

Innovation Initiative

“New business models are disrupting all industries. Is that a business problem or a technology problem?”

stki.info

Copyright@ST

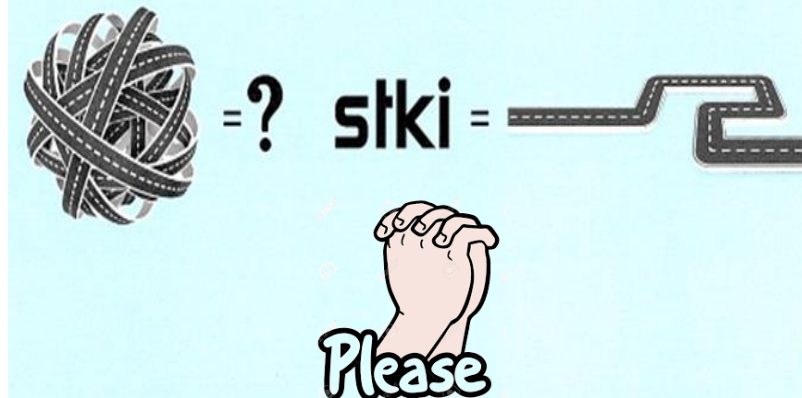
“When all think alike, then no one is thinking”

Water Lippman

STKI's RE-INVENTION INITIATIVES



Maybe We're Trying To Solve The Wrong Problem



שם _____ חברה _____ לקוח כן / לא

האם אתם מעוניינים שנוצור אתר קשר:

• בנושא שירותי STKI כן / לא

• בנושא מקסום השימוש בשירותי STKI כן / לא

• האם דרגי את שירותי STKI, על מנת שנוכל להמליץ אותם אישית אליך? (1 = כלל לא | 5 = במידה רבה מאוד)

• מינשות עם אנליסטים - 1 | 2 | 3 | 4 | 5

• מצגות במחלקה / לכלל החברה - 1 | 2 | 3 | 4 | 5

• שולחנות עולים - 1 | 2 | 3 | 4 | 5

• השתתפות בכנס השנתי - 1 | 2 | 3 | 4 | 5

• שאלות - 1 | 2 | 3 | 4 | 5

• מאמרים מקצועיים - 1 | 2 | 3 | 4 | 5

באיזה מתושים הבאים תרצה/י לקבל חומרים באופן שוטף (STKI initiatives) - ניתן לסמן מספר נושאים.

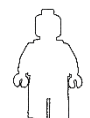
- Customer engagement
- Employee Empowerment
- Cloud
- IT as a Service (infrastructure and operations)
- Cyber Government
- Data driven
- Organization innovation
- Re-invent IT (internal IT such as IT organization, development, procurement, OCIO, etc.)

האם תרצה שנמחק אתר מסאגר התנועים של STKI? כן / לא



Innovation by:

1. improvisation
2. regulation
3. design*





The Dunning-Kruger Effect Shows

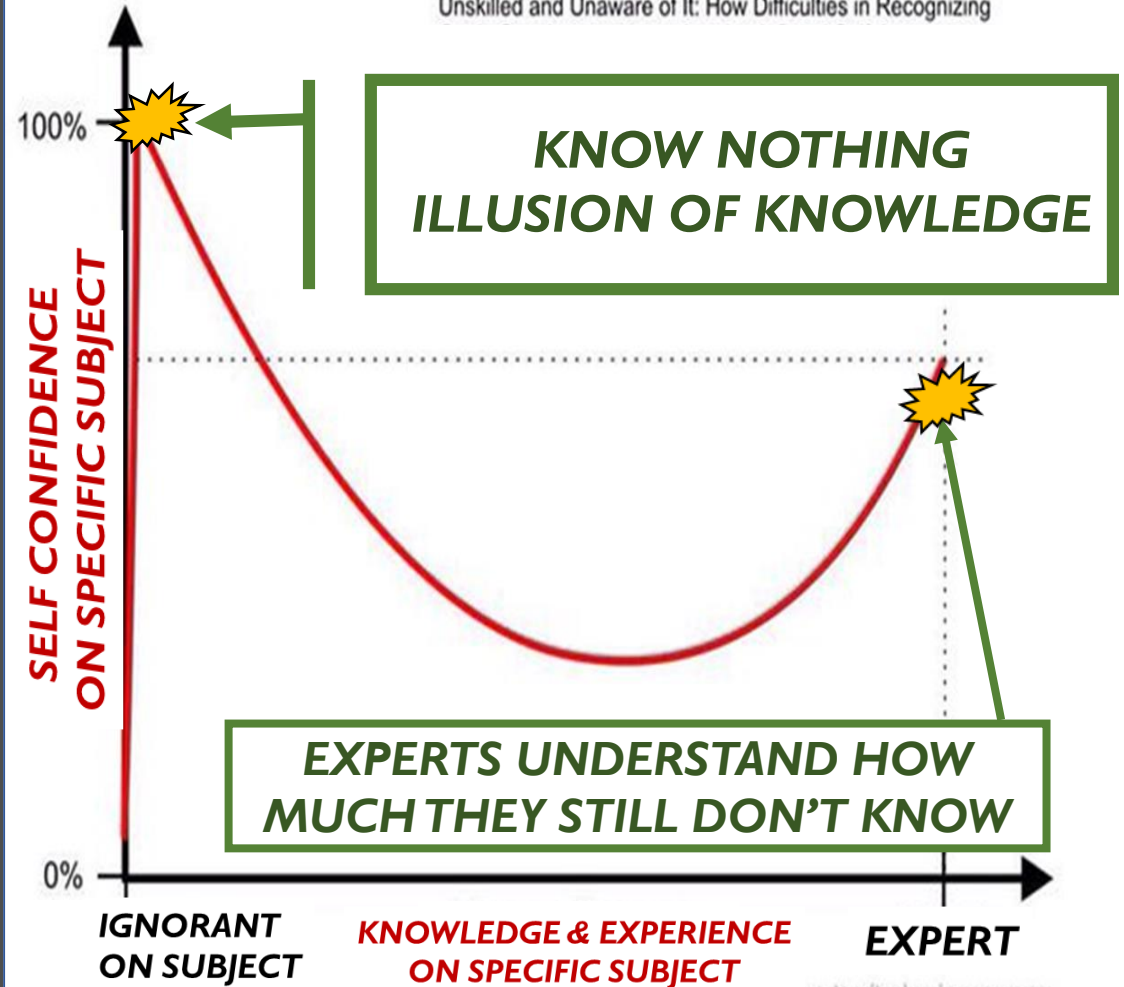


people cannot objectively evaluate their actual competence or incompetence

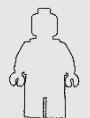
**TO KNOW WHAT YOU KNOW AND WHAT YOU DO NOT KNOW, THAT IS TRUE KNOWLEDGE.
-CONFUCIUS**

