



3adda Profile and Glimpse of products

**Presented by
Amira Abaza**

Amira Abaza

Slide 1

Meet Our Team

Our Founder: Muhammad Hijazi (InsurTech Expert)

MSc. Degree in the Management Information Systems

cbip
Certified Business
Intelligence Professional

tdwi
THE DATA WAREHOUSING INSTITUTE

ASQ

Certified Six Sigma
Black Belt
The Global Voice of Quality™

Over 25 years' experience in building Business Intelligence Solutions for Corporate and Commercial enterprises, Extensive experience in the Insurance industry with special focus on the Medical Line. Proven International quality delivery for enterprise wide projects providing sustainable, robust solutions overall the Insurance Value-Chain Processes using his deep Hands-on Experience in the Insurance Business processes and systems.

Teaches BI Systems to Computer Science senior Studies at Cairo University and at 3adda BI Academy.



3adda's profile

3adda combines the **Data Science** and **AI** Methodologies and Technologies with **Business Analysis**, in order to reach the optimum customer **profitability** and business goals.

3adda is the Sole Egyptian BI Solutions company specialized in the Medical intelligent solutions in a market of big players--**SAS, IBM, Oracle,.....**

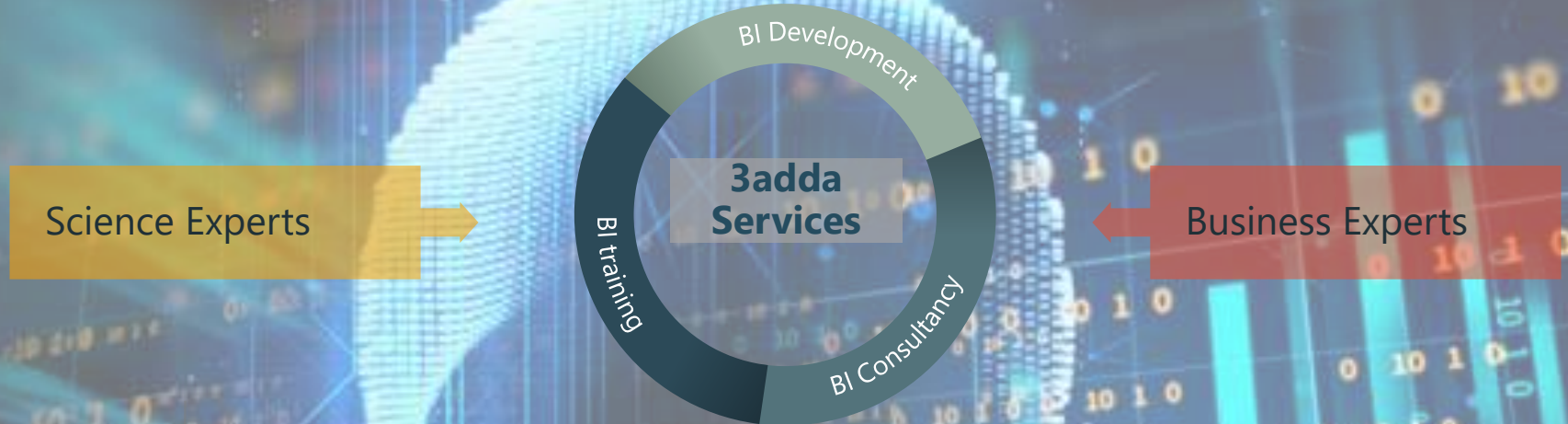
3adda plan to be the first **InsurTech** Company in the region, due to experience in Insurance business and experience of tailoring technical solutions to serve the Insurance Business continuity.

We're a Team of **passionate experienced Certified BI Professionals, Data-scientists** and Big Data Developers and experienced Matter Experts in the Medical Insurance Industry.

The Story of 3adda



3adda services



BI Consultancy Services

Audit and Qualify your BI under-development projects.

Suggest BI Solutions for complex issues.

Align your BI systems with your enterprise strategies

From Complexity to Clarity

RFP & RFQ Services for Governmental & Enterprise BI Systems

BI Development Services

- Design & Develop Data Warehouses
- Building Dynamic Interactive Collaborative Dashboards.
- Advanced Analytics
- Machine Learning Predictive, Descriptive and Cognitive Prediction
- Data Mining, NLP.
- Cubical OLAP Analysis.
- Complex Data Extraction, Transferring and Loading Projects.

BI Training

Certified experienced instructors for BI courses, our course list includes

- Introduction to BI, Data Warehouses, Designing, Building and Operating
- Building OLAP System Project (Optional)
- Building Data Mining Models
- Data Mining Project (Optional for advanced courses)
- Building BI Advanced Reporting Solutions

3adda Clients



البنك السعودي الهولندي
Saudi Hollandi Bank



United
Nations



فال القابضة
FAL HOLDINGS



MANTRAC



Cairo University



جامعة ٦ أكتوبر
October 6 University Egypt

3adda partners



3adda's specialization

Successful Customer Experience:

- FDPS Cloud solution and On-Premises solution
- Advanced Analytics for Medical Insurers
- Services Mapping

Projects approved and licensed by ITIDA :

- IHIS
- Medical Fraud detection(Cloud and on-premises)

Products for Insurance intelligence:











- Smart Scan Solution
- Smart Card Solution
- Customer Retention
- 3adda BIAAS



FDPS Fraud Detection and Prevention System

AI is the future of Health Sector services Worldwide

Top 10 AI Applications

	APPLICATION	VALUE*
	Robot-Assisted Surgery**	\$40B
	Virtual Nursing Assistants	\$20B
	Administrative Workflow Assistance	\$18B
	Fraud Detection	\$17B
	Dosage Error Reduction	\$16B
	Connected Machines	\$14B
	Clinical Trial Participant Identifier	\$13B
	Preliminary Diagnosis	\$5B
	Automated Image Diagnosis	\$3B
	Cybersecurity	\$2B
TOTAL		= ~\$150B

Source: Accenture analysis

* "Value" is the estimated potential annual benefits for each application by 2026.
** Orthopedic surgery specific

AI represents a significant opportunity for industry players to manage their bottom line in a new payment landscape, while capitalizing on new growth potential.

To better understand the savings potential of AI, Accenture analyzed a comprehensive taxonomy of 10 AI applications with the greatest near-term impact in healthcare.

