CIPHER SKIN

PREDICTING FAILURE WITH AUTHENTIC DATA

VISION ///

COLLECTING DATA TO PREDICT FAILURE

Through unlimited access to complete, genuine data, Cipher Skin makes it possible to predict failure before it happens - at any time, on any object, from the human body to the built world.

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VISION ///

A WORLD MADE OF CYLINDERS AND FLAT SURFACES

Cipher Skin wraps cylinders and surfaces in a sensor mesh to measure their movement and behavior.

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VISION ///

Through the trillions of high-quality data points collected, Cipher Skin enables complex analyses to understand how the objects interact with their environment, thus predicting future failure.

One cylinder

Two cylinders

Three cylinders

CIPHER SKIN

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PROBLEM ///

A BOOK WITH MISSING PAGES

Personal injuries, pipe leaks, bridge collapses - Failure happens everywhere, costing lives and billions of dollars every year.

Current technology can’t predict failure.

It can measure some individual pieces of data but cannot capture a complete picture of an object and its behavior, in time and space, with extreme precision.

Like a book with missing pages, incomplete data makes it impossible to read an object’s story and predict its future.

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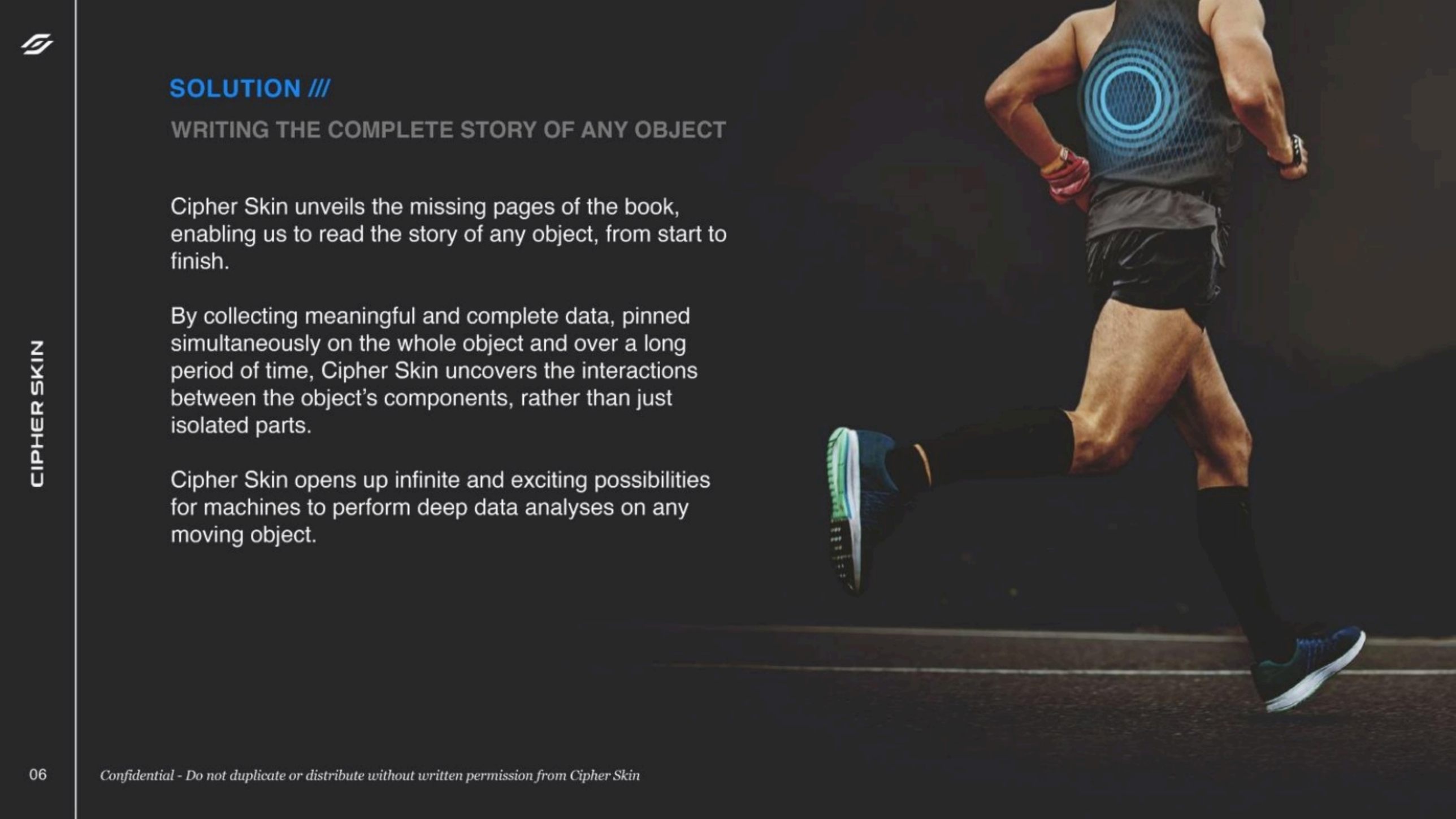
SOLUTION ///

