2013
Federal Mobile Collaborative Sessions

July 8th

Components of Contextually Aware Mobile Ecosystems

Collaborative Lead:

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Determine Context:

- Geolocation
- Sound
- WiFi Triangulation
- Bluetooth Low Energy
- ARP
- Anomolistic Behavior

Context =
who, what, where, why

Actions based on context:

- No access
- Wipe data
- Turn on/off device features (camera, radio)
- Configure device for efficiency (e.g. correct default printer)
- Present data with highest value for time/mission.

Issues:

- Privacy / data collection

7/8/2013

Collection of Data

AUTHENTICATION/ IDENTITY

PRIVACY? Litigation Risk?

PROXIMITY

RF Technologies (BLE, ANT,)

Medical / Bio Data

Audio

PUSH OR PULL DATA (ALERT)

Velocity, Variety, Value of Information

- Location = lat-long, lat/altitude above mean sea level, density, altitude, proximity to boundaries, borders, or movings of events that are violations or warnings of events and is the trigger activation, aliance, altitude (yaw, pitch, roll) relative to a standard datum.

LEVELS of Contextually Aware?

- technology doesn't work
- people work
- people use technology to do work
- work = job to be done

Tied to MISSION

INCONSISTENT

Economic, Crime, Personal Law Enforcement, etc. categories

TRENDING - BI

Technology Doesn't Work • People Do

People use technology to do work. WORK = Job to be done

CONTEXTUAL ENCRYPTION

Collection of Data

AUTHENTICATION/ IDENTITY

PRIVACY? Litigation Risk?

PROXIMITY

Different Context technologies for diff Data Classification

Size, connectivity, quantity of devices for viewing, entering, changing data

Location of data capture ①

Location of data analysis for data-based decision ②

Location of data-based decision ③

arbitraging data asymetric effort to benefit capturer v. provider v. user

RF Technologies (BLE, ANT,)

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PUSH or PULL DATA (ALERTS)

Velocity, VARIETY, Value of Information V⁴ I

relative to long-term and near-term trend and stability of the trend, and the operator/owner controlling/owning the obstacle, object, person, and what they are capable of relative to a subject. the subject's object, or subject's location — these into

LEVELS of Contextually Aware?

Governance Business decides

Tied to MISSION

What are tracking?

INCONSISTENT

Economic, Crime, Personal Law Enforcement, etc. categor

TRENDING - BI

• technology doesn't work • people work • people use technology to do work • work = job to be done

technology Doesn't Work • People Do

People use technology to do work. WORK = Job to be done

Shift from IT driven to user driven

VPN

ENTERPRISE vs SENSOR DATA

ACCESS MANAGEMENT

ENTERPRISE IT IS SERVICE THAT MANAGES USER ⟷ DATA

CONTEXTUAL ENCRYPTION

Components of Contextually Aware Mobile Ecosystems

Size, connectivity, quantity of devices for viewing, entering, changing data

Different Context technologies for diff Data Classification

PRIVACY? Litigation Risk?

Decisions allocate risk & resources

RF Technologies CBLE, ANT,

Location of data capture ①

PROXIMITY

AUTHENTICATION/ IDENTITY

What is the product of the user's purpose Dept of Army: Readiness at Best Value

ENTERPRISE IT IS SERVICE THAT MANAGES USER ⟷ DATA

TRENDING - BI

Governance Business decides

What are We doing?

Contextual App What is it? - Adapts to the User Who, What, Where, When, How

CONTEXTUAL ENCRYPTION

ACCESS MANAGEMENT

Tied to mission

INCONSISTENT

Medical / Bio Data

PUSH OR PULL DATA (ALERTS)

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ENTERPRISE vs SENSOR DATA

arbitraging data asymetric effort to benefit capturer v. provider v. user

Value of Information VⁿI

From data hunter-gathered to data farming/mining to data harvesting

event capture in a one-way stream vs transaction in a two-way stream

Location of data-based decision ③

unburdening people from labor intensive tasks

Shift from IT driven to user driven

security of non-aggregated data vs aggregated data in a one-way stream

Location of data analysis for data-based decision ②

information is a measurement to reduce uncertainty about a decision needed to be made

AUTHENTICATION AUTHORIZATION (CONTEXTUAL)

LEVELS of Contextually Aware?

relative to long-term and near-term trend and stability of the trend, and the operator/owner controlling/owning the obstacle, object, person, and what they are capable of relative to a subject, the subject's object, or subject's location - & their info

• technology Doesn't Work • People Do

VPN

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