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Activinsights



INTERNATIONAL WORKSHOP
DATA PROTECTION IN REAL-TIME
Transforming Privacy Law into Practice

9-10 September 2019

University of Oxford, United Kingdom

Delivering healthcare innovation using open standards

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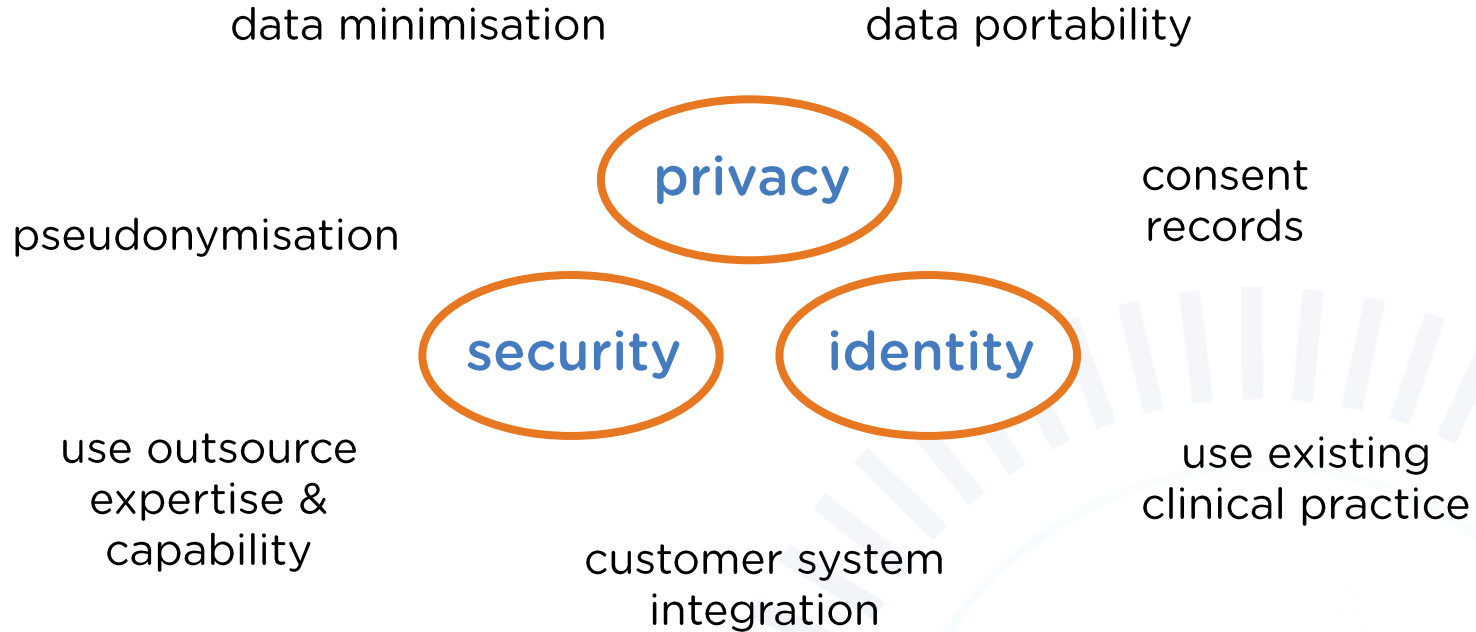


- Activinsights delivers data services to healthcare professionals, providing patient lifestyle and behaviour insight using wearables and other connected devices.
- The roots of the business are in research - high precision, raw data within a highly controlled, ethical environment to develop algorithms.
- Clinical & health management markets have different needs - ease of deployment, integration, timeliness of results, validated algorithms / endpoints etc.



The needs drive the specification of a cloud-based digital infrastructure.

Architecting privacy-by-design infrastructure



OASIS COEL

Standard for managing data about people in the IoT.

