



proudly present:

# Healthcare Applications in Cloud: How? Where? When?

Roman Pavlyuk

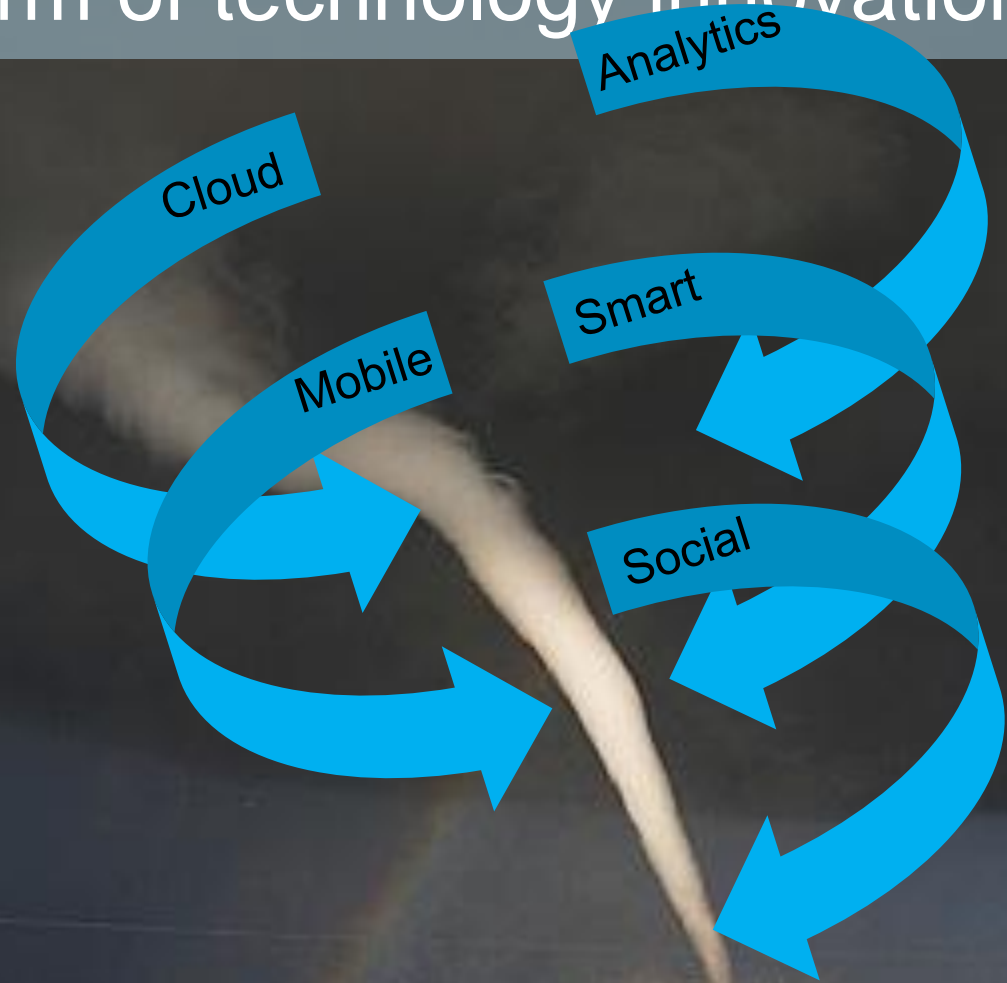
SoftServe Inc

May 2014

# The perfect storm of technology innovation

Everyone is organized around individual silos

Innovation is at the intersections

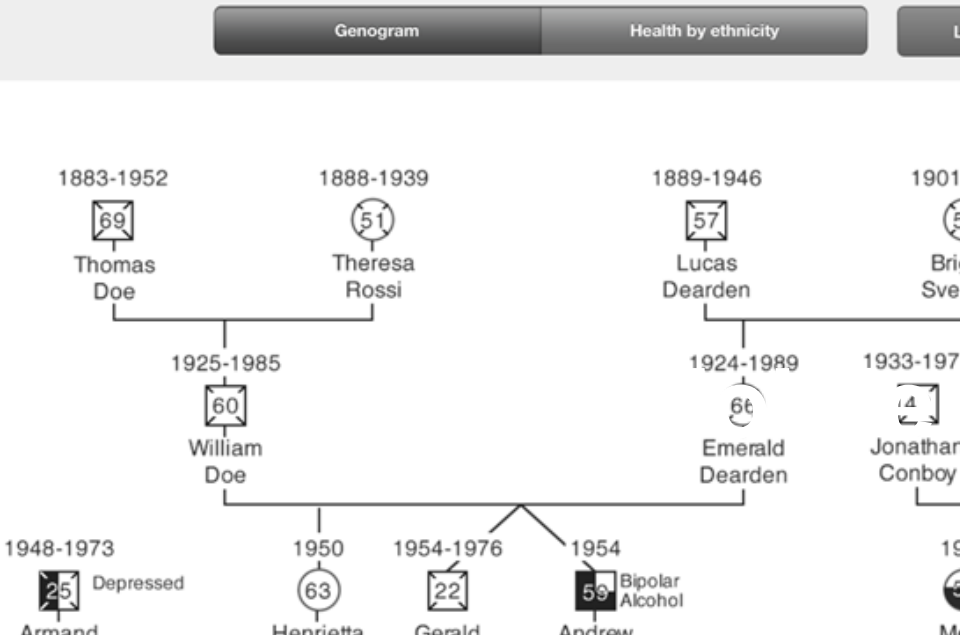




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# Where should I go?





and Cloud

**Patients Helen Harris**

DOB 7/12/76, 36 years F  
MRN 2288181-5  
Admitted on 9/14/12  
Ward 12, Bed 1

Diagnosis HTN  
Allergy Aspirin (rash)

VITAL SIGNS

- Temperature 37
- Heart Rate 61
- Respirations 13
- SpO<sub>2</sub> 98
- BPS 112
- BPD 70

**Patients Helen Harris** Edit

-1yr 9/14 10/19/12 -1yr 9/14 10/19/12

Respirations 14 rpm BPS 112 mmHg

Mood 1.6 Heart Rate 61 bpm

Temperature 37 C BPD 70 mmHg

**Patients Helen Harris**

Synovia:9/15/12 Synovia:9/16/12

x-ray:9/17/12 x-ray:9/18/12

x-ray:9/20/12 x-ray:9/22/12



Into the Cloud

PC is disappearing...

Into the pocket