Dunning-Kruger Effect

Unskilled and Unaware of It: How Difficulties in Recognizing

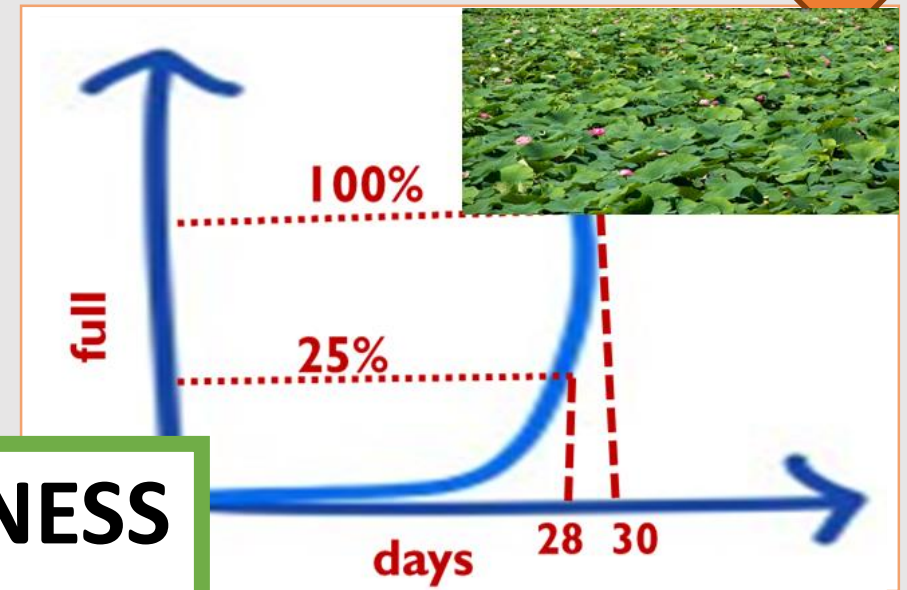


.....artandtechnology.com.au

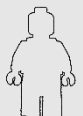


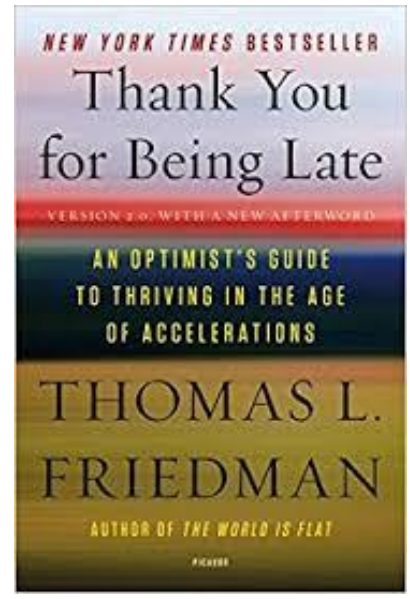
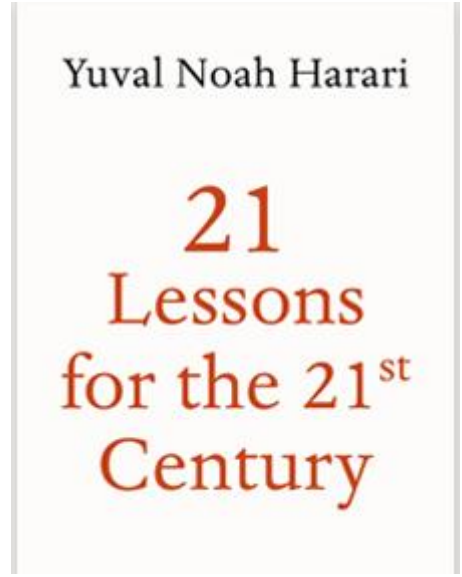
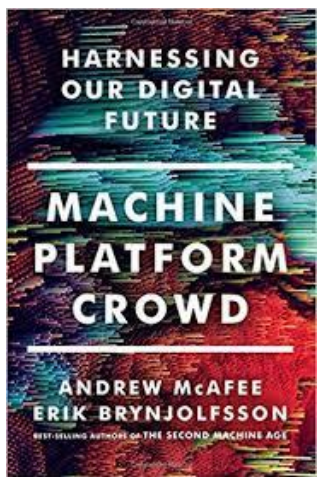
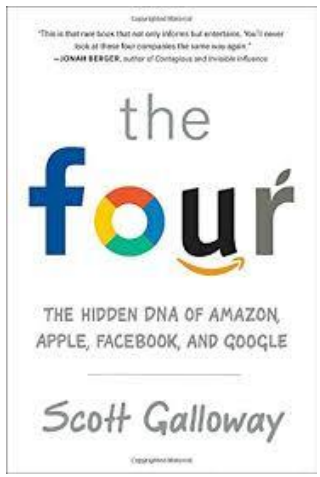
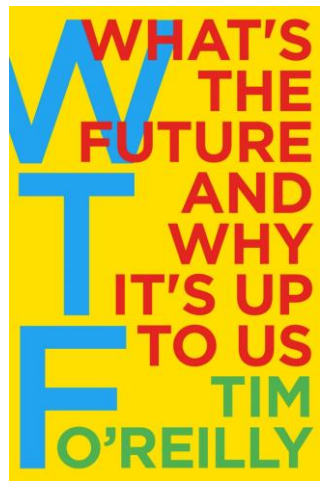


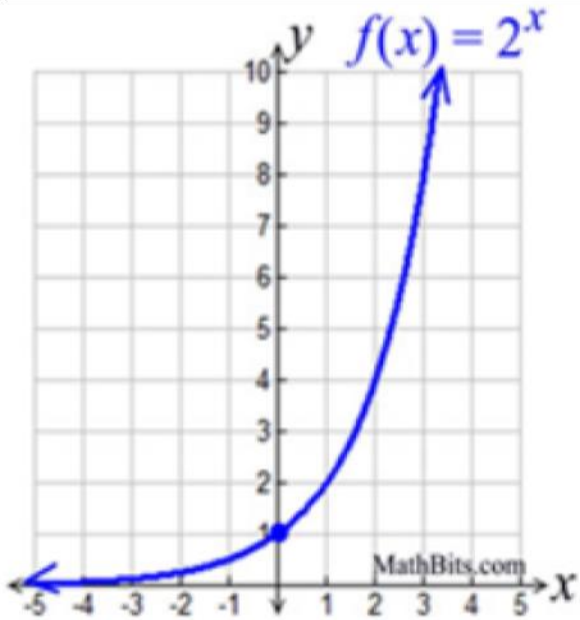
THE REALITY OF MODERN BUSINESS
the pace of change is exponential
(like the pond lily)



pond lily doubles its leaf area every day and it takes 30 days to completely cover a pond, on what day will the pond be 1/2 covered?

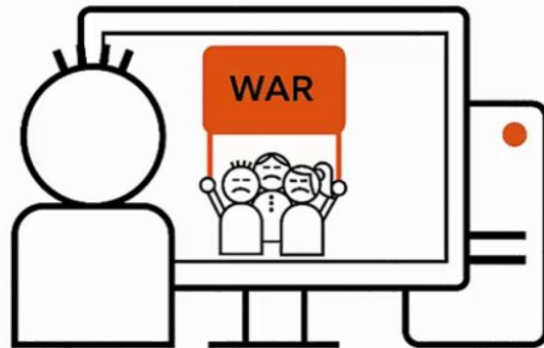




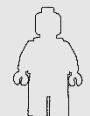


The greatest shortcoming of the human race is our **inability to understand the exponential function**

Dangers of Personality Profiles



Professor Yuval Noah Harari in DAVOS Talks about how **big data can reveal everything** about an individual, even things that are not known to the individual himself. **The same data will be hacked,** with **personal and political complications**