- Roles
- Data types
- Interfaces



Roles

Data Engine



Service Provider



Operator



Consumer

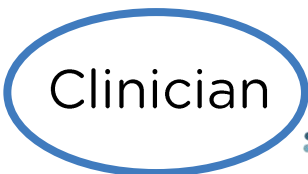


Device



Data Types

Pseudonymised
Behavioural
Events

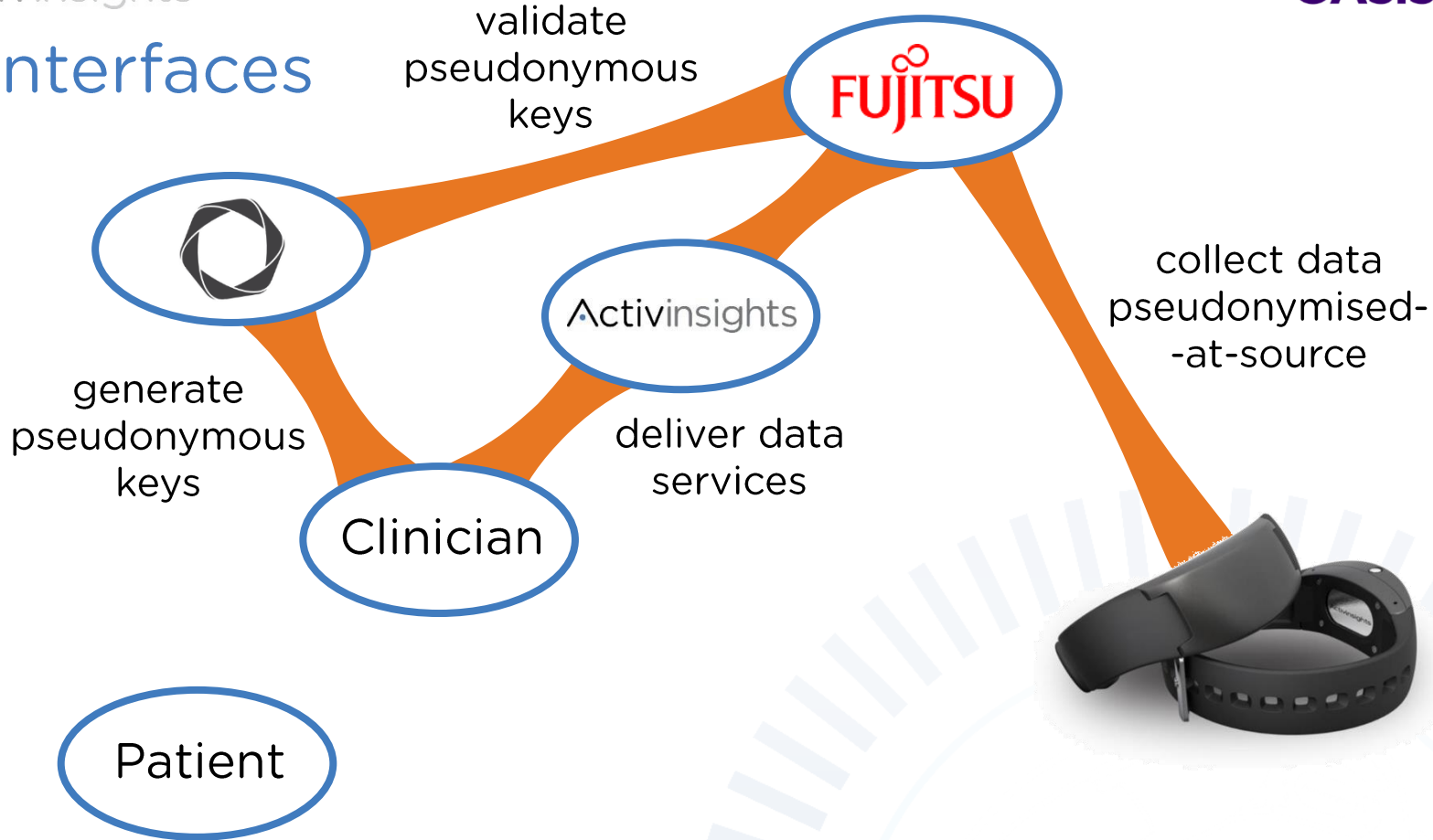


Directly
Identifying
Personal
Data



Cluster

Interfaces






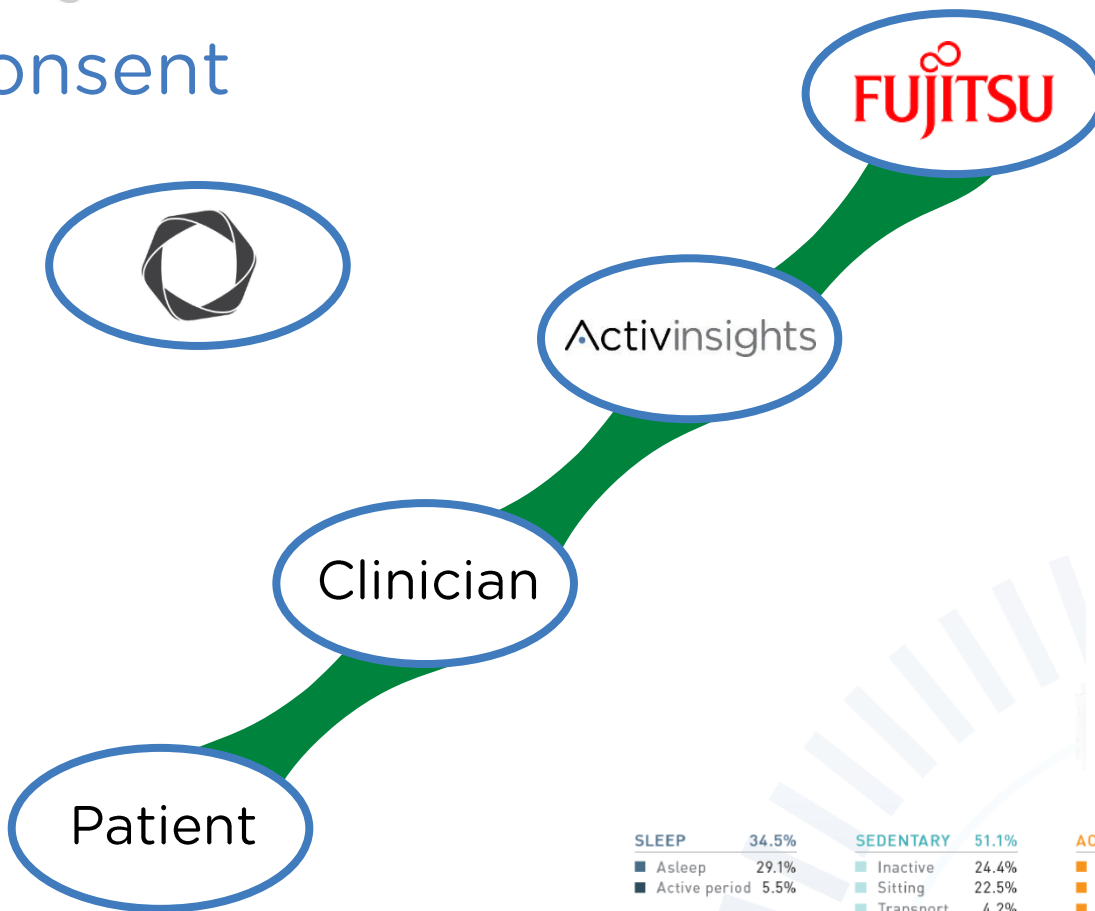
kantara TM INITIATIVE

Consent Receipt

Provides a standardised notation for a record of consent.

- Time-bound event
 - Identities of parties
 - Data types & purposes
 - Notice details
- 

Consent



What is the device measuring?

It measures movement and provides lifestyle analysis based on scientifically validated algorithms to give objective behaviour data around your physical activity and sleep. The Activinsights Band detects up to 10 basic activities with estimates of steps, movement and energy expenditure.