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# How will I get there?


# SoftServe Research & Offering

We co-create and co-invent with healthcare providers. Our solutions unlock such benefits for providers:

- Risk reduction for system implementation by 30-60%
- Accelerated coding by 20%
- Increased maintainability by 20%
- Mass customization simplified by 30% of UI efforts
- Increased monthly recurring revenue by 20-60%
- Decreased customer acquisition cost up to 90%

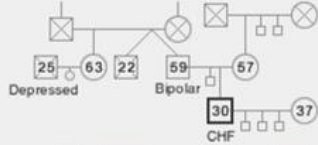
12:19 PM 1%

Patients **Summary**



**JOHN DOE**  
30 years M  
DOB 12/14/82  
Diagnosis CHF  
Allergy **Novocaine (coma)**

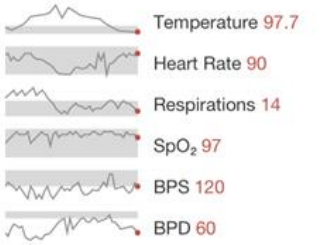
MRN #3733344  
Admitted on 8/31/12  
Ward 1, Bed 2



hospitalized →

clinic visits →

### VITAL SIGNS



### IMAGERY

EKG-8/31/12

9/15/12 9/16/12 x-ray:9/17/12

### MEDS

Carvedilol	6.25 mg	PO daily
Lasix	40 mg	PO daily
Ramipril	5 mg	PO daily
ASA	81 mg	PO daily
Spironolactone	25 mg	PO daily
Cough Medicine	1000mg	PO BID
Multi Vitamin	100%...	PO daily
Nutrilogie Vichy	5mg	extern...


