Building a Digital Health Ecosystem

HIMSS Healthcare IT in Kansas City
Kansas City
January 19, 2017

http://kcdigitaldrive.org • @kcdigitaldrive
KC Digital Drive Overview
Mission: Make Kansas City a Digital Leader

We have **gigabit-speed technology** in place. Now it’s time to **secure our economy’s future** and **improve the quality of life** for all Kansas Citians by...

- Closing the Digital Divide
- Driving Digital Innovation
- Building Kansas City’s Reputation
KCDD: Building an Ecosystem

- 10% technology, 90% sociology
- Addresses problems of:
  - Amazing but underutilized infrastructure
  - Unclear ROI (chicken & egg)
  - Resources not being shared
  - Who’s doing what?
- Issues pervasive in emerging tech
DIGITAL DIVIDE:
Workforce pipeline
Stable society
Quality of life
Engaged citizens
PILOT PROJECTS:
Health care
Civic
tech/government
Education
Digital access
Smart city
GLOBAL LEADERSHIP:
Talent
attraction/retention
Business attraction
Global markets
Our approach

**Build Community**
- Leverage relationships
- Create workgroups

**Identify Opportunity**
- Follow the energy
- Evaluate need
- Measure interest
- Fill gaps

**Track Results**
- Storytelling
- Public outreach
- Social/digital media

**Pilot Projects**
- Launch projects
- Manage workflows
- Obtain funds
Health Innovation Team
Building community

• Monthly meetings, 15-30 people, targeting health stakeholder communities
• Community forums, 40-75 people, spurring broader conversations
• Startups/entrepreneurs
  – iShare Medical (HISP, personal health records)
  – Pathfinder, SmartSteps (coordination of programming/care, decision tree)
  – SORA Medical Solutions (critical diagnostic accuracy)
• Health care providers
  – iCare: HPN Mobile Distance Connections Research/KU Med (home care)
  – Community Health Council of Wyandotte County (design thinking, ecosystem)
  – Swope Health Services (EMRs in safety net setting)
  – Valley Hope (synchronous & asynchronous remote support for recovery)
  – Cedarwood Senior Cottages (home monitoring, aging in place)
Identify opportunities

• Connectivity in safety net clinics
  – REACH Foundation grant to support research ... which led to connectivity
• Mental/behavioral telehealth
  – Hackathon ➔ StartTalking
• Telemedicine codes workshop
  – March/April 2017
• Telehealth grants
Identify opportunities: Cross-vertical alignment

• Code for KC
  – SafeAssist
  – I Got Mine
  – Street Medicine KC/Joyn
• Digital Inclusion
  – HCF Grant working
• Smart city
  – NSF Smart + Connected Cities / Eldertech, smart parks
• Education
Pilot projects

• Among team members
  – Telehealth grant opportunities
  – StartTalking
  – Collaborations

• KCDD led
  – Telemedicine coding workshop
  – Using computer labs for better health care
  – Smart Healthy Campus
THE DESIGN THINKING PROCESS

UNDERSTAND       OBSERVE       POV       IDEATE       PROTOTYPE       TEST       STORY       TELLING       PILOT       BUSINESS       MODEL

INSPIRATION       IDEATION       IMPLEMENTATION
This is what we’re doing today
II. Healthcare Services

Developing 6 services in accordance with demands identified from various primary users and trial will be given until the end of year

Ecosystem of mutual benefits

Choice of Diversified Services
Provides better HC Services

Public
Improved Living Quality and wellness

SMB
New opportunities & investments

Product/services verification
Faster Quality Improvements

Participating Consortium

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- Public HC Mgmt
- Chronic Disease Mgmt
- Adolescent Obesity & Fitness Mgmt
- Emergency Cognitions & Alerting
- Fatigue recovery for Air Force Flights
- Int'l Collaborative Diagnosis

Primary Users

- Medical Institutions
- KYUNGPOOK NATIONAL UNIVERSITY HOSPITAL
- Keimyung University Dongsan Medical Center

- Insurance Companies
- School
- Air-Force

Platform

Big Data
Algorithm
Contents

Devices

Wearables
Portable
Infrastructural

Global City Teams Challenge 2016
II. Healthcare Services

This service provides personalized exercise/dietary plan to users, monitors/measures how they follow such program and rewards users for their accomplishment.

Public Healthcare Management Service

**User**
- Wearables monitors user’s stress lv. activities & sleeping quality
- Wearables communicates with the APP on a smart device

**Healthcare Platform**
- Biometric Data Mgmt.
- Analyze Data
- Analyze User’s Life Pattern

**New devices development**
- Heart rate Sensor (PPG)
- Zyro/Accelerometer with 9 Axes
- Connects with mobile Apps using Bluetooth & NFC

**Insurance Company**
- Determine per person’s workrate achievements

Global City Teams Challenge 2016
Track results and tell the story

• Blog posts
• Project pages (need screen shot)
• Improving metrics
  – Anecdotal to quantitative
  – Activity-based, stakeholder impact, end user impact
• Within and beyond KC
• Health newsletter
Technology-enhanced Aging in Place homes now open in Lawrence
by Katy Schamberger | Nov 22, 2016 | Next-Generation Home, Telehealth Pilot

The numbers tell a compelling—even overwhelming—tale.

Currently, the number of people worldwide 65 years and older is estimated at 506 million, according to information shared by Greg Corpier, principal/vice president of technology solutions and strategy, Telecare Global, LLC. This number is expected to surge to 1.3 billion by 2040. And within just one decade, there will be more people 65 years and older than children under the age of 5—for the first time in human history.

There’s no doubt that the time for improved elderly care, including aging in place, is now. And with the opening of

http://www.kcdigitaldrive.org/project/usignite
Building community (virtuous cycle)

• Regional workgroups
  – KCALSI Health IT and Outcomes Research
  – Blue Ribbon Advisory Panel

• Global City Teams Challenge

• MetroLab Network: Big Data and Human Services Workshop
Identify opportunity (virtuous cycle)

• Grant opportunities
  – REACH Foundation
  – Health Care Foundation of Greater KC
  – National Science Foundation

• Smart Healthy Campus
• Health and Environment “SuperCluster”
• HIT membership
- Health team members
- Grants, donations, talent contributions
- Meetings, forums, speaking, workshops
- Presenters, hackathons
- Connectivity work, platforms
- Project pages, tracking, storytelling
Get Involved

• Join our monthly meetings
• Join our mailing list at kcdigitaldrive.org
• Twitter
  – @kcdigitaldrive
  – @codeforkc
  – @gigabitcities
THANK YOU

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