Why measure my behaviour?

Lifestyle measurement is fundamental in understanding the intricacies of people's daily lives and how behaviours impact health. One week of data collection is enough to provide screening information or support a differential diagnosis.

Does it know my location?

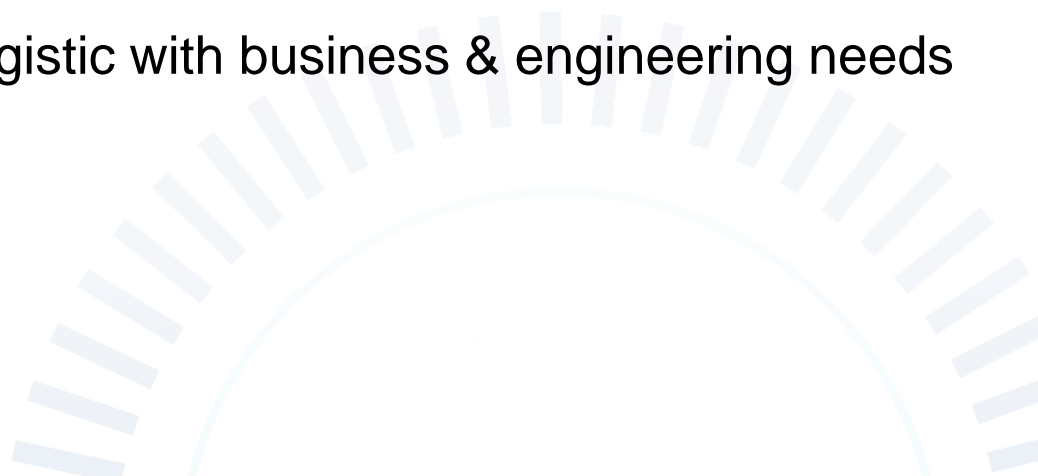
No, the device does not have GPS or any other location recording capability. Once the activity data is uploaded, only the healthcare professional can match the behaviour data with your directly identifying personal information.

Is the data safe?

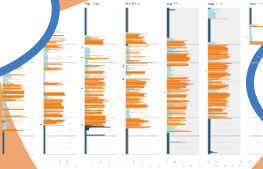
Yes, the device carries no information that can identify you directly. The Activinsights Band uses the Coalition global standard to give confidence and security to both patients and practitioners.