According to **Accenture** analysis, when combined, key clinical health AI applications can potentially create \$150 billion in annual savings for the United States healthcare economy by 2026.

Also, to be mentioned that Fraud Detection Area can save 17B\$, this is because **Errors** and **fraud** are a similarly **expensive** problem for **health care organizations** and also for **insurers**.

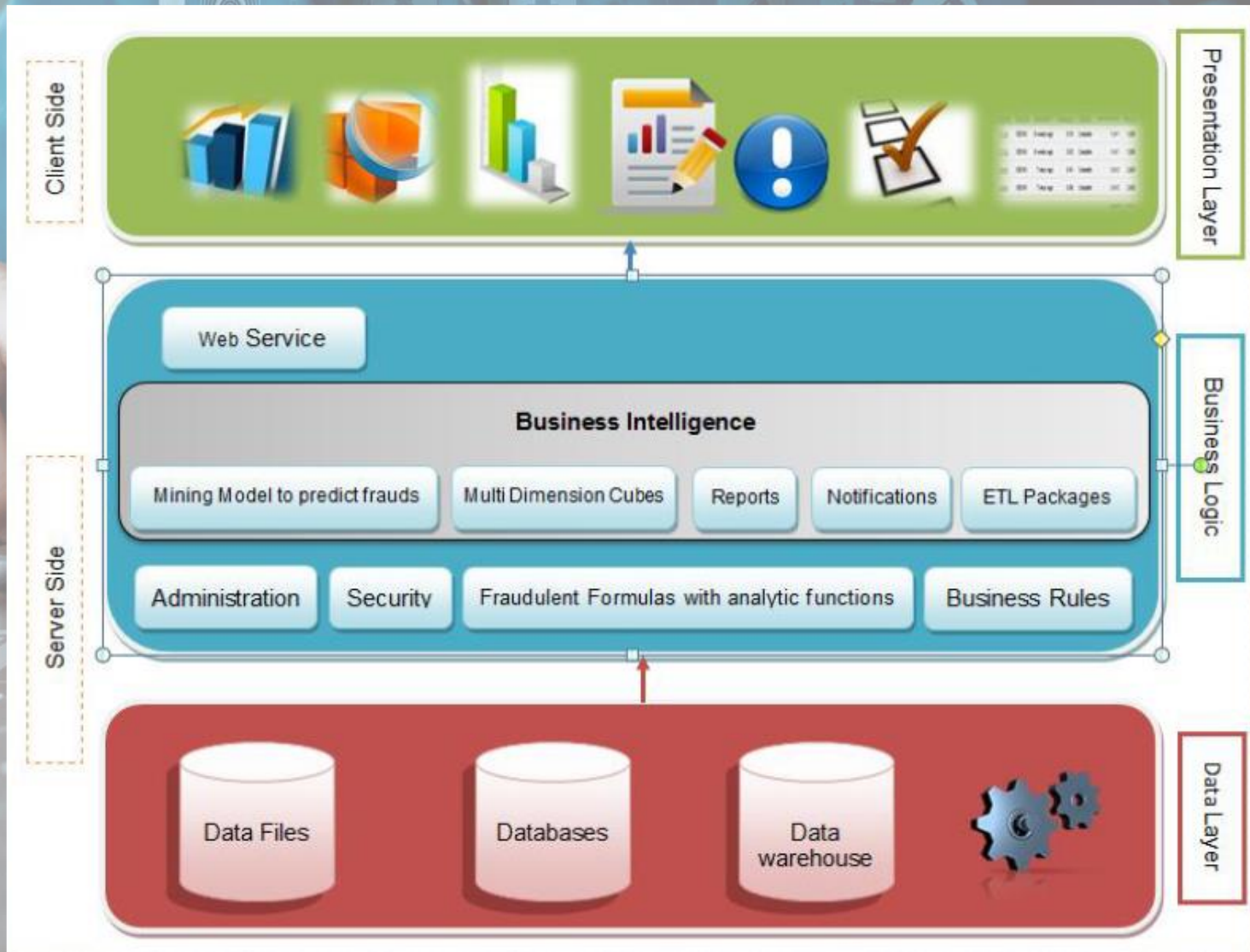
FDPS Success in Numbers

3adda Fraud Engine Performance



FDPS

Fraud Detection and Prevention System



FDPS

Fraud Detection and Prevention System

LinkedIn x My Drive x Technical x demo vide x Brochures x (1) 3adda x (2) 3adda x (2) 3adda x WhatsApp x LinkedIn x MFDP x

localhost:51145/pg_home.aspx

Welcome heba.adel@3adda.com | Log Out

Home Fraud Detection Request Detected Frauds Threats Admin Red/Green Flags Dashboard Settings

Acquire a Fraud Detection System in days..

The diagram illustrates the Fraud Detection and Prevention System (FDPS) process. It shows 'Medical Claims' being processed through 'Upcoding', 'Duplications', 'Unbundling', and 'Misused Coding' to 'Determine Frauds Schemas'. A 'MEDICARE FRAUD DETECTION' monitor is also shown.

Medical Claims

Upcoding

Duplications

Unbundling

Misused Coding

Determine Frauds Schemas

MEDICARE FRAUD DETECTION

Contact Us

Office # 12, 61 Ashgar Compound, Wahat Road,
Giza, Egypt.
+2 0114 1900 072 - +2 0238 8700 28