WRITING THE COMPLETE STORY OF ANY OBJECT

Cipher Skin unveils the missing pages of the book, enabling us to read the story of any object, from start to finish.

By collecting meaningful and complete data, pinned simultaneously on the whole object and over a long period of time, Cipher Skin uncovers the interactions between the object's components, rather than just isolated parts.

Cipher Skin opens up infinite and exciting possibilities for machines to perform deep data analyses on any moving object.



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CIPHER SKIN TECHNOLOGY ///

DIGITAL MIRROR™
REAL-TIME DATA VISUALIZATION

The trillions of data points collected from the Cipher Mesh are transmitted wirelessly to a software application that models movement in 3 dimensions and gives a real-time representation of the object.

Cipher Skin's unique dataset creates a Digital Mirror™ of the behavior of the monitored object, from the human body to the built word.

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CIPHER SKIN TECHNOLOGY ///

CIPHER CLOUD
DATA AGGREGATION

Cloud connection via API
All data transmitted from the Cipher Mesh is collected over time and managed in the Cipher Cloud.

Unique, complete database to predict failure
Through the rich datasets it generates, Cipher Skin enables analysis that leads to the prediction of structural and functional failure.

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PRODUCTS ///

CIPHER SKIN SMART SLEEVE

The first product designed and manufactured by Cipher Skin is a smart sensor sleeve that enables the user to visualize, through the Digital Mirror™, 3D real-time movement and integrity of one cylinder.

