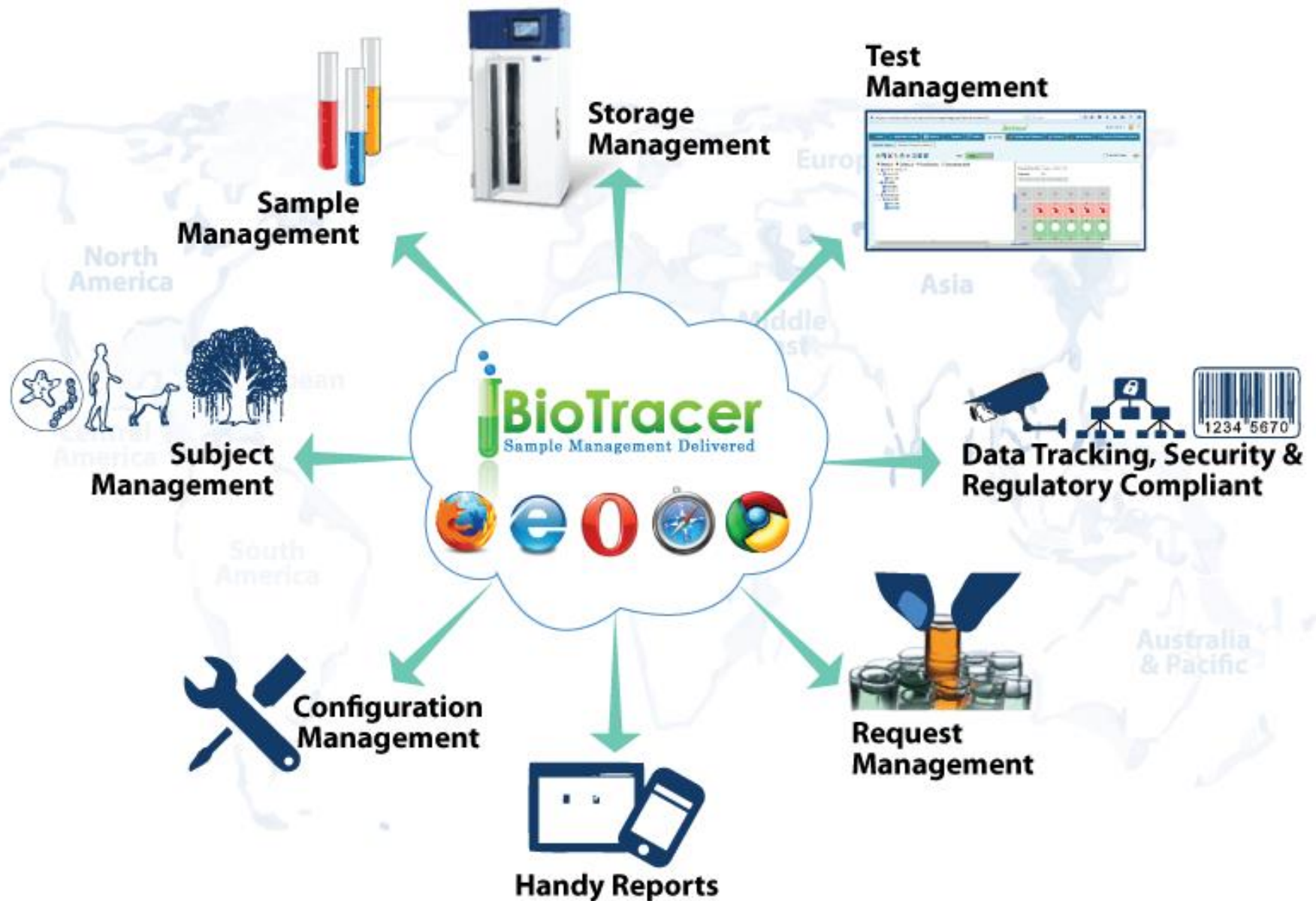
## One complete solution for your efficient Biobanking

- **An affordable solution offered as SaaS**
- **Simplifies your laboratory operations by managing, tracking and efficiently organizing samples and freezers**
- **Hosted on cloud, no need to invest in IT infrastructure & personnel**
- **Access anytime anywhere. All you need is a device with an Internet connection**
- **Ethics and regulation compliant**
- **Suitable for biobanks of any shape and size**

# Major Focus on Data compliance and Security

- **256-bit encryption, secured data transmission between the client and server**
- **Network security via firewall/route tables, IP spoofing, port scanning, packet sniffing, VPN gateway, etc.**
- **Stringent server and auditing guidelines**
- **Adhere to SLAs to provide fool-proof security and privacy, 99.95% uptime and multi-tenancy**
- **Unique login credentials (ID and password) which are masked even from CloudLIMS.com employees**

# BioTracer<sup>®</sup> Features



**Thank You**  
For more details, Visit Booth #28

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