About the company

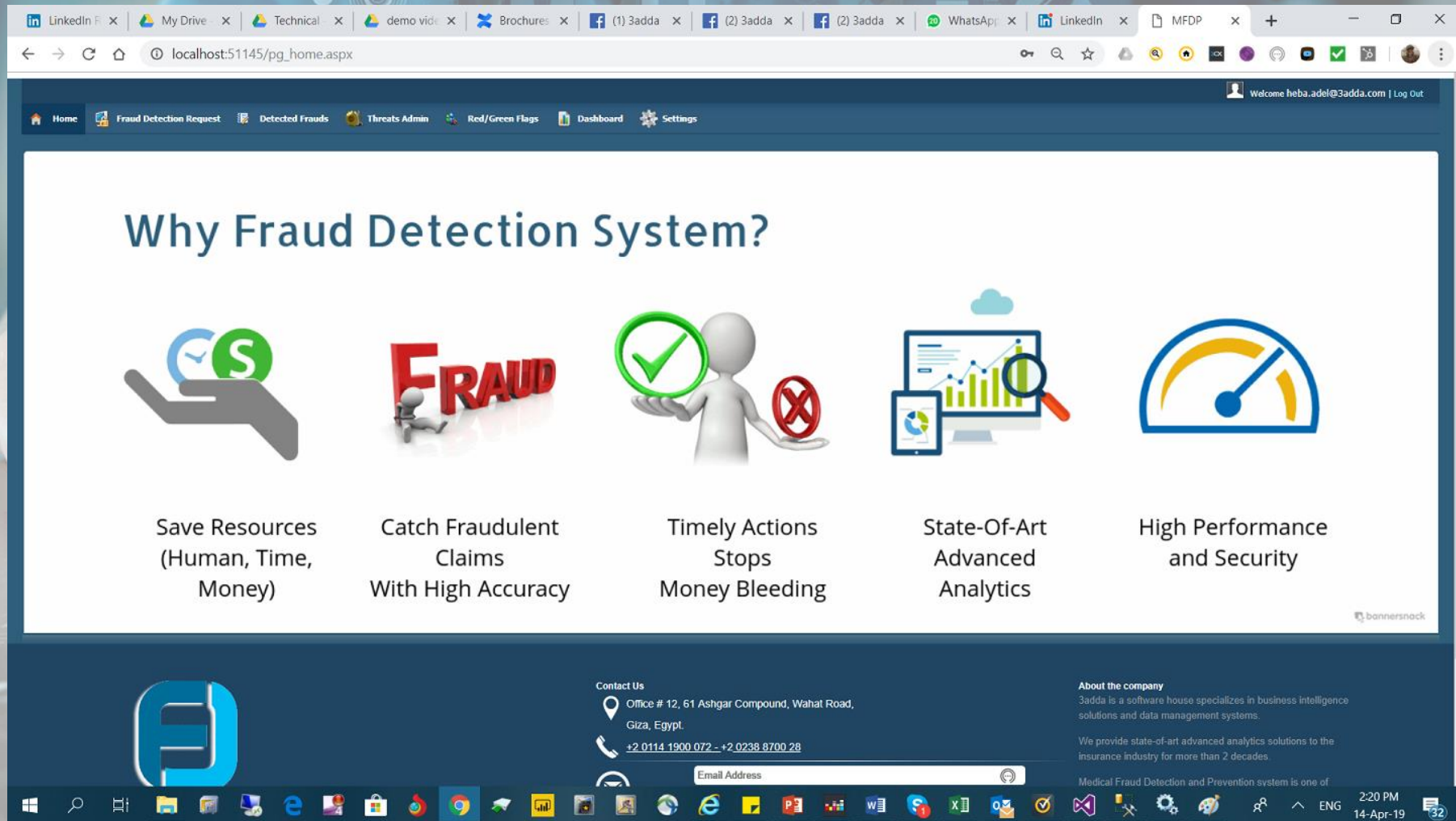
3adda is a software house specializes in business intelligence solutions and data management systems.

We provide state-of-art advanced analytics solutions to the insurance industry for more than 2 decades.

Medical Fraud Detection and Prevention system is one of

2:17 PM
14-Apr-19

Fraud Detection and Prevention System



FDPS

Fraud Detection and Prevention System

localhost:51145/pg_DetectedFrauds.aspx

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Home Fraud Detection Request Detected Frauds Threats Admin Red/Green Flags Dashboard Settings

Detected Frauds

Request Day [24-Apr-2017] 275

- Threat [M0101] 7
- Threat [M0201] 44
- Threat [M0302] 10
- Threat [M0303] 17
- Threat [P0201] 16
- Threat [P0301] 133
 - H_P-1007: Provider -1007 [3]
 - H_P-1404: Provider -1404 [2]
 - H_P-1404: Provider -1404 [3]
 - H_P-1404: Provider -1404 [3]
 - H_P-1404: Provider -1404 [2]
 - H_P-1404: Provider -1404 [2]
 - H_P-1404: Provider -1404 [2]
 - H_P-1404: Provider -1404 [2]
 - H_P-1473: Provider -1473 [2]
 - H_P-1690: Provider -1690 [2]
 - H_P-17170: Provider -17170 [21]

Request Date: Request Day [24-Apr-2017] 275 Threat ID: P0301 - Using the same Invoice Number for multiple different claims.

Action on Details: ☐ Accept ☒ Not Accept

Red/ Green Flag: Flag ID: H_P-17632: Provider -17632 [21] Red

	Action Type	Thread ID	ID	Clin ID	P.N.	Clin No	B.N.	Provider ID	Patient ID	ICD Code	Invoice No.	Clin Cost	Clin Date
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2920	M41713452	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	18-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2921	M41713440	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	16-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2922	M41713643	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	23-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2923	M41713614	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	22-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2924	M41713380	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	13-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2925	M41713288	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	08-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2926	M41713303	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	09-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2927	M41713256	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	07-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2928	M41713233	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	06-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2929	M41713217	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	05-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2930	M41713790	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	30-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2931	M41713744	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	28-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2932	M41713726	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	27-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2933	M41713686	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	25-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2934	M41713527	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	21-Mar-2017
<input type="radio"/> A <input checked="" type="radio"/> NA S		P0301	2935	M41713490	13856064	-1	0117M0B115510	H_P-17632	M-212721	N/A	153667	50.00	20-Mar-2017

