



SAP
Innovation
Awards 2019



SAP Innovation Awards 2019 Entry Pitch Deck

**Data Driven Mental Healthcare Powered by SAP HANA®
Data Anonymization and SAP Analytics Cloud**

HarrisLogic

THE BEST RUN



About HarrisLogic



Patients in the behavioral health system are being evaluated and assigned treatment based on a fraction of the data that could be available. Providers do their best with the information they have, but inevitably many patients still remain dependent on services they receive. The key to understanding “why” lies trapped away in the vast amount of protected data spread across all public service providers. Integrating this data and providing comprehensive insights that bring hope and healing to patients is our mission.

Our clinical experts have worked alongside public health professionals to develop StellaLOGIC. StellaLOGIC is a proven data platform used by providers, administrators, and civil liberty professionals to reduce suicides, decrease mental health populations in jails, increase mental wellness services to professionals, and assist emergency departments with complex mental health cases. In a common mission with SAP, we are further developing our capabilities to provide evidence-based clinical support tools, predictive modeling, and population health analytics.

HarrisLogic is proud to be partnered with industry leaders like SAP, Zero Suicide Institute, American Association of Suicidology, University of Texas Southwestern, and many more who all share the same desire to improve the quality of life through more effective patient care.

Privacy and Insights – The Case for Data Anonymization

HarrisLogic



“Quote”

"The ability to protect data and create insights will add not only value, but draw customers looking to embrace privacy by design."

Hudson Harris,
Chief Engagement Officer

Challenge

Compliance with regulatory requirements and privacy regulations, such as HIPAA, commonly restrict the consumption and sharing of protected data needed to produce critical and comprehensive insights.

Solution

Utilize SAP HANA and SAP Analytics Cloud to build a real-time, anonymized, intelligent platform that consolidates and transforms behavioral health data into life saving analytics.

Outcome

Demonstrate that highly sensitive data, such as mental health records, can be safely anonymized while still producing actionable data insights.

(1) **Real-time** behavioral health care **data** models **enhancing patient treatment**.

(2) **Anonymized life saving analytics** from data previously unavailable.

(3) **Harmonized patient data across providers** now possible.



Business Challenge & Objectives

HarrisLogic operates environments that are data-rich and must adhere to regulatory challenges such as HIPAA, 42 CFR Part 2, CJIS, plus individual and varying state regulations.

We routinely work with clients in crisis, mental health environments, and emergency systems. Despite the known value of sharing data across these fields, the inability to anonymize often stymies research into cross-environment data silos.

As a consequence, poor coordination leads to fewer outpatient appointments, lower adherence to treatment plans, system-wide inefficiencies, and increased readmissions.