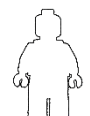
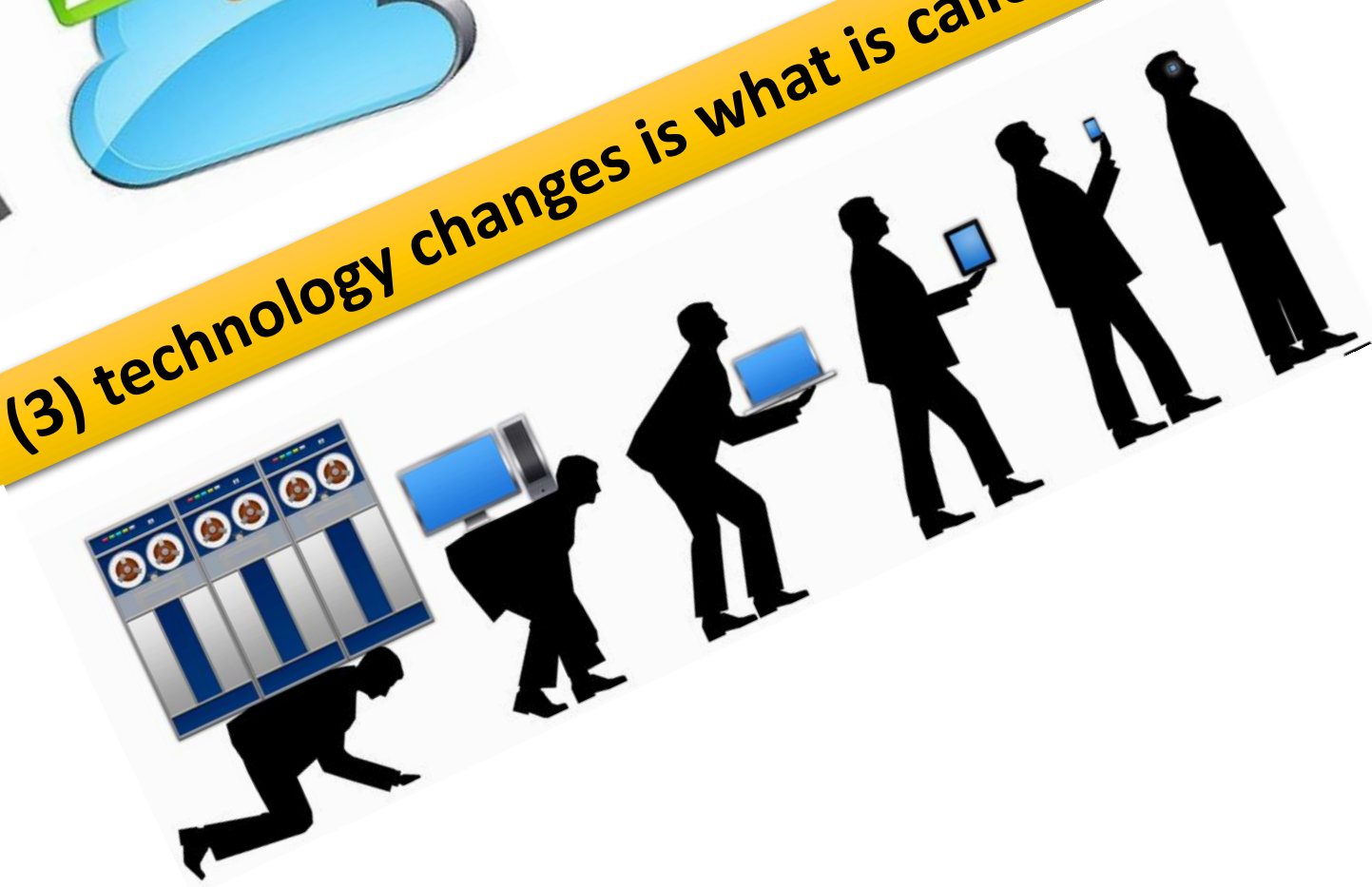


What do we call “DIGITAL” ?



Resource becomes so **cheap** and **abundant** that **wasting** it to **create something completely different** makes sense

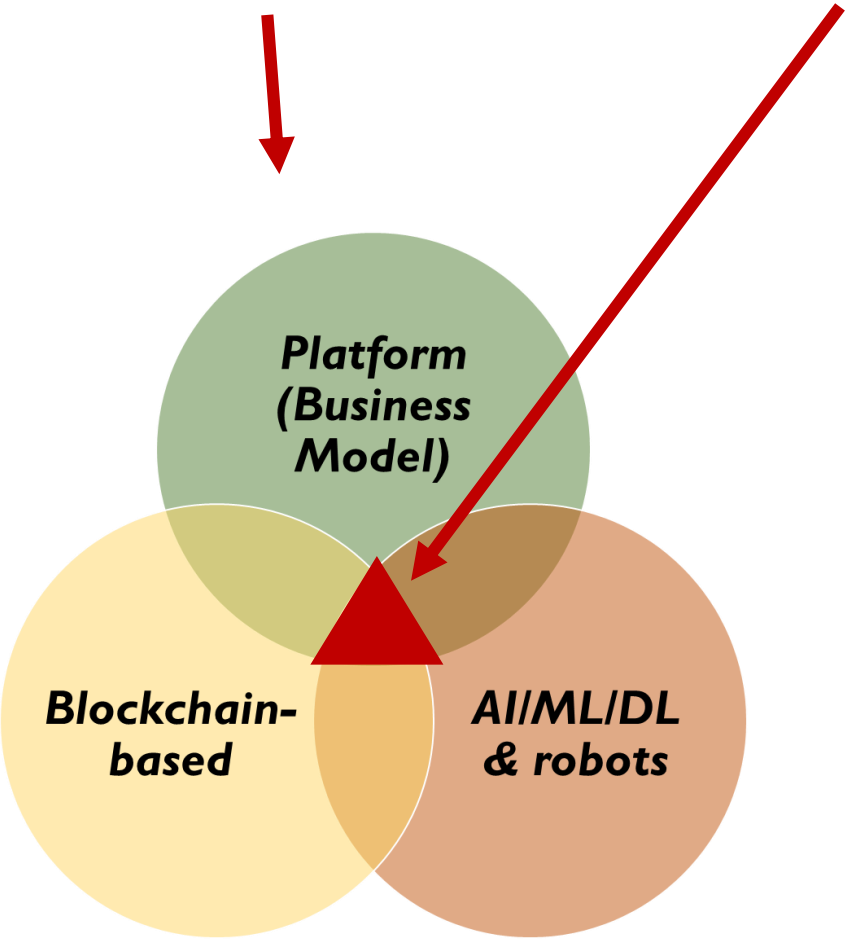
The combination of this three (3) technology changes is what is called DIGITAL





DIGITAL INNOVATION TECHNOLOGIES

EXTREME INNOVATION



DIGITAL INNOVATION

INTELLIGENCE



technologies

SPEED



agility

SYNERGY

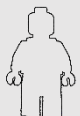
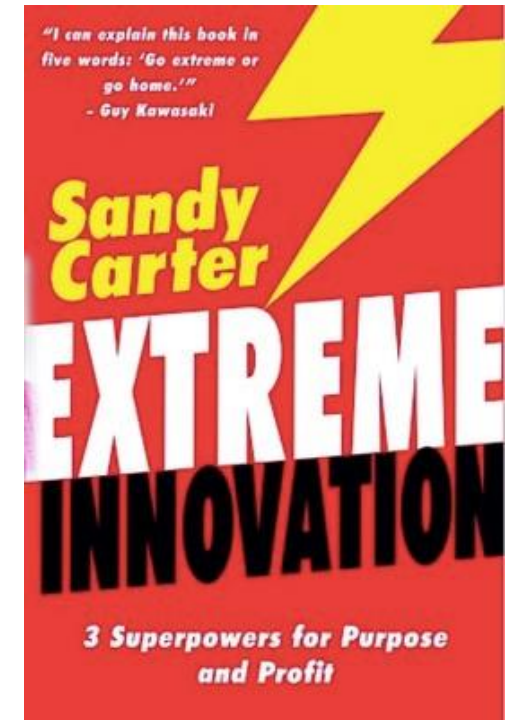