FDPS

Fraud Detection and Prevention System



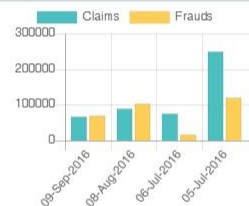
Frauds per Action Count



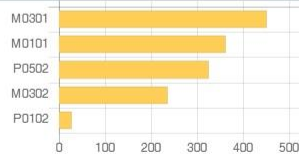
Claims <> Frauds Count



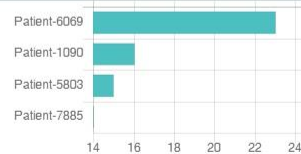
Claims <> Frauds Amount



Top 5 Threats



Top 5 Patients



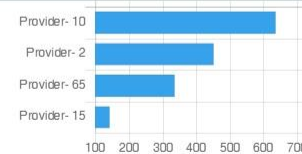
Frauds per Action Amount



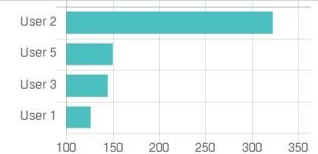
Summary of Threats

Threat Id	Threat Schema	Count	Amount
M0301	Visiting several providers in 7 days period.	451	44321.00
M0302	Members who have 5+ visits in a month period.	235	12324.00
P0502	A single service that exceeds 25% of the total claimed amount.	325	5842.00
M0101	Members who have total medication amount more than US\$1000 in several visits in a month period claiming same diagnosis.	362	9652.00
P0102	Multiple claiming of the same provided Medical service for the same member.	26	2345.00

Top 5 Providers



Top 5 Users



Date Mode: ☐ Daily ☒ Monthly Request Day: 09-Sep-2016 Top N: 5





IHIS

Intelligent Health Information System

IHIS the Intelligent Health Insurance System

- Geo-localized solution for mobile users and the hospitals and providers and the insurers too.
- Cloud based centralized Intelligent System to help the patient finds the best suitable physician or provider(Hospitals/Pharmacies) regarding to his location, physical status,...etc
- The system is centralized for the Patients information to be handled and accessed by Doctors, Hospitals, Pharmacies, and Insurers in order to confirm the information validity and updated.

Complete solution for Patients, Physicians, providers, and Insurers

Attendance Sheet x IHIS-Home x fais - Google Search x Muhammad

localhost:60116/Default.aspx

Intelligent Health Information System


Not Logged Login Registration

Home Insurance Providers Physicians Patients Visits Reports Tools Administration Help

Home


Patient

You can register then login to view/update your personal and contact information, personal and family medical history, and upload medical documents to help doctors take better decisions. Profile Register




Physician

You can register then login to view/update your personal, contact information and scientific degree which may matching between your experiences and medical provider requests, also you can add new visit, update visit, search visit. Profile




Medical Provider

You can register then login to view/update your personal and contact information, personal and family medical history, and upload medical documents to help doctors take better decisions. Register Profile



Medical Insurance

You can register then login to view/update your personal, contact information and scientific degree which may matching between your experiences and medical provider requests, also you can add new visit, update visit, search visit. Profile




You Can Search Here

Search for: All Radius: 500 Search

Search for Location:

Map Satellite



Map data ©2017 Google, ORION ME Terms of Use

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Example for type of detailed information about the patient's medical history which can be included in the IHIS

Intelligent Health Information System Welcome Ahmed Hamed Ali

Home Insurance Providers Physicians Patients Visits Reports Tools Administration Help

Add New Visit

Visit Initiation **Medical Document**


Clinic Name: Gen
Patient National ID: 250
Encounter Type: ☒
Visit fees: 55
Room Number:
Duration of Illness:
Pain Type: Con

Medical History Visits

Personal Information

Medical Documents

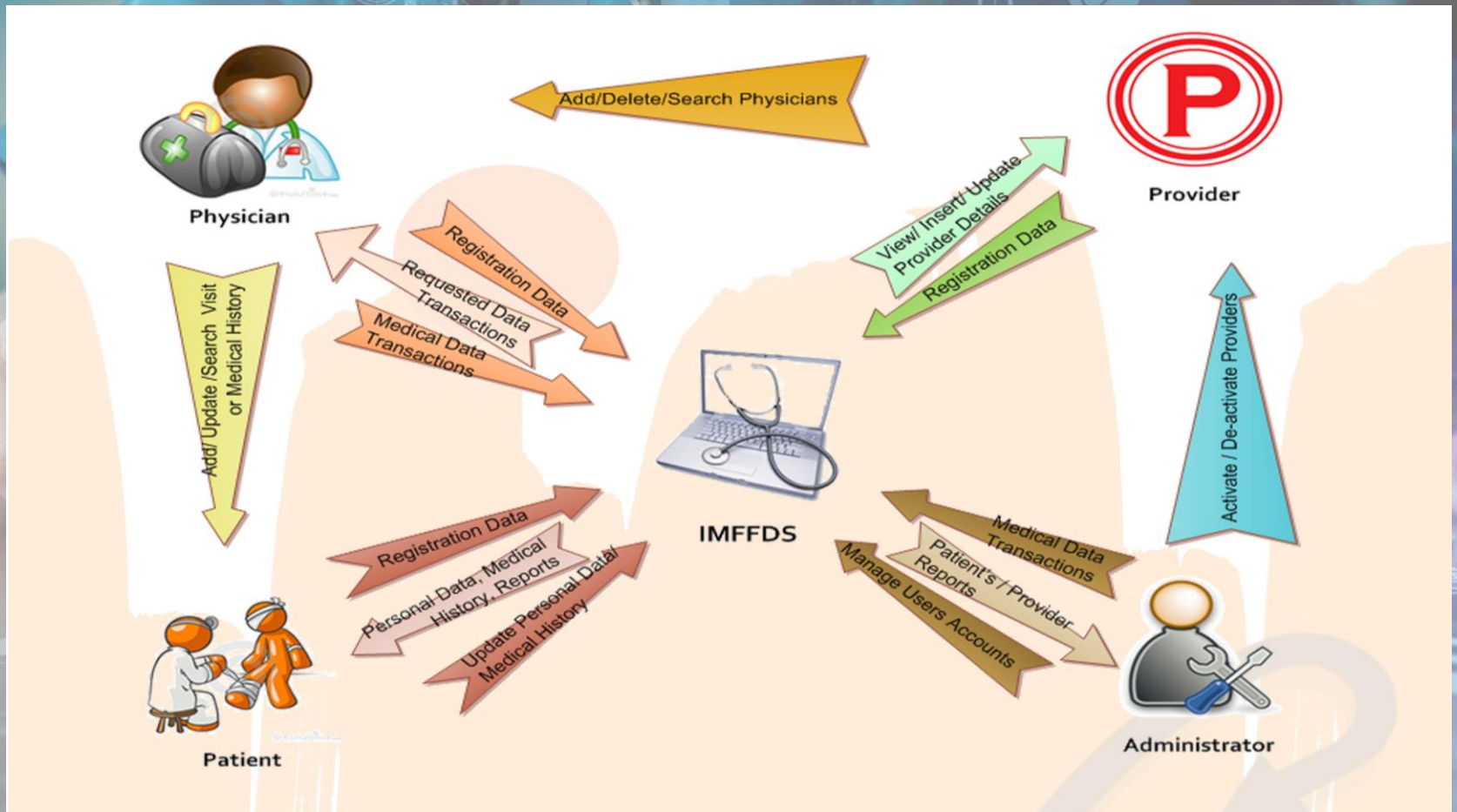
Service name	Doc. name
N/A	my hand
N/A	lat x-ray
Orthodontics	tooth