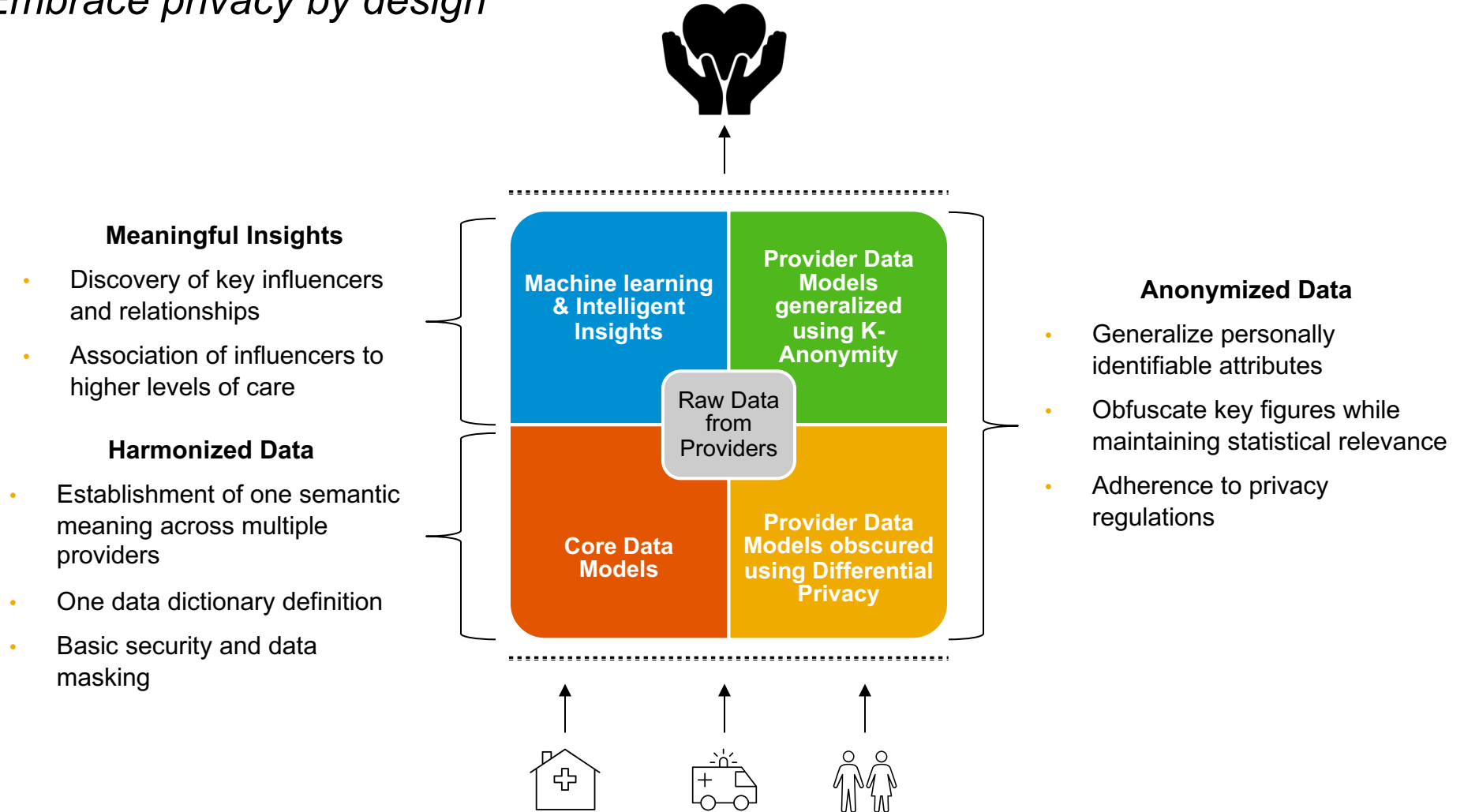
This project will have three demonstrable objectives:

- (1) Harmonization of public services data into a "common anonymized truth"
- (2) Meaningful analytics based on anonymized data
- (3) One common API making anonymized data available to any system, person, or process



Project / Use Case Details

"Embrace privacy by design"





Benefits and Outcomes

Business / Social

Real-time Data Enhancing Patient Treatment

Live data sets protected by SAP HANA Data Anonymization provide ease of mind in complex IT environments. If the real data is never disclosed, the risks for individuals of re-identification associated with use decline.

Better understanding of the healthcare flow across the operating environment leads to improved patient engagement, driven by accurate care plans and accountable health providers.

Accelerate new participation within the industry.

IT

Harmonized Patient Data Across Providers

“Privacy respectful” analytics originating from various data sources to protect individual identities and drive better data models for healthcare.

Accuracy of the intelligent algorithms to identify unknown patterns increases with the data size and with the additional data sources now available.

Human Empowerment

Anonymized Life Saving Treatment

Too often fear prevents organizations from delving into their own data. By changing the way we see data and the risk associated with viewing data, we open new paths to research and provision of better care and enable a deeper collaboration among healthcare providers.

Increased acceptance level and participation rate in therapy measures.

Increased patient trust and well-being, as well as optimized use of scarce resources at lower cost.



Architecture





Deployment

Date of Deployment or POC: 1/29/19

Number of live users: n/a

SAP Technologies Used:

SAP HANA	PoC
SAP Analytics Cloud	PoC

Server Processor: tbd

Linux Distribution: tbd



Emerging Technologies and Use Cases

The following Emerging Technologies and use-cases are part of the project and describe the contribution

	Technology or Use Case	Yes/No	Contribution to Project
1.	Machine Learning / Artificial Intelligence	Yes	By using SAP Analytics Cloud Machine Learning capabilities, we are able to discover key influencers and relationships in the data that reveals unknown behavioural patterns (e.g what contributes to the need of higher level of care within individuals)
2.	API Economy / Integrate the Intelligent Enterprise	Yes	By using SAP HANA and the power of the Intelligent platform, we are able to demonstrate that protected data can now conform to privacy regulations. This anonymized access to behavioural health data opens up the door for the establishment of new API's and data standards. Through this project will not attempt to codify any standard or publish an API, it will demonstrate that the possibility now exists.