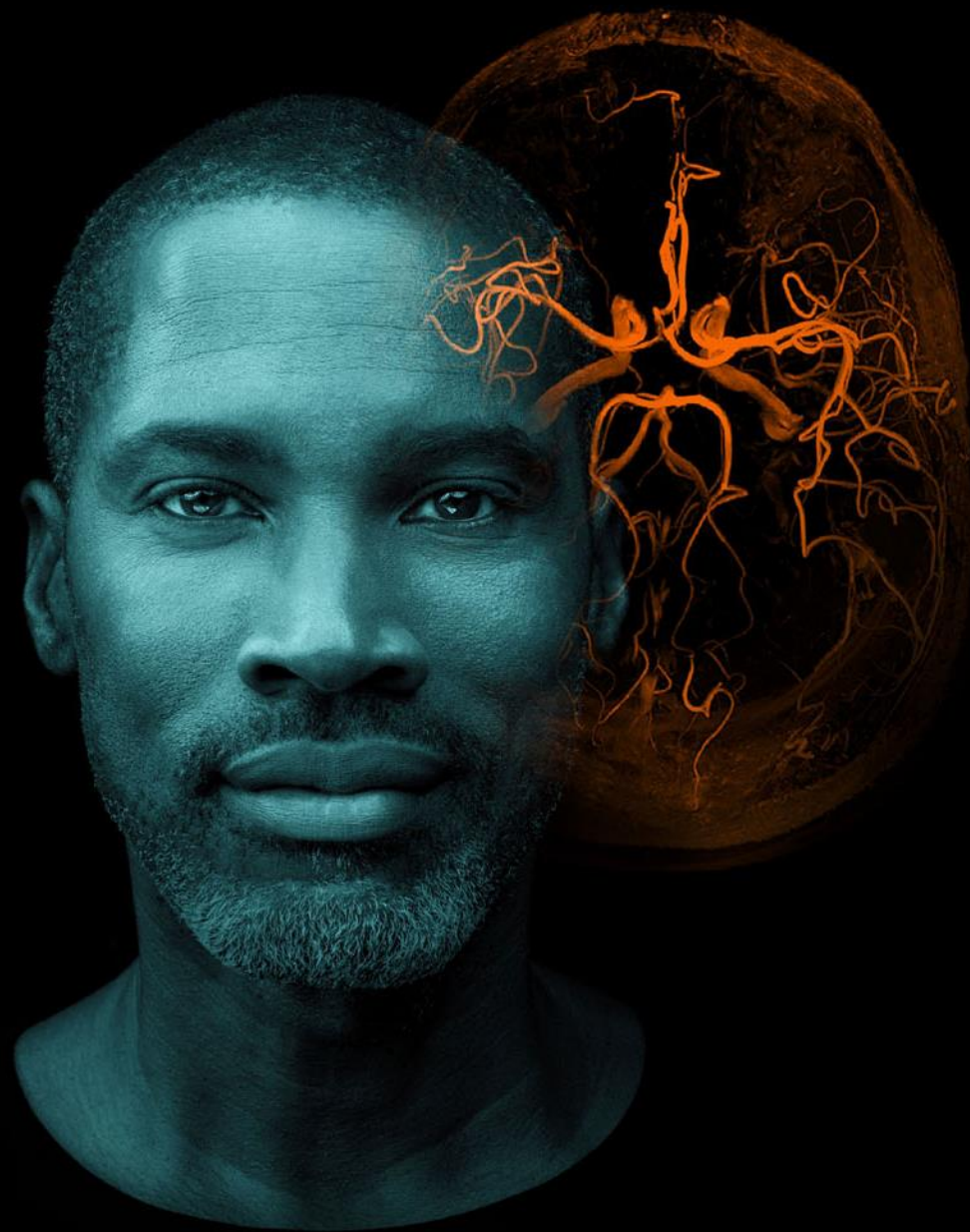


User-centered Ideation

within the Digital Transformation
at Siemens Healthineers IT



Dr. Michael Reinhardt
IT Strategist | Digital IT Transformation Program Mgr.
November 2020



The average life span of an S&P 500 company has been ...