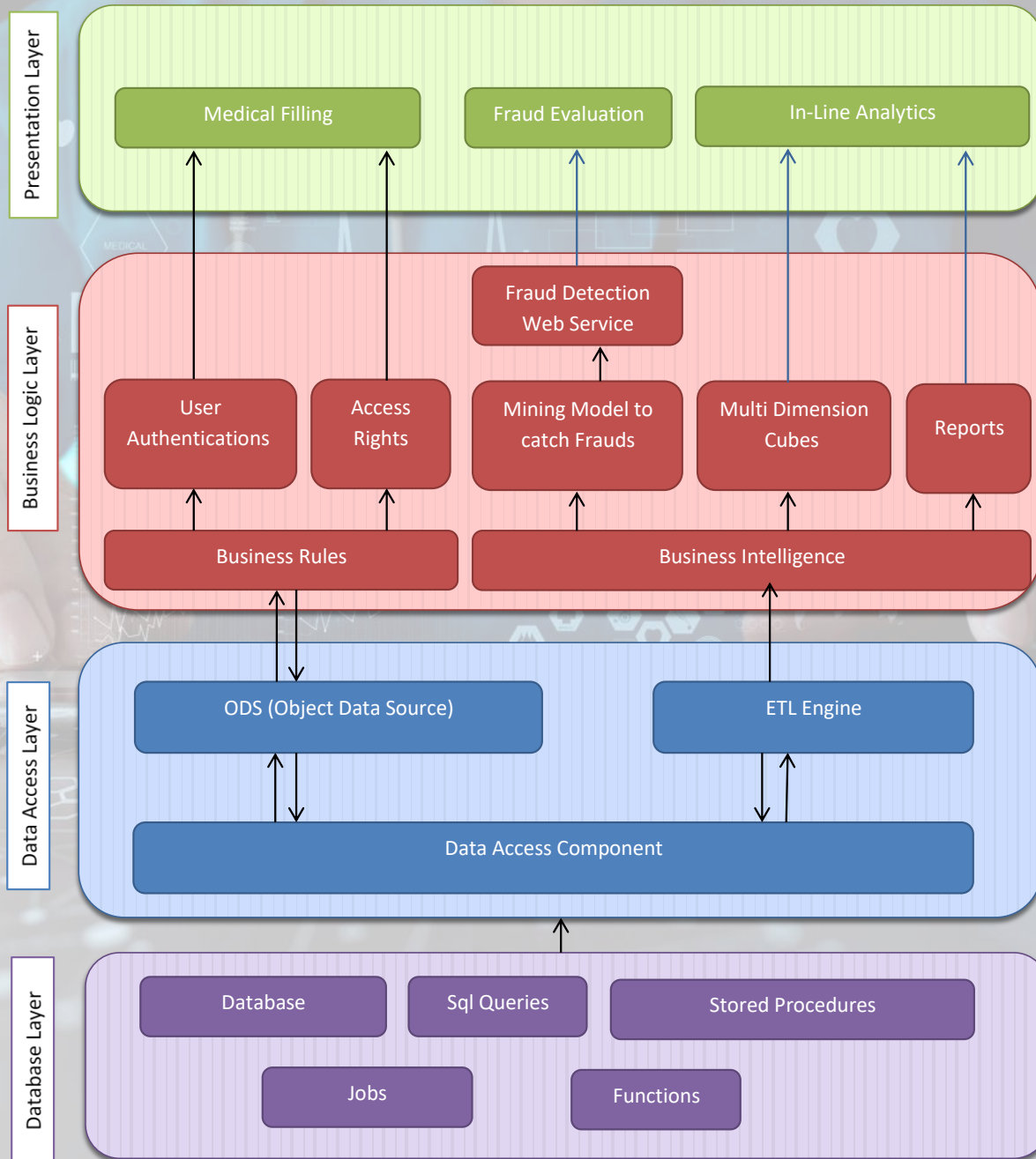
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Edit

How it works?



Data Flow for IHIS



3adda's Services Mapping

The Problem

- One of the key pillars of the Digital transformation is to have your Data Governance managed and well-structured and processed.
- And to reach Mature Data Governance solution you've to have your organization Data Dictionary Built

The Solution: Services Mapping

- 3adda created the first Egyptian Software for the Medical Terminology mapping and autonomous learning via Machine Learning, reaching accuracy of 70%.
- 3adda has built an active Data Dictionary for the CPT, CDT, ACHI and the FDA codes and others related data for the Medical Insurance companies.
- A sample of the mapping results with accuracy calculation reaches 90%, as shown below:

Services Mapping

Services Mapping Results - Excel

Sign in

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing Add-ins

SD_Code --> Service Dictionary Code; SD_ServiceCode --> Reference Code(SFDA and its accumulated services); SD_RefName --> Reference for the service; psc_ServiceCode --> Provider Service Code; psc_ServiceDesc --> Provider Service Description; psc_ProviderID --> Provider ID; psc_Similarity --> Service Similarity with SD; psc_Agree --> Agree From Specialized Doctor