Cipher Skin Knee BioSleeve
Training and Recovery

Cipher Skin Pipe Sleeve
Pipe Monitoring and Breach Detection

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MARKET POTENTIAL ///

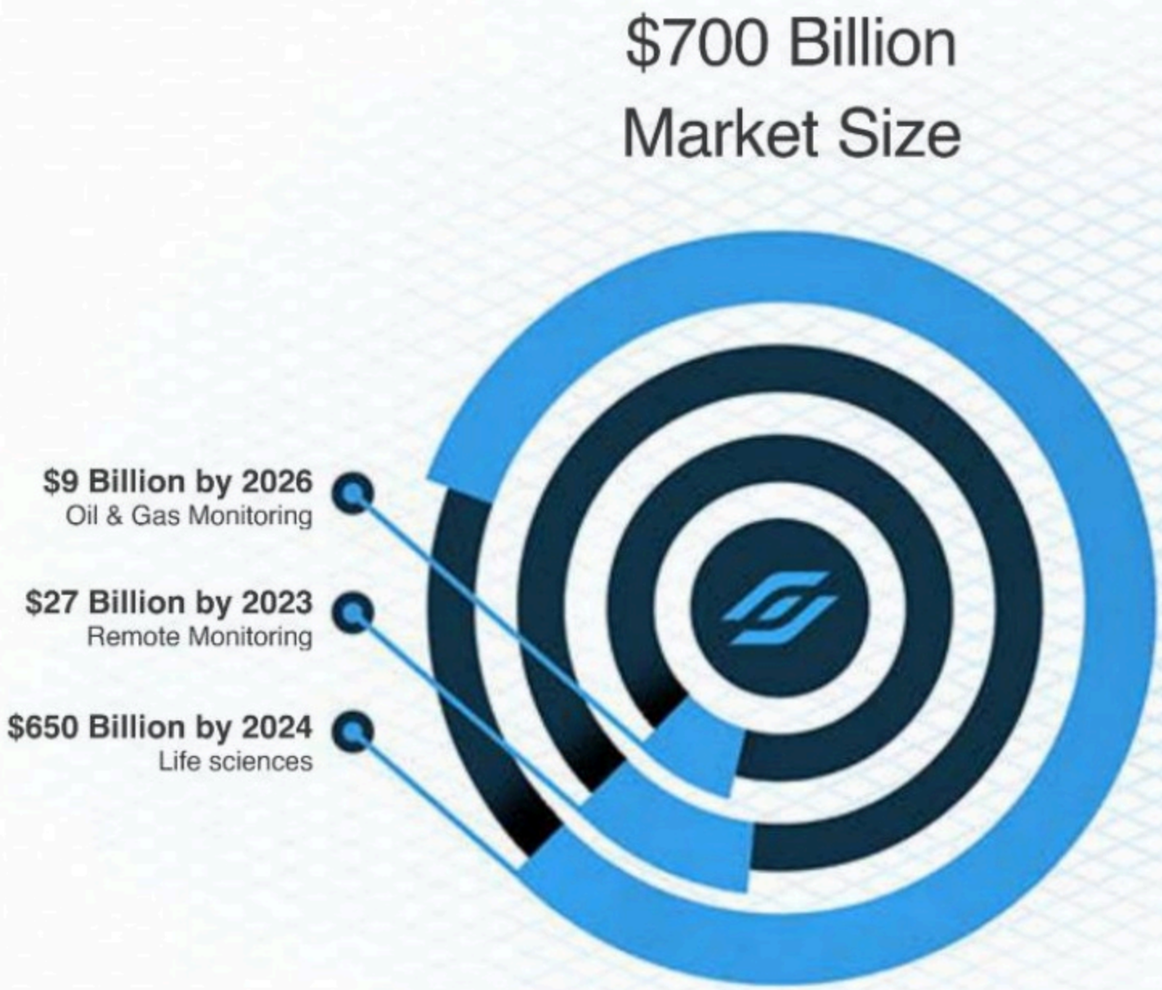
MULTIPLE APPLICATIONS

By 2023, the total addressable market for a few Cipher Skin applications will exceed $700 billion. The majority of this TAM lies in the life sciences, and the remainder existing in industrial monitoring.

Sample application areas

Bio
Athletics: training and recovery
Heat stroke prevention
Remote employee monitoring
Remote patient monitoring

Industrial
Pipe monitoring and breach detection
Stress test monitoring (pipes, tanks, etc.)



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WHY INVEST NOW ///

12 MONTHS
Full Commercialization of Cipher Skin's Sleeve
One cylinder

24 MONTHS
Full Commercialization of Cipher Skin's Leggings
Two cylinders

36 MONTHS
Full Commercialization of Cipher Skin's Tee-Shirt
Three cylinders

ENGINEERING & LEGAL

Software Development
Database Development

Full Stack Software Engineer
Back End Software Engineer
Software Engineer – Mobile iOS
Data Scientist
QA Engineer

Pilot Manufacturing
Material & Equipment Costs

University Research
Sponsorships

Patent filing
FCC Licensing

SALES & MARKETING

Sales Representatives
Customer Success Manager

Product Marketing
Development
Trade Shows

Series A Funds

Detailed Proforma

OPERATIONS

Costs of goods of operating and supporting pilots

Office operations

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APPENDIX ///

CUSTOMER-SPONSORED CO-DEVELOPMENT

SAMPLE APPLICATIONS

PRODUCTS DEVELOPED SO FAR

PIPE SLEEVE

KNEE AND ARM BIOSLEEVES

BIOHELMET

UPCOMING PRODUCTS

BIOLEGS

BIOSHIRT

CIPHER SKIN TEAM

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CUSTOMER-SPONSORED CO-DEVELOPMENT ///
CONVERTING EARLY PARTNERS INTO LONG-TERM CUSTOMERS

Over 90 days, Cipher Skin provides support to early customers in the application development and testing phase, with established milestones. We convert them into long-term customers through multi-year data subscription.

Purchase of Cipher Skin's Product Package

The customer purchases Cipher Skin's product package:

- Customized data delivery vehicle for the customer's application
- Digital Mirror™ Software Application (data visualization - iOS - iPad)
- Data storage and unlimited access to the Cipher Cloud

Product Testing and Feedback

During the testing phase, Cipher Skin provides:

- Periodic software updates
- Customer Support
- Technical Support

Multi-year Customer Partnership

Upon successful product testing, the customer converts to a multi-year contract:

- Aggregation and management of the customer's data
- Access to Cipher Cloud anonymized database
- Access to insights and predictive analytics