15 years

in 2015

60 years

in the 1950s



A long story of success



Röntgen



Von Behring

1901 Nobel prize winners (Physics and Medicine)



1896
First industrially
manufactured
medical X-ray unit



1909
The fastest X-ray
device of its time



1933
Our first rotating
anode X-ray tube



1941
First rapid urine test



1953
First device for
echocardiography



1956
First ever dry
chemistry testing
for glucose in urine



1957
First fully auto-
mated discrete
chemistry analyzer
for whole blood or
serum



1958
First nuclear
medicine scanner
from Siemens



1964
First glass
electrode for
blood-gas analysis



1967
World's first real-
time ultrasound
scanner



1975
Our first
CT scanner



1983
First Siemens
MRI scanner



1990
World's first
spiral CT scanner



1996
The best-selling
ultrasound system
of all time



1997
First in-vitro whole-
blood detector of
platelet-function
abnormalities



1998
Our first track-
based laboratory
automation system



1999
First intuitive medical
IT platform
from Siemens



2001
Our first PET/
CT system



2005
World's first Dual
Source CT scanner



2006
Diagnostic analyzer
integrating four
technologies in
one system



2008
Robotic-assisted
angiography
system



2008
Digital radio-
graphy, wireless
flat panel detector



2009
Multi-modality 3D
imaging software



2011
First integrated,
simultaneous whole-
body MRI and PET



2012
Wireless
transducers
for ultrasound



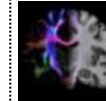
2014
"Free breathing"
CT scanning with
dual X-ray sources
and detectors



2014
Cloud-based
network: teamplay



2015
Wide-angle image
acquisition breast
tomosynthesis



2015
The first research
7T MRI:
MAGNETOM 7T



2015
First Twin Robotic
X-ray for better
patient care and
productivity



2015
First BTP assay to
determine RRF
and CSF leakage



2016
Liquid biopsy



2016
Cinematic
rendering for 3D
medical imaging



2017
Lab diagnostics
solution for
immunoassay
and clinical
chemistry:
Atellica® Solution



2017
A whole new
world of precision:
Biograph Vision



2017
Mobile operations
for closer patient
interaction: SOM-
ATOM go.platform



2017
MRI technology
adapting to human
nature: BioMatrix



2017
FAST 3D Camera –
automated precise
patient positioning



2018
More than 40 AI-
enriched offerings



2018
AI-Rad Companion
Chest CT to mark
and measure
potential
abnormalities



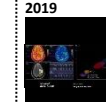
2018
Software for remote
scanning assistance:
syngo Virtual Cockpit



2018
Innovision:
Planned to redefine
the MRI experience



2019
AI-enabled user
guidance system:
myExam Companion



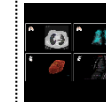
2019
MR Fingerprinting?
Leverage quantitative
data to understand
more precisely a
patient's condition