SD_CODE	SD_ServiceCode	SD_ServiceDesc	SD_RefName	psc_ServiceDesc	psc_ProviderID	psc_Similarity	psc_Agree
87	9-368-00	ACRETIN 0.025 30 g 1	SFDA-2016	ACRETIN 0.05% CREAM	???		1 Y
87	9-368-00	ACRETIN 0.025 30 g 1	SFDA-2016	ACRETIN .025% CREAM - 30GM	???		1 Y
87	9-368-00	ACRETIN 0.025 30 g 1	SFDA-2016	Acretin 0.25% Cream 30 gm	???		1 Y
1016	83-212-98	FEVADOL 100MG SUPPOSITORY	SFDA-2016	FEVADOL 100MG SUPPOSITORY	???		1 Y
1016	83-212-98	FEVADOL 100MG SUPPOSITORY	SFDA-2016	FEVADOL 100MG SUPP 10 s	???		1 Y
1016	83-212-98	FEVADOL 100MG SUPPOSITORY	SFDA-2016	FEVADOL-100MG SUPPOSITORY	???	0.93	Y
1016	83-212-98	FEVADOL 100MG SUPPOSITORY	SFDA-2016	FEVADOL 100MG SUPP 10's	???		1 Y
2884	51-212-97	CLARITINE 10MG TAB	SFDA-2016	CLARITINE 10MG TAB	???	0.92	Y
2884	51-212-97	CLARITINE 10MG TAB	SFDA-2016	CLARITINE 10MG TAB	???		1 Y
2884	51-212-97	CLARITINE 10MG TAB	SFDA-2016	Claritin 10 mg Tablet 10P	???		1 Y
2884	51-212-97	CLARITINE 10MG TAB	SFDA-2016	Claritin 10 mg Tablet 10pcs	???		1 Y

Similarity > 0.9 | 0.7 < Similarity < 0.89 | 0.3 < Similarity < 0.69

Ready Filter Mode

Type here to search

9:13 AM 12/16/2018

Services Mapping

Services Mapping Results - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing Add-ins

H16

Y

SD_Code --> Service Dictionary Code; SD_ServiceCode --> Reference Code(SFDA and its accumulated services); SD_RefName --> Reference for the service; psc_ServiceCode --> Provider Service Code; psc_ServiceDesc --> Provider Service Description; psc_ProviderID --> Provider ID; psc_Similarity --> Service Similarity with SD; psc_Agree --> Agree From Specialized Doctor

SD_CODE	SD_ServiceCode	SD_ServiceDesc	SD_RefName	psc_ServiceDesc	psc_ProviderID	psc_Similarity	psc_Agree
107	6/4/1987	ADALAT RETARD 20MG TA	SFDA-2016	ADALAT.RET-20MG TAB-30'S	????	0.7	Y
107	6/4/1987	ADALAT RETARD 20MG TA	SFDA-2016	ADALAT RETARD (TABS) 30S	????	0.82	Y
107	6/4/1987	ADALAT RETARD 20MG TA	SFDA-2016	ADALAT RETARD 20MG (TAB) 30'S	????	0.82	Y
107	6/4/1987	ADALAT RETARD 20MG TA	SFDA-2016	Adalat-Retard 20 mg Tablet 30P	????	0.83	Y
120	1-186-96	ADOL 500MG CAPLET 24	SFDA-2016	Adol 500 mg Caplet 24pcs	????	0.79	Y
120	1-186-96	ADOL 500MG CAPLET 24	SFDA-2016	Adol 500 mg Caplet 24P	????	0.87	Y
120	1-186-96	ADOL 500MG CAPLET 24	SFDA-2016	ADOL 500MG (CAPLETS)	????	0.82	Y
120	1-186-96	ADOL 500MG CAPLET 24	SFDA-2016	ADOL CAPLETS 500MG TAB-24'S	????	0.72	Y
141	41-31-00	ADVIL 200MG TAB 24	SFDA-2016	Advil 200 mg Tablet 24P	????	0.79	Y
141	41-31-00	ADVIL 200MG TAB 24	SFDA-2016	ADVIL 200MG (TAB) 24'S	????	0.83	Y
141	41-31-00	ADVIL 200MG TAB 24	SFDA-2016	ADVIL 200MG TAB 24'S	????	0.83	Y
141	41-31-00	ADVIL 200MG TAB 24	SFDA-2016	Advil 200 mg Tablet 24pcs	????	0.71	Y
145	180-212-03	AERIUS 5MG TABLETS 18	SFDA-2016	Aerius 5 mg Tablet 18pcs	????	0.73	Y
145	180-212-03	AERIUS 5MG TABLETS 18	SFDA-2016	AERIUS 5MG TAB -18'S	????	0.77	Y
145	180-212-03	AERIUS 5MG TABLETS 18	SFDA-2016	Aerius 5 mg Tablet 18P	????	0.83	Y

Similarity > 0.9 0.7 < Similarity < 0.89 0.3 < Similarity < 0.69

Ready Filter Mode

Type here to search

9:13 AM 12/16/2018

Distribution of market share among the major industry players



Distribution of market share among the major industry players of STC and ZADDA. STC has 74% and 26% percent respectively. A further change in the economic situation in the market will be characterized by a more equal distribution of market share among players.