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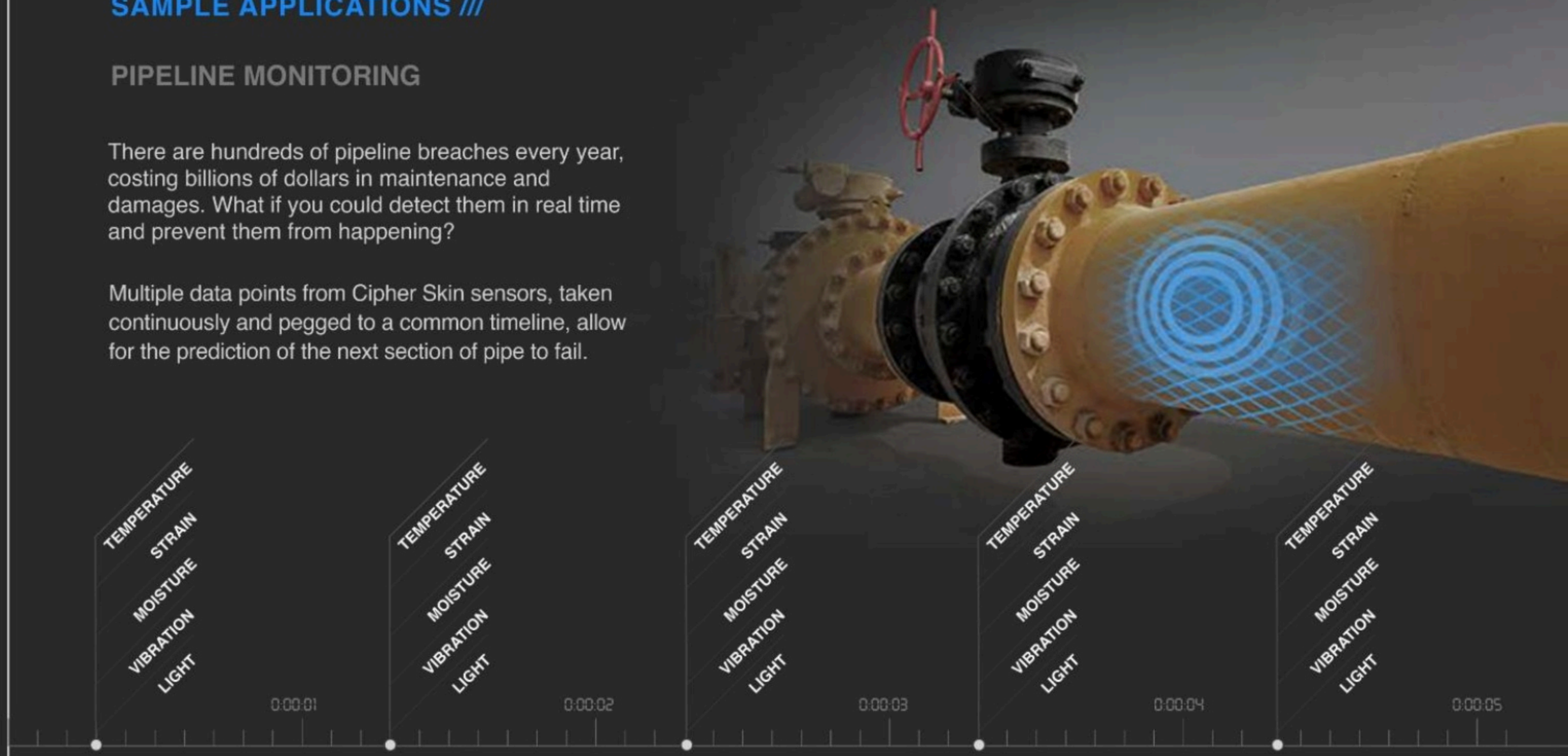
CIPHER SKIN

SAMPLE APPLICATIONS ///

PIPELINE MONITORING

There are hundreds of pipeline breaches every year, costing billions of dollars in maintenance and damages. What if you could detect them in real time and prevent them from happening?

Multiple data points from Cipher Skin sensors, taken continuously and pegged to a common timeline, allow for the prediction of the next section of pipe to fail.



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SAMPLE APPLICATIONS ///

ATHLETICS

Next-Level Performance Training

Through its patented sensor network, Cipher Skin is able to capture a complex series of data points well beyond simple movement. Cipher Skin helps create a holistic picture of athletic performance, allowing elite athletes to take their game to the next level.

Sample Sensor Measurements

- BODY POSITION
- HEART RATE
- RESPIRATION RATE
- 12-LEAD EKG
- CUTANEOUS GLUCOSE
- GALVANIZATION
- CUTANEOUS CONDUCTIVITY THRESHOLD
- SUPERFICIAL NERVE CONDUCTIVITY
- TEMPERATURE THRESHOLD
- SWEAT CONTENT
- ELECTROMYOGRAPHY
- AND MORE

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