2019
ARTIS icono - enables
a wide procedure mix
and multi-disciplinary
usage



2019
CT imaging of the
head at the point of
care: SOMATOM
On.site



2019
Multi-modality
imaging decision
support with AI-Rad
Companion



2019
AIDAN Artificial
Intelligence for
Molecular Imaging



Expanding
precision
medicine

Transforming
care
delivery

Improving
patient
experience

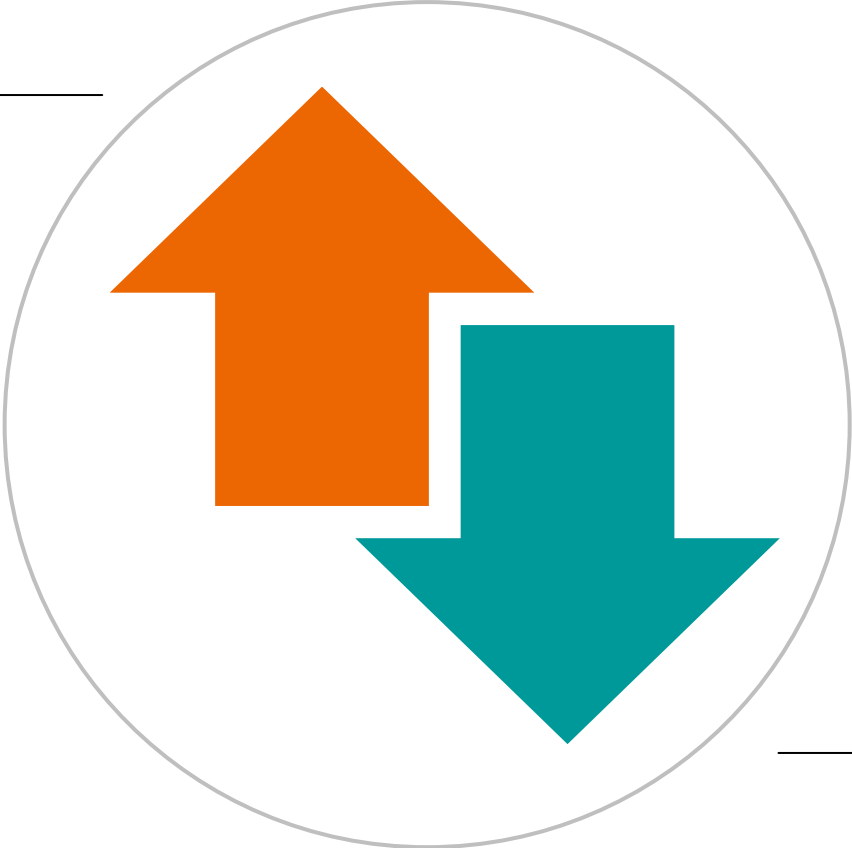
Digitalizing
healthcare

Future

The products/features (mentioned herein) are not commercially available in all countries. Due to regulatory reasons, their future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details. | 1 Innovision is still under development and not commercially available yet. It is not for sale in the US. Its future availability cannot be ensured. | 2 Magnetic Resonance Fingerprinting is 510(k) pending. It is not commercially available in all countries. Due to regulatory reasons the future availability cannot be guaranteed. | 3 SOMATOM On.site is pending 510(k) clearance, and is not yet commercially available in the United States or other countries. | 4 AI-Rad Companion Chest CT (MSK) is pending 510(k) clearance, and is not yet commercially available in the United States. Its future availability cannot be guaranteed. | 5 AIDAN The features herein are pending 510(k) clearance, and are not yet commercially available in the United States or other countries worldwide on Biograph Horizon, Biograph mCT and Biograph Vision. Their future availability cannot be guaranteed. The features herein do not yet fulfill all the essential requirements according to the European Medical Device Directive (93/42/EEC) and its national implementations for Biograph mCT and Biograph Vision. They are not yet commercially available in the EU. Future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

Our purpose is to enable healthcare providers to increase value

**Enabling
better outcomes**



at lower costs

IT Breakthrough Targets 2025

Derived from the IT Strategic Focus Fields

Innovation for Users

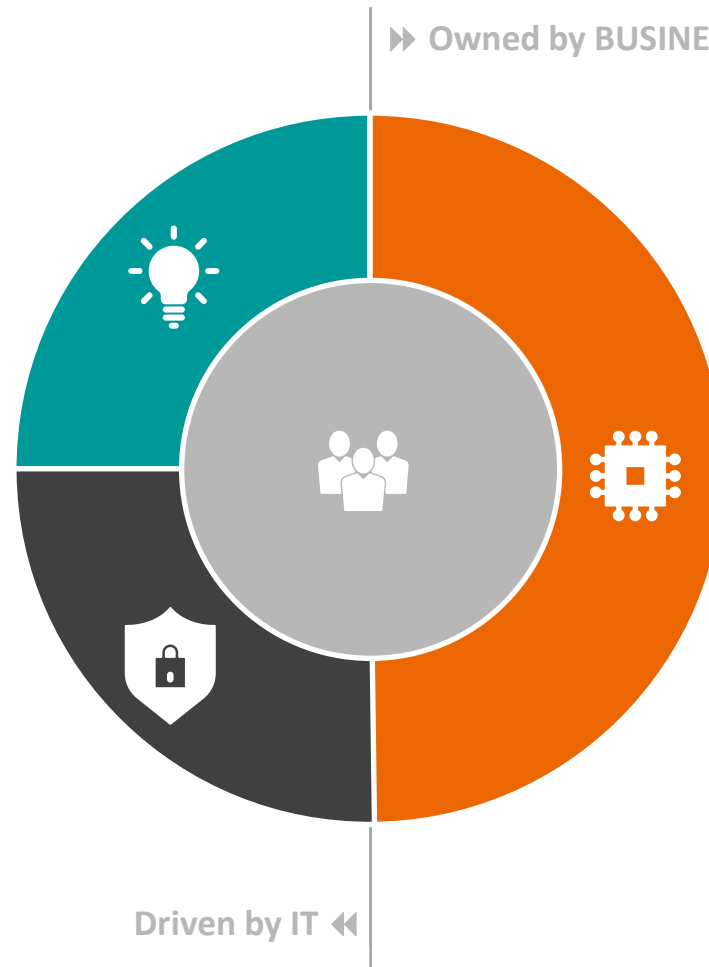
- Digital working environment
 - Innovative, secure, easy
 - Role-based
 - Fast information access anywhere

Digital IT Transformation

- Digital IT organization
 - Capacity (i.e. global footprint and partner network)
 - Competences and culture
 - New way of working (i.e. OpenIT Studio)

Cyber Security

- Security built in IT landscape
 - Adaptive protection measures
 - Awareness
 - Adherence to laws and regulations



Digitalize Processes & Services

- End-2-end digitalization
 - Process based architecture
 - Competitive advantage
 - New business models

Consumer and User behaviors are changing through digitalization



Data driven business

Information load

Speed of innovation

Pay as you use

Personalization

Instant Communication

Cybersecurity needs

Technological Enablers fuel the digital transformation



Artificial Intelligence

Digital Workplace

Cloud Solutions

Data Lake and Analytics

SaaS Platforms

Intelligent Automation

Mobile services

Blockchain

Network Infrastructure

The OpenIT Studio tackles three main problems within the fuzzy frontend of IT demands