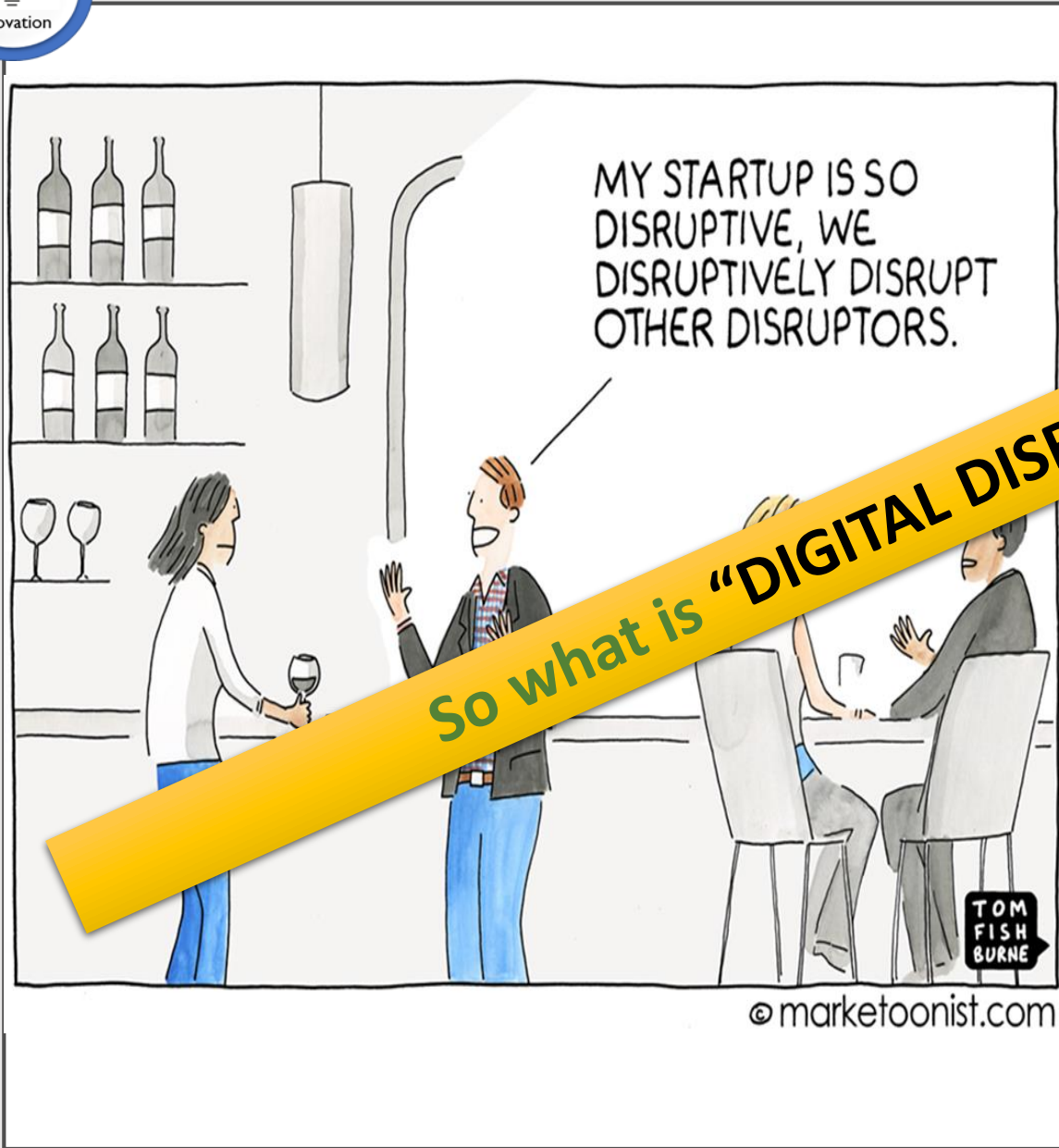
ecosystems



Sandy Carter

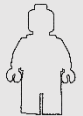
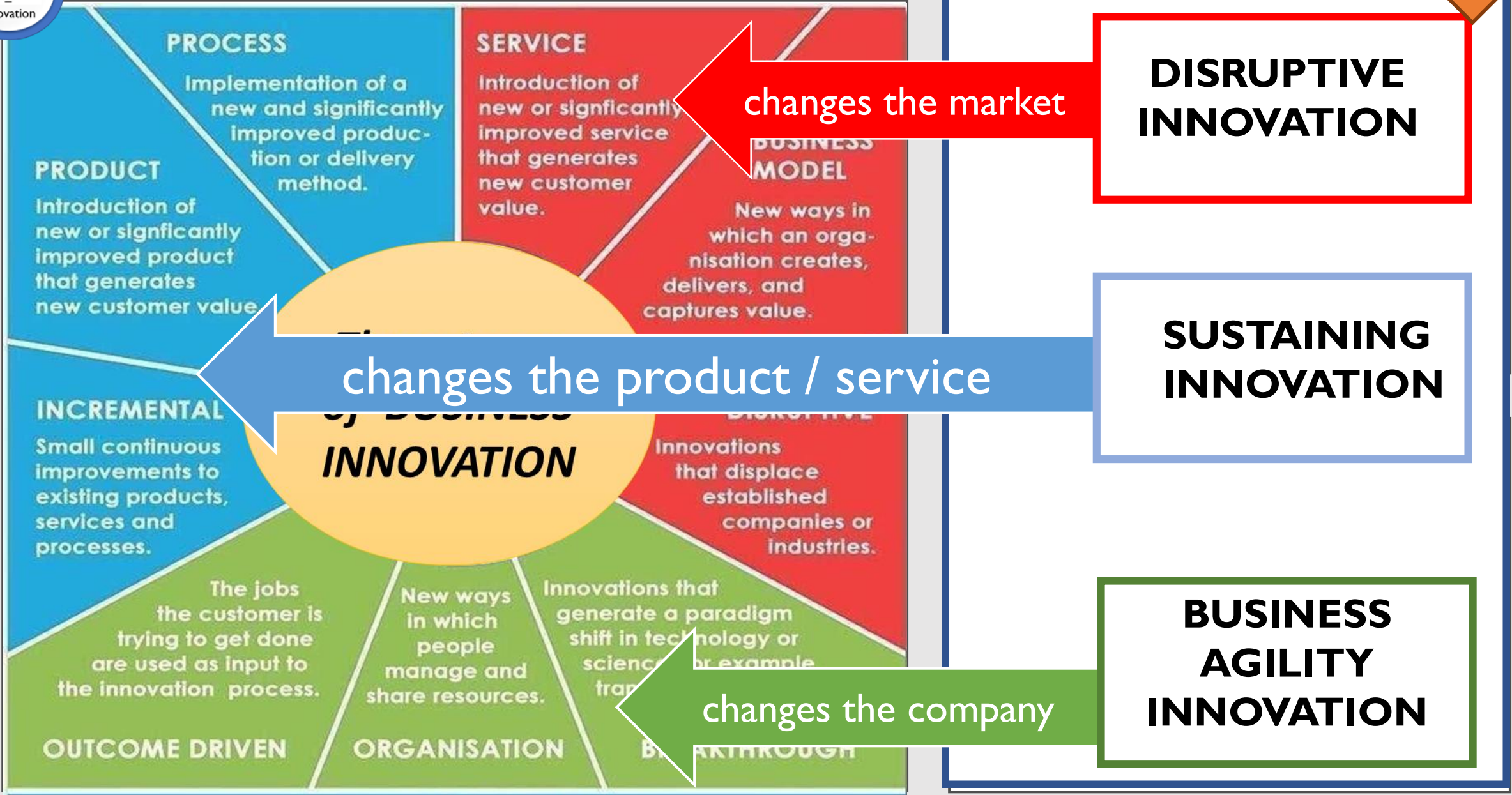
IBM AMAZON
evangelist responsible for connecting emerging technology companies and accelerators with enterprises





So what is "DIGITAL DISRUPTIVE INNOVATION"?







Type Of Innovation	Business Agility Innovation
Market Concentration	Existing Market
Customer Demand	Processes for Products/Services For Existing Clients
Budget	70%
ROI After 5 Years	10%

BUSINESS AGILITY INNOVATION

ability of an organization to **sense and respond to change** quickly during everyday business activities

Managers have a better intuition about the value of resources than they do about the value of processes.



BUSINESS AGILITY INNOVATION



FORD took 8 years to fix the PINTO's gas tank
(exploded in accidents)

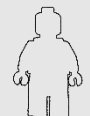


TOYOTA took 1.5 years to fix the gas pedal
(stuck resulting in continued acceleration)



TESLA fixed the batteries in 14 days

adler@CA





Elon Musk (TESLA) turns tweets into actions FAST



Paul Franks @pjfranks1509 · Aug 19

@elonmusk can you guys program the car once in park to move back the seat and raise the steering wheel? Steering wheel is wearing.

43 98 1.9K



Elon Musk @elonmusk

Musk's example has been copied by all TESLA managers

Following

Replying to @pjfranks1509

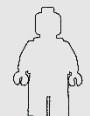
Good point. We will add that to all cars in one of the upcoming software releases.

11:11 AM 19 Aug 2017

524 Retweets 9,465 Likes



298 524 9.5K





FAST
IS THE
NEW
BIG



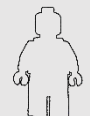
“my two gurus”



MARKETING GURU



INNOVATION GURU





Purple
COW

Transform Your Business by Being Remarkable

Seth Godin author of *Permission Marketing*

WHAT'S YOUR
Purple Cow?