3adda's

ADVANCED ANALYTICS FOR INSURERS

Projected sales of main products in 2013

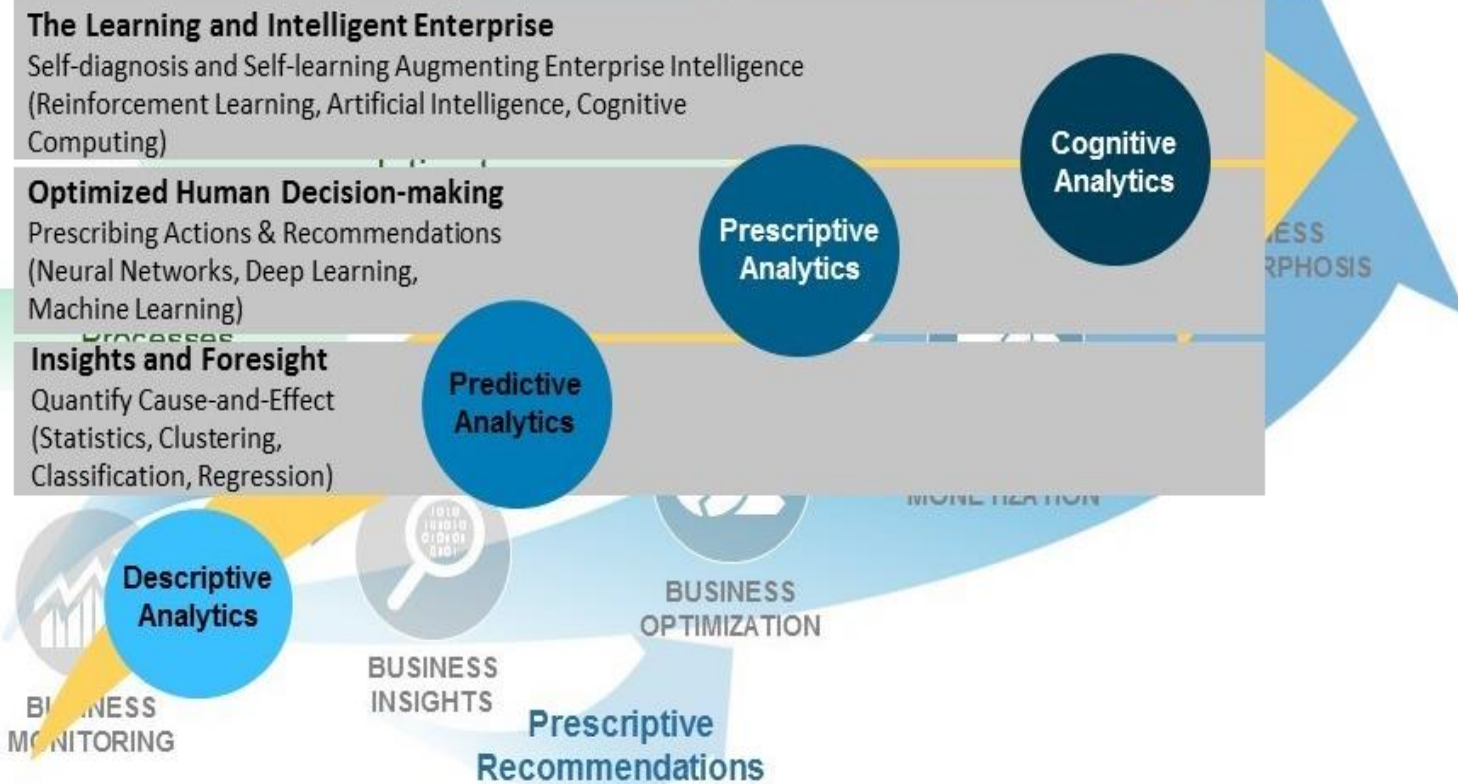


	TJU Division			FRT Division		
GHT	254	550	354	214	110	420
RCW	470	120	764	279	30	112
TRQ	181	800	181	100	100	
TRC	200	200	200	200	200	

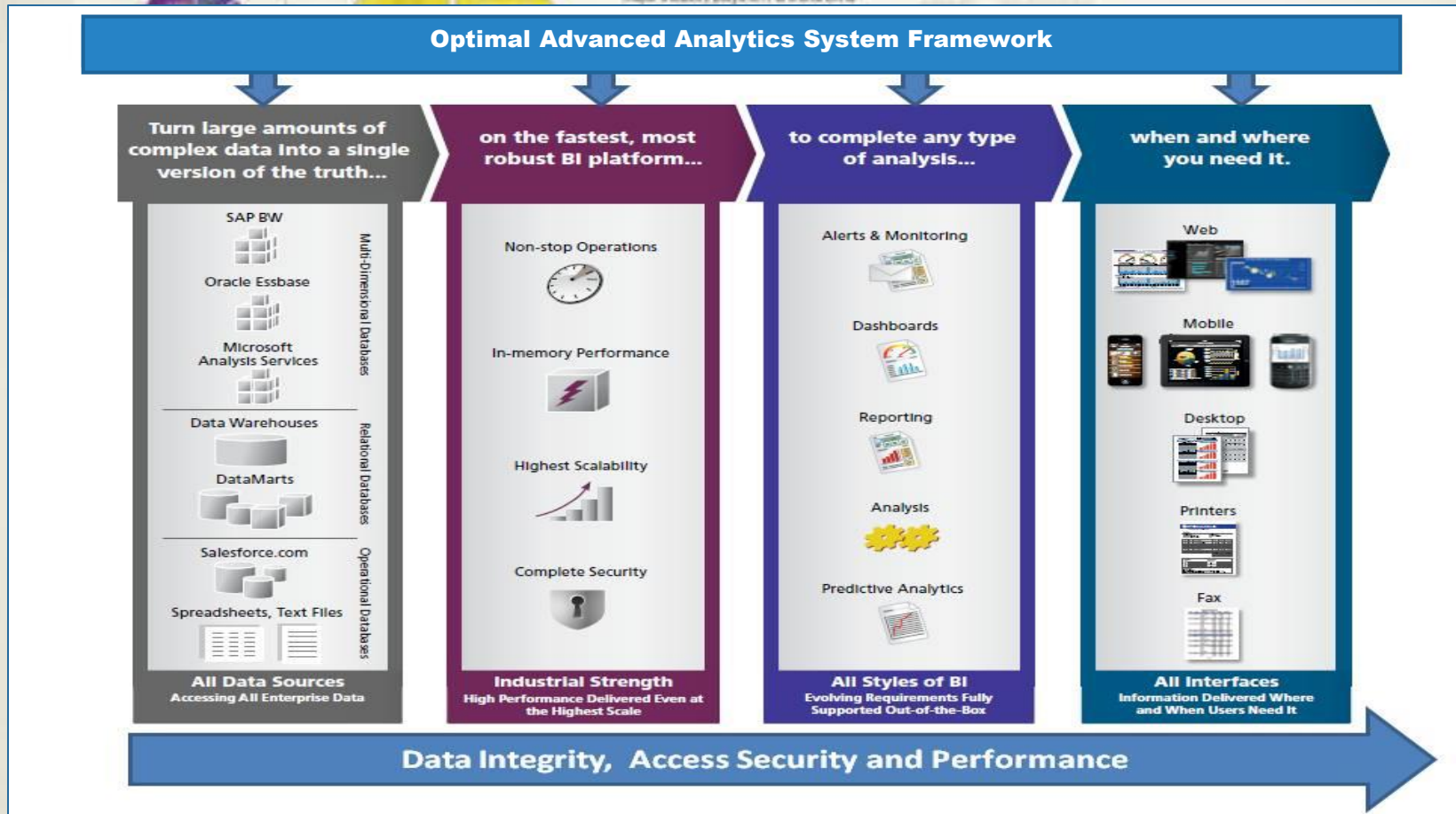
Why Advanced Analytics Solution?