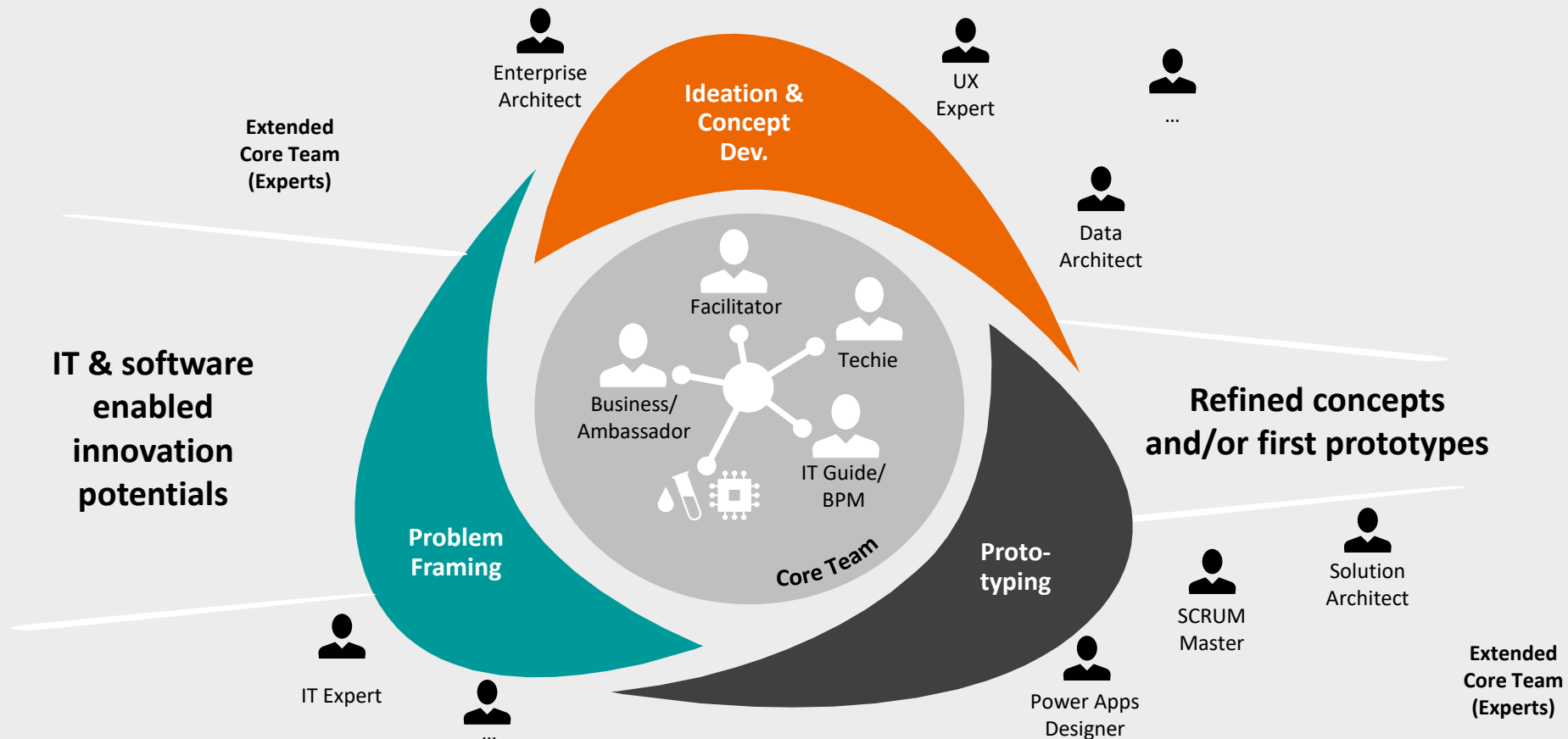
Too slow

Too complex

Too expensive

The OpenIT Studio is an innovation-catalyst for SHS digitalization, sharpening early stage IT demands

We work within a **core team** and an **extended core team** cross-functional on innovative topics sharpening the demand regarding **desirability, feasibility, and viability**



Creating Business Value by “Connecting the Dots”

X-functional Ideation and Incubation of IT enabled innovations



Please contact me in case of any questions

Siemens Healthineers

SHS IT IDA

Siemens Healthcare GmbH
Henri-Dunant-Straße 50
91058 Erlangen, Germany

Dr. Michael Reinhardt

Phone: +49 172 408 4115

reinhardt.michael@siemens-healthineers.com