SAY WHAT?

“ THE KEY TO SUCCESS IS
TO FIND A WAY TO STAND OUT,
TO BE THE PURPLE COW
IN A FIELD OF MONOCHROME HOLSTEINS

- SETH GODIN



Minimum Viable Product



Minimal Marketable Product



"Purple Cow" Product

**new, unique
remarkable**



**Stop advertising and
start innovating**
 build a remarkable
 product/ service that is
new, unique and remarkable
purple cow 

Sustainable Innovation

Sustainable (incremental) innovations **improve the performance of established products or services** along the dimensions of performance that customers in major markets have historically valued.

Radical Innovation

Radical innovations are **significant improvements** and affect and/or change entire companies.

- A) New to the world features
- B) Significant (5-10x) improvement in known features
- C) Significant (30-50%) reduction in cost

Disruptive Innovation

Disruptive innovation first takes a foothold in **new markets** and, at first, often exhibits significant disadvantages compared to conventional products.

They **satisfy other customer needs** and have their advantages in other, new criteria.

High risks, low sales and margins



must look for a second act

TYPES OF INNOVATION

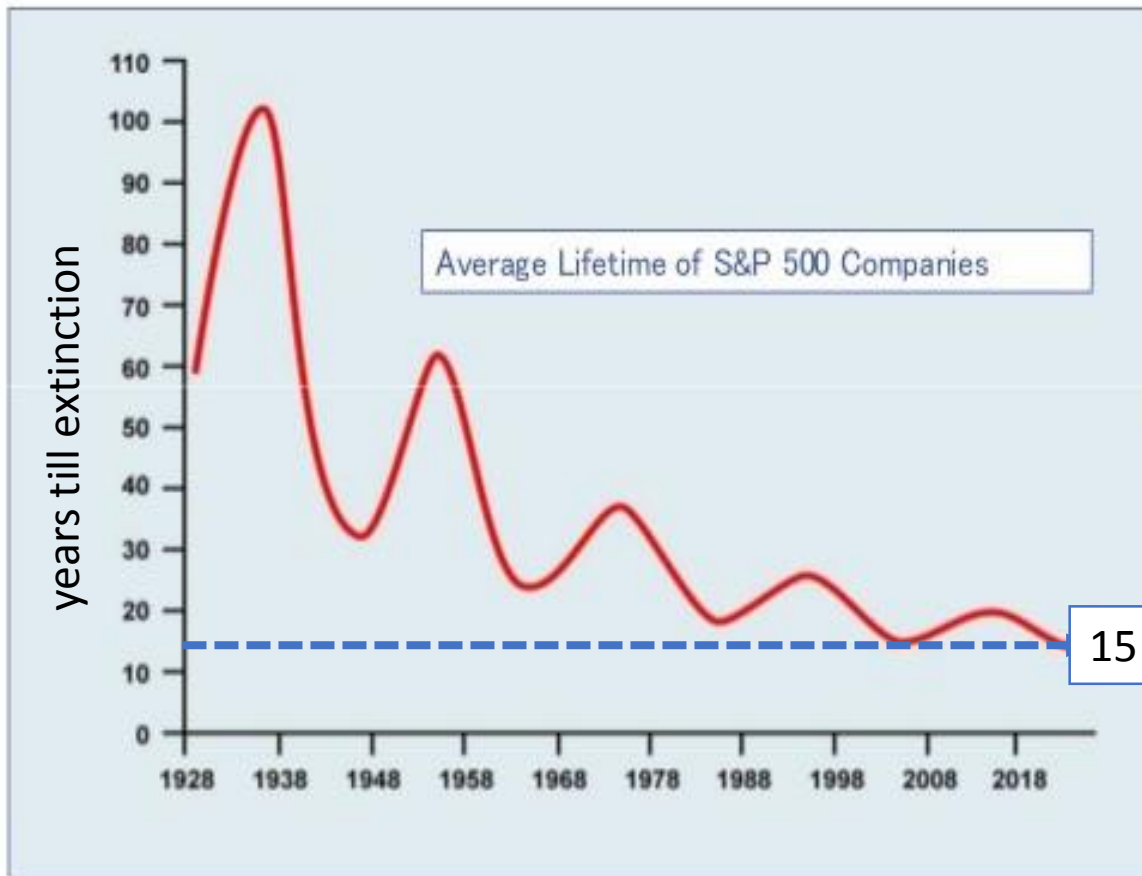
Sustaining: improve on existing products and/or services

Radical: significant improvements that change entire companies (cost performance especially)

Disruptive: change entire markets



Extinction rate for companies is increasing



- *first week 7.5 million players*
- *Second week 28.5 million players*
- *Week 10 lost 15 million players.*

Disrupters (Fitbit and GoPro) scaled up incredibly quickly and then cooled off almost as fast.

weren't ready with their next innovation

life span of companies on the S&P 500 from 67 years (1920s) to 15 years today,

2020 : 75% of companies will be unheard of in 2010.



Why The Second-Act Crisis Exists ?

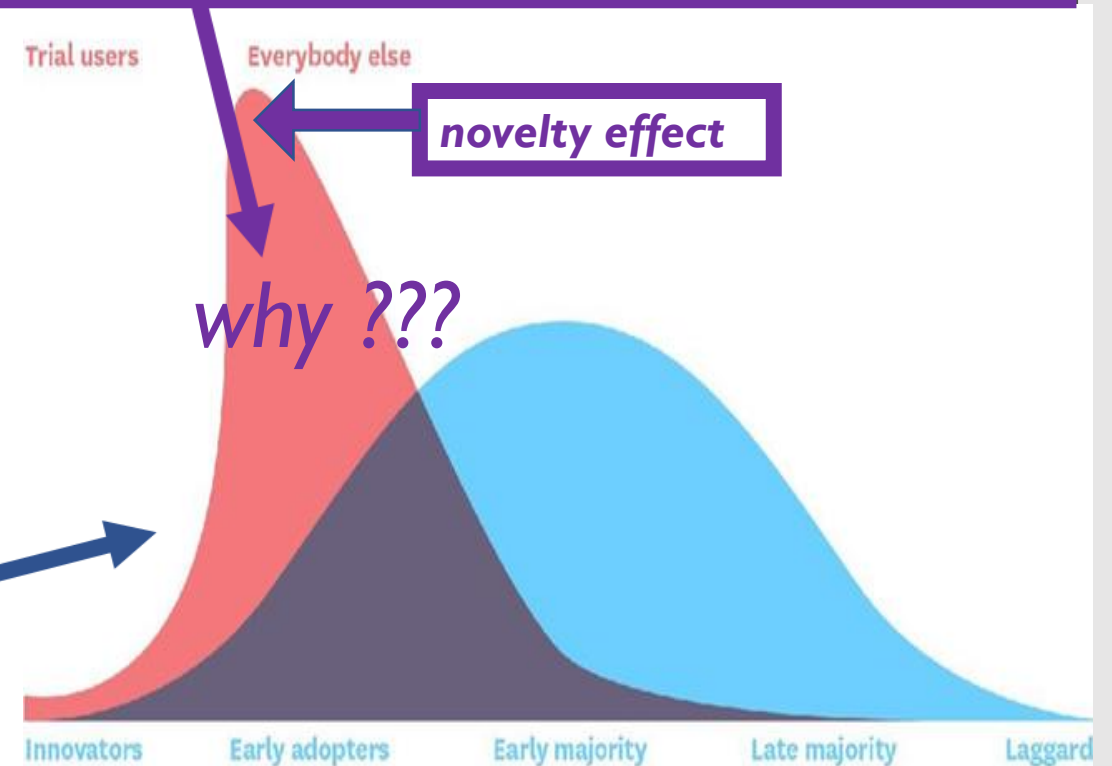
**RAPIDLY SPREADING
SECOND WAVE OF TRANSFORMATION
in industries largely untouched by
FIRST WAVE OF TRANSFORMATION:**

- **manufacturing** (3-D printing and IoT)
- **agriculture** (drones and sensors)
- **transportation** (autonomous, shared , electric vehicles)
- **professional services** (artificial intelligence)