### LABS

CBC - Hemogram	9/6	9/7	9/8
WBC	5.9	8.3	8.5
RBC	4.5	4.3	4.2
HGB	14.4	14.4	17.9
Hematocrit	40	41	42
MCV	82.5	83.7	2.4
MCH, POC	26	27	28
MCHC	35.0	31.0	33.0
RCD	14	14	13
MPV	8.7	8.6	10
Platelets	170	180	190

Coagulation	9/6	9/7	9/8
PT	12	13	14
PTT	20	19	18
INR	1.5	1.7	1.5
DDMER	0.5	0.3	0.4

Cardiac Profile	9/6	9/7	9/8
Creatine kin.	90	96	102
CK-MB	3	3	3
CK-MB index	1.2	0.1	0.5
Troponin I	0.2	0.2	0.3
BNP	20	20	20

### MEASUREMENTS



### NOTES EVENTS

No coughing. Feels a little bit better.  
MD HDM, 9/22/12

No delirium  
MD HDM, 9/20/12

Bilateral leg swelling, SOB (shortness of breath) Spironolactone 25 mg BID added to regimen  
MD HDM, 9/17/12

5pm patient complains of difficulties breathing, cough. CXR revealed pulmonary edema. Lasix 40 mg given  
MD HDM, 9/15/12

Alert and oriented. No complaints.  
MD HDM, 9/7/12

Ambulates with assistance. Weak.  
MD HDM, 9/6/12

Still coughing. Breath sounds diminished at right base.  
MD HDM, 9/5/12

Follows directions  
MD HDM, 9/3/12

More relaxed  
MD HDM, 9/1/12

Drowsy and sleeping



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# Is it safe to go there?

# CLOUD COMPUTING

Revolutionizing Business Processes  
in Government & Healthcare

# EAST 2014

MAY 15-16, 2014

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Downtown Washington, DC





Customers



Partners



Employees



Smart products



M2M

Mobile apps guide people in

**Systems of engagement empower people with context-rich apps that merge the physical context with virtual intelligence to take the next most likely action**

host transactions in  
the virtual world



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# How SoftServe does it?

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# Problems

# Solutions

Uncertainty how to leverage connectivity & mobility	Design & execution of mobile strategy, biz innovation via technology
Inefficient workflows or biz processes	Mobilization of biz processes, productivity increase
Missing location-based potential for biz processes & operations	Localization of biz processes, design of location-based services (LBS)
Uncertainty with smartphone, tablet, wearables interaction design	Efficient activity & technology centeric IxD and UI design for new devices
Big downtime per year, hitting biz negatively	Under 5h downtime per year, with 99.99% availability
Malfunction during New Year, Christmas, 'Black Friday'	'Black Friday' proofed apps & environment for high spikes in short periods of time
IaaS outage (e.g. Amazon)	Zero downtime via multi-provider IaaS solutions for availability zones



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## Mobility offering

- Business Process Mobilization
- Mobile Architecture Discovery
- Mobile UX Design
- Mobile UI Design
- Mobile Security
- Mobile SDK

## Cloud offering

- SaaS Architecture Discovery
- DevOps Discovery
- SaaS Tenant Analyzer
- Cloud Software Development Kit
- SaaS Operations Framework



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# Security offering

System and Application Assessment  
Comprehensive Risk Assessment  
Secure SDLC  
Penetration Testing  
Incident Forensics  
Secure Operations



Abiliton People  
Abiliton Process  
Abiliton Technology

Adaptive framework for  
building optimized and  
high performance SDLC  
(based on best practices  
and benchmarks)



proudly present:

# Thank you!

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**SoftServe Inc**

<http://www.softserveinc.com/>

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