- When it comes to enterprise data, it isn't enough for to simply be available.
- Advanced Analytics Are Crucial to Digital Transformation.
- Organizations that thrive on change use data and analytics as a competitive asset. They adapt quickly and predict trends by continuously curating and analyzing data and developing insights that drive new value.

Advanced Analytics leads to seamless digital transformation



Advanced Analytics Solution



The background is a light blue gradient with various medical and technology icons. A central computer monitor displays a dark screen with a white question mark and a plus sign. To the left of the monitor is a heart rate line, a heart, a stethoscope, and a delivery van. To the right is a microscope, a pill bottle, a person's head in a circle, and a bar chart. At the bottom, a keyboard is shown with two hands typing. The text '3adda's Medical Smart Cards Solution' is centered over the monitor.

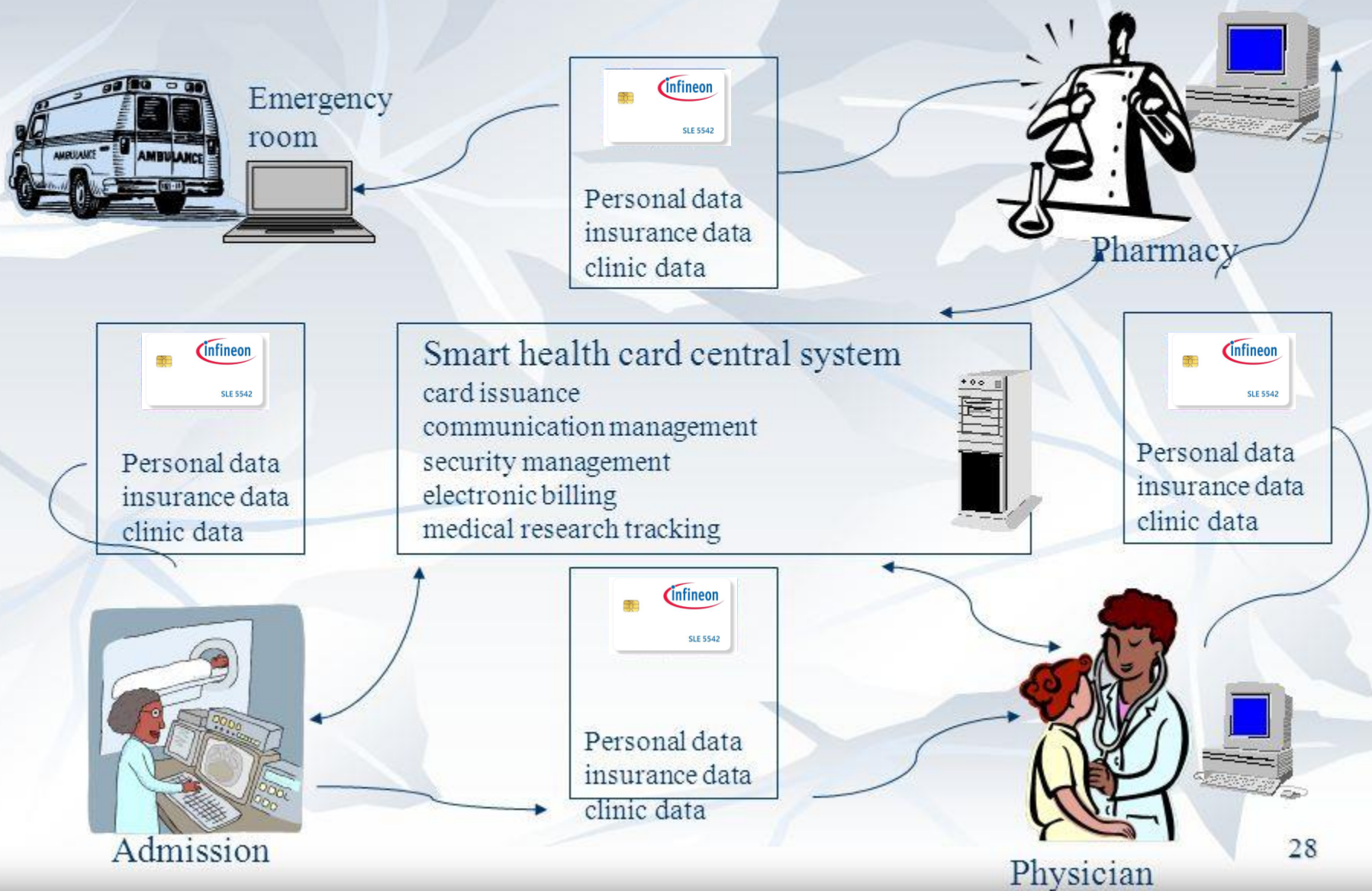
3adda's Medical Smart Cards Solution

SMART CARDS

- 3dda offers a consolidate solution for smart cards management with the cooperation with our partner SoftLock.



Smart card and Services Network



Smart cards

Who's SoftLock?

- Softlock is a regional leader in Information Security providing technology, state of the art solutions, consulting, integration and testing services to protect the information assets, identities and the supporting infrastructure against unauthorized use.
- The Smart Card solution for Softlock is offered by the International company Infineon.
- Infineon Technologies AG is a German semiconductor manufacturer founded on 1 April 1999, when the semiconductor operations of the parent company Siemens AG were spun off to form a separate legal entity. As of 30 September 2018, Infineon had 40,100 employees worldwide. In fiscal year 2018, the company achieved sales of €7.599 billion.



Amira Abaza



Why Invest in 3adda?

- 3adda is based on scientific basis not technology consumer or business/system integrator. We're aware of huge companies which embedded the AI/BI in their processes and was affecting the business negatively.
- Proven hands-on experience for ten years in the KSA Insurance market
- We're targeting the US and KSA Market. Accordingly, we began to work on our products to be SHIB Compliant, and working on the HIPPA Compliance for the US Market.
- We're currently working on the security assessment and compliance assessment to be proven by documents for our secure and regulatory compliant Products. Taken into consideration that SAMA org in KSA recently had taken actions against non-compliant entities.
- To be mentioned that we're in the process of opening our office in US, Delaware state.



Thank you