**Roger's bell curve of innovation diffusion
deformed from 5 distinct markets to 2**

- *Innovators, early adopters, early majority, late majority & laggards*
- *Trial users (help develop/test) & Everybody else*

1. **Near-instant saturation** by new products
2. **Near-perfect market information** has lowered transaction costs (evaluating potential purchases)
3. **Rapid obsolescence of digital components** (new versions and innovations in price, performance, size, and power utilization lead to ever-shorter cycles)



SOURCE EVERETT ROGERS (BELL CURVE)
FROM "FINDING YOUR COMPANY'S SECOND ACT," BY LARRY DOWNES AND PAUL NUNES, JANUARY-FEBRUARY 2018

© HBR.ORG

Type Of Innovation	Sustaining Innovation
Market Concentration	Expand Existing Markets
Customer Demand	New Products/Services Based On Existing Assets (Incrementalism)
Budget	20%
ROI After 5 Years	20%

SUSTAINING
incremental value gain over existing solutions available to users

Sustaining Innovation

Innovating in Response to Customers' Feedback



SUSTAINING INNOVATION

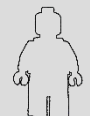
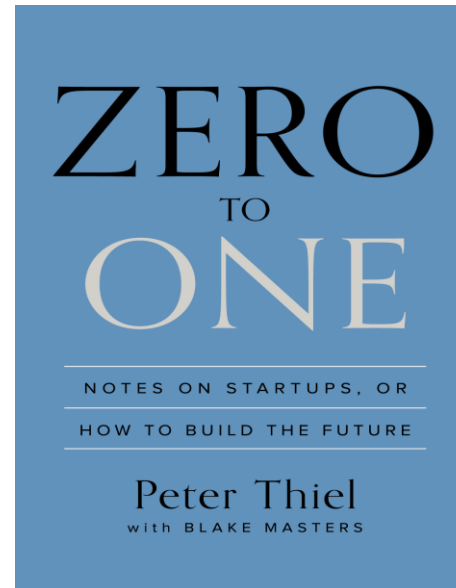
can be described as incremental line extensions and product improvements.

- **companies are stuck in a cycle** of producing **new** products via **sustaining innovation**
- **number of disruptive innovations** from existing companies is at an **all-time low**

progressive improvement of products/services is the

“incrementalism”

Peter Thiel writes about
(even for startups)





Parking Roads Vehicle

Advanced parking services that put an end to fines and save time and money – locate parking spaces, quick entry into parking lots and automatic termination.



On-Street Parking



Smooth Parking



simple



Parking Locator

Parking Roads Vehicle

Smart and vital road services that provide you with roadside assistance if necessary, a direct dial for police assistance and travel on toll roads.



Roadside Assistance Service



Toll Roads



police

Parking Roads Vehicle

Your vehicle is in good hands with a variety of convenient and worthwhile services: Flat tire service, excellent car wash prices and car insurance at an attractive price



car wash



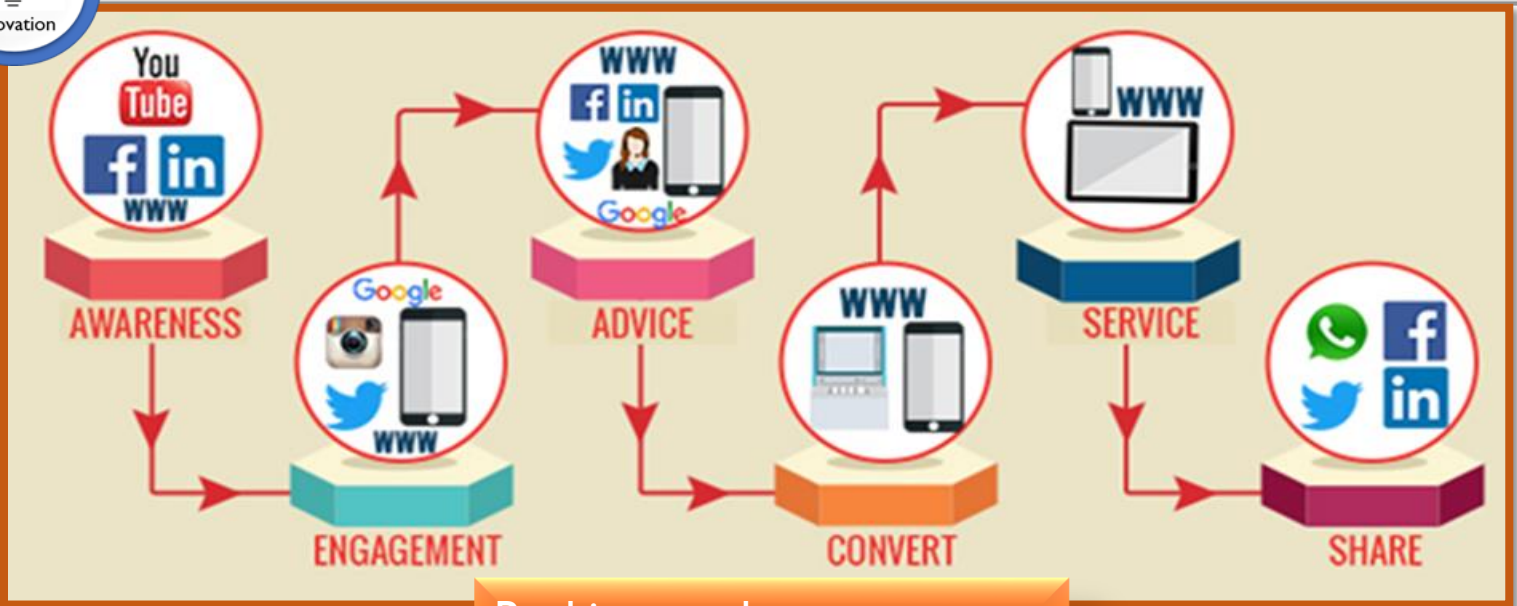
flat tire repair



”incrementalism”



are “financial institutions”
in Israel ready
for
SECOND ACT??



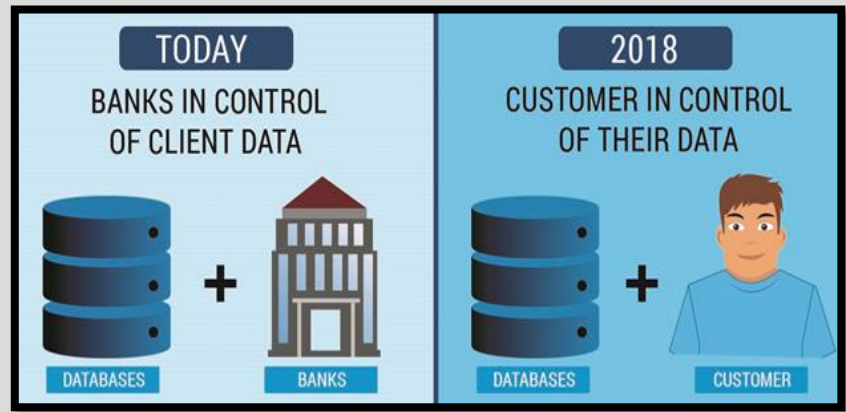
Banking needs an ecosystem



FIN INS Partners

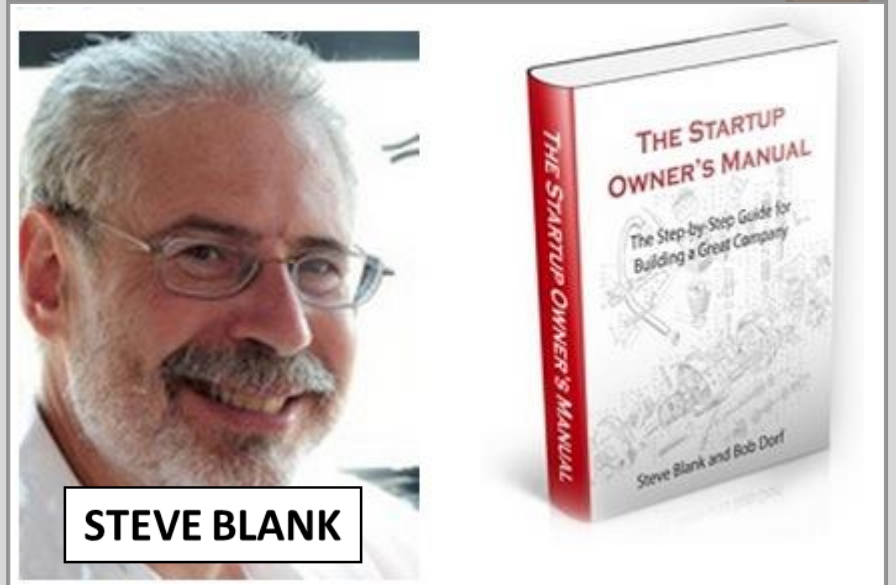
Bank Platform

customers





DISRUPTIVE INNOVATION



Type Of
Innovation

Transformational
Innovation

Market
Concentration

Markets That (Yet)
Do Not Exist

Customer
Demand

Products/Services
Clients Do Not
Recognize They
Want (Yet)

Budget

10%

ROI After 5 Years

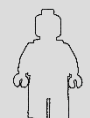
70%

companies are stuck
in a cycle of producing
new_products only via
sustaining innovation

number of
DISRUPTIVE INNOVATIONS
from existing companies
is at an **all-time low**

most new
DISRUPTIVE INNOVATIONS
are based on:

- **crowd sourcing**
- **platform models**





How Elon Musk's companies are taking on ... everything

COMPANIES AND INITIATIVES CONNECTED TO ELON MUSK

CEO & founder

Founder, inventor, or adviser

Acquisitions

AEROSPACE



ARTIFICIAL INTELLIGENCE



TELECOMMUNICATIONS



INFRASTRUCTURE



TRANSPORTATION



CBINSIGHTS



Elon Musk @elonmusk

FLYING CARS ?

Following

Not saying the next gen Roadster special upgrade package *will* definitely enable it to fly short hops, but maybe ...

Certainly possible. Just a question of safety. Rocket tech applied to a car opens up revolutionary possibilities.

11:01 AM - 19 Nov 2017

7,201 Retweets 38,360 Likes



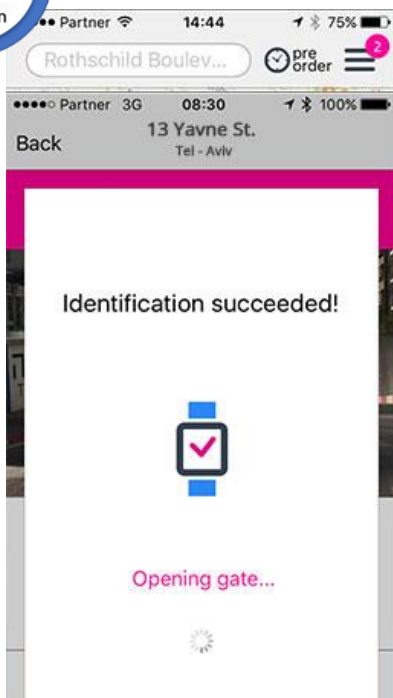
1.6K 7.2K 38K

Industry	How it Could Be Disrupted
Launches	Offering lower priced transport into space
Communications	Offering lower priced service worldwide
Internet	Putting more satellites into space for cheaper
Autonomous Vehicles	Building the best, lowest-cost electric vehicle
Transportation	Eliminating the need for car ownership entirely
Energy	Increasing access with Powerwall and Solar Roof
Solar Panels	Maximizing efficiency of solar panels
Sharing	By making idle Tesla cars available via app
Tunneling	Reducing cost of tunneling through the ground
Infrastructure	Building more efficient transportation infrastructure
Real Estate	Increasing range people can live from their place of work
Shipping	Reducing freight costs by a magnitude
AI Learning	Owning the best AI system in the world
Gaming	Consistently producing better-than-human AIs
Prosthetics	Reducing cost of effective prostheses by magnitude
Medical Treatment	Treating serious illness with simple injection
Human Augmentation	Allowing enhancement of human capabilities
Robotics	Better modeling of brain-machine interaction





Innovation



P PINK
PARK
לחנות בפחות

יש לכם חניה בתל-אביב?

עכשיו אפשר גם להרוויח מזה כסף

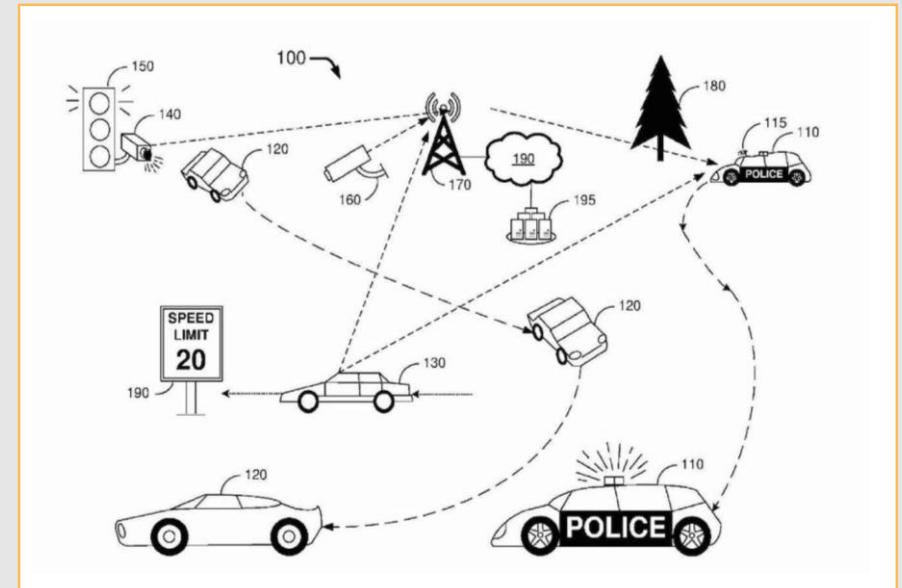
רוצים לדעת עוד? לחצו כאן



Ford Files Patent for **Autonomous Robocop Car** learns how to catch *violators of traffic laws*

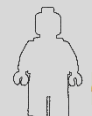
The patent (1/2018) references:

“machine learning tools”, cameras, road sensors, license plate readers, touch sensitive panels, speakers, LIDAR, ultrasound sensors, microphones, satellite connectivity, and radar detectors to record the speed of other vehicles





INNOVATION is
never about
“money”





84.9%

SAID INNOVATION IS
VERY IMPORTANT

business
agility
innovation

new
technologies

disruptive
innovation

sustaining
(continuous)
innovation



State of
Innovation

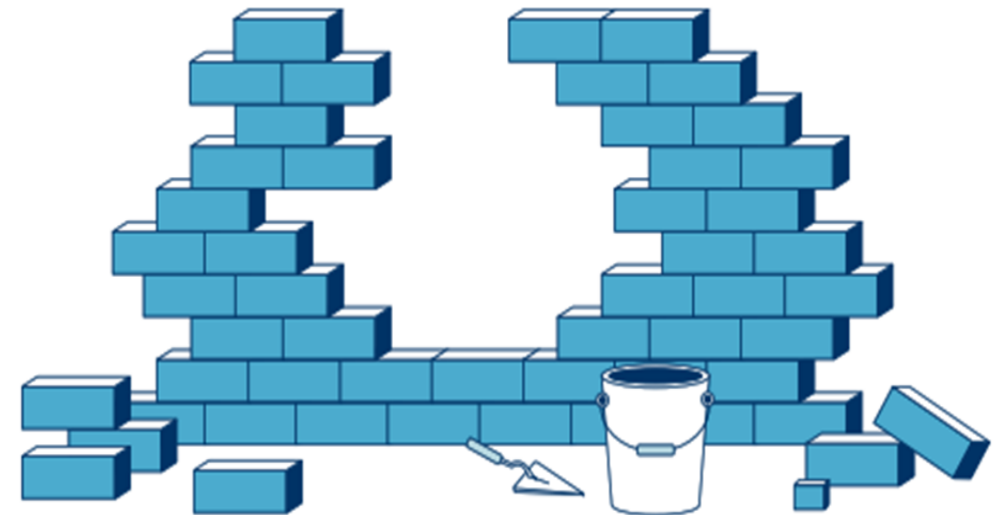
CBINSIGHTS

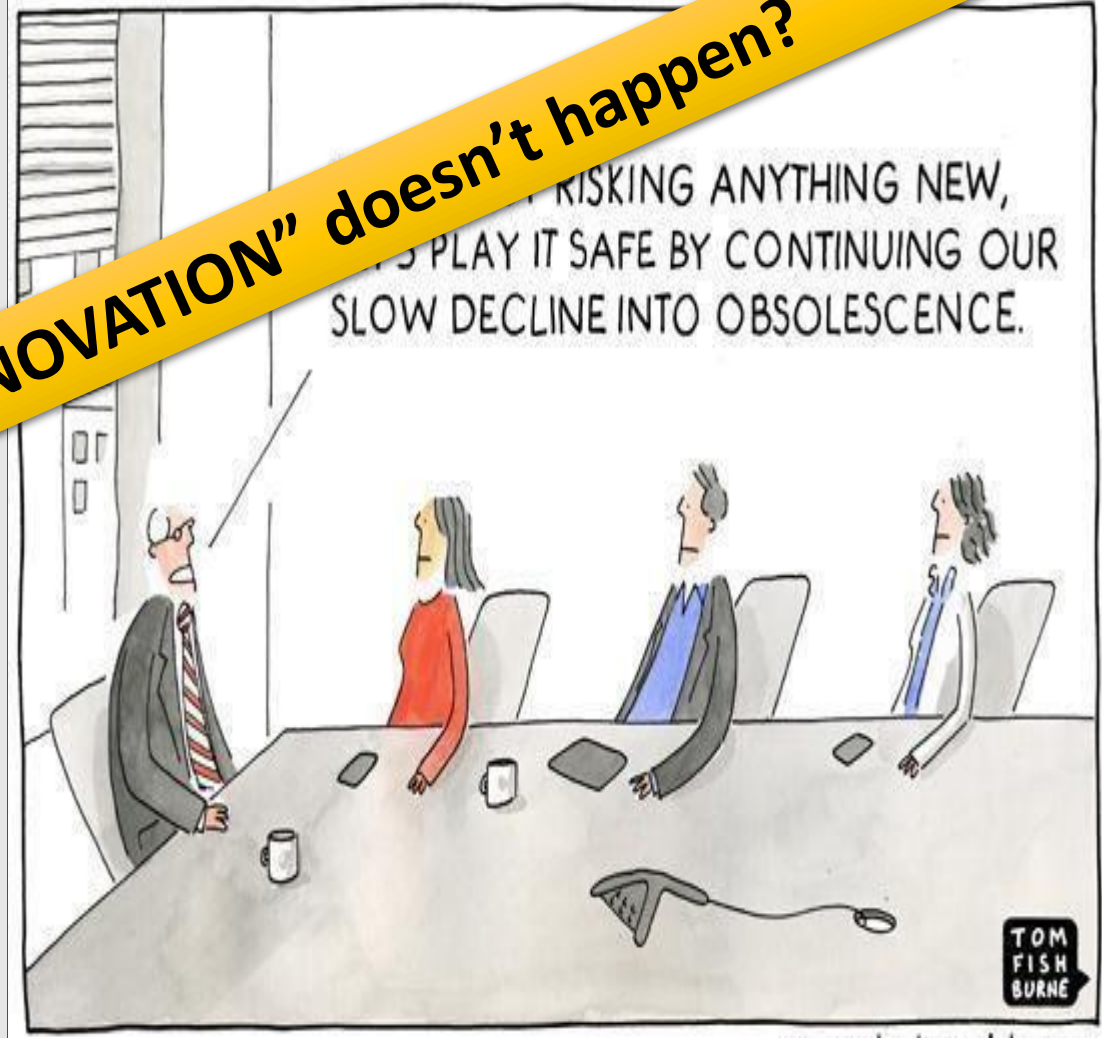
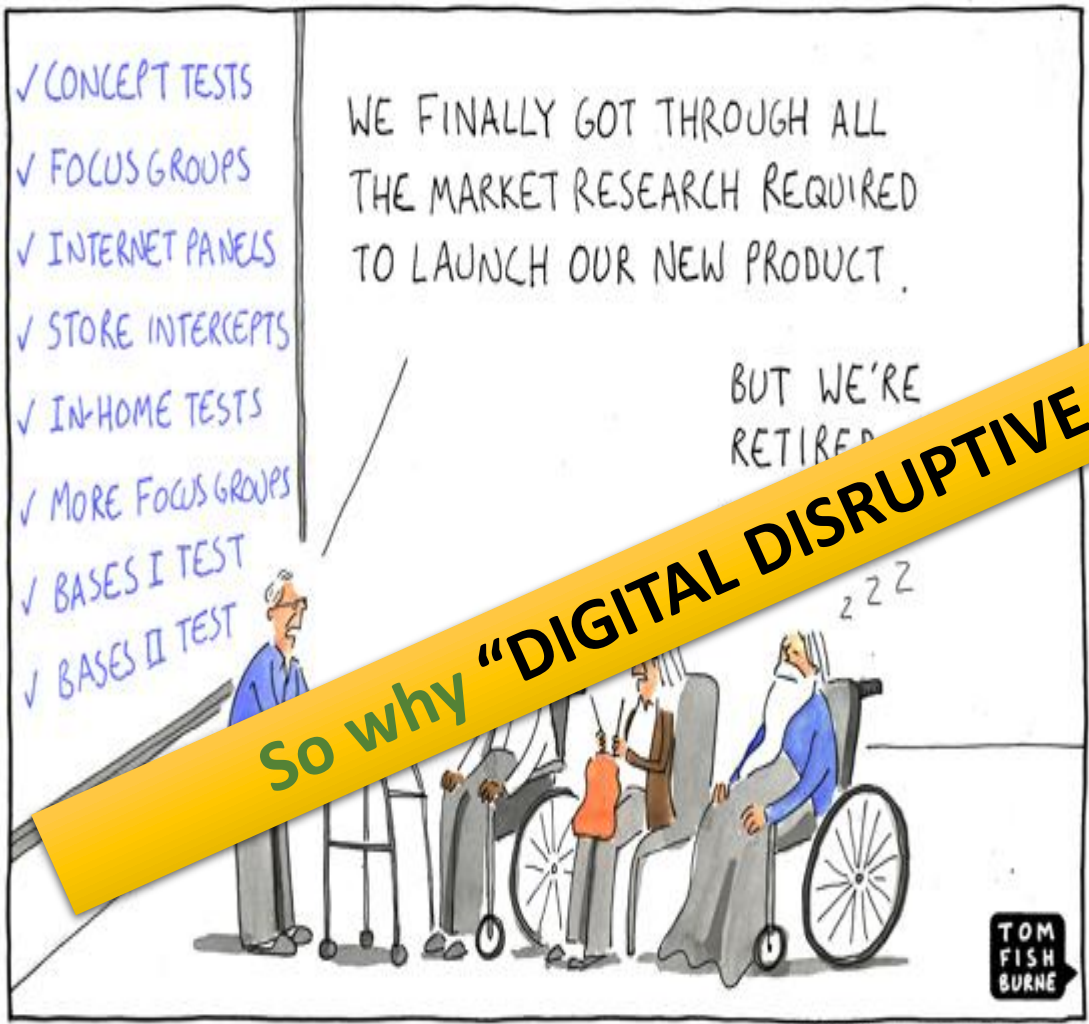
Survey of 677 Corporate
Strategy Executives



While corporations worry about
disruption, do they actually invest
in preventing it?

ANSWER = NO





So why "DIGITAL DISRUPTIVE INNOVATION" doesn't happen?

© marketoonist.com

© marketoonist.com

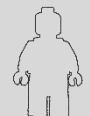