SLEEP	34.5%	SEDENTARY	51.1%	ACTIVE	14.9%	EXERCISE	0.6%	EVENTS MARKED	23
■ Asleep	29.1%	■ Inactive	24.4%	■ On the go	2.9%	■ Working out	0.1%	● Button press	
■ Active period	5.5%	■ Sitting	22.5%	■ Standing	9.7%	■ Running	0.5%		
		■ Transport	4.2%	■ Walking	2.3%	■ Swimming	0%		
						■ Cycling	0%		

Summary

- Privacy-by-design specification achieved with minimum engineering
 - Customer credibility and acceptance
 - Access to shared resources
 - Maximise utility while minimising privacy risks
 - Early privacy decisions synergistic with business & engineering needs
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- A decorative graphic in the bottom right corner of the slide, consisting of a light blue gear-like shape with a semi-circular arc and radial lines extending from it.

Pseudonymised Behavioural Events



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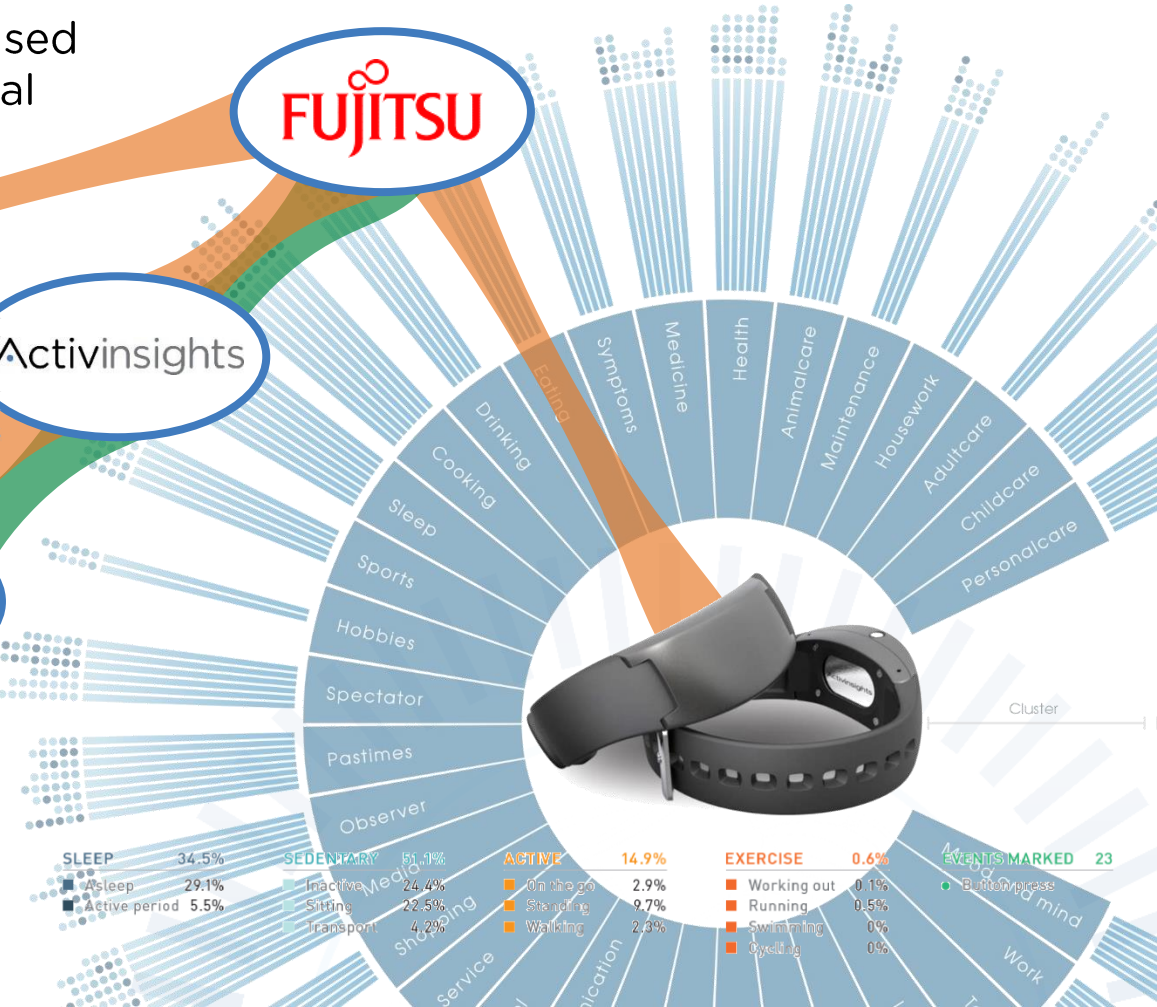
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EVENTS MARKED 23
 Bluetoothpress



Future

- Internet of Things
- Patient-centric data access
- Anonymisation for safe data sharing
- Machine readable privacy policies



MyData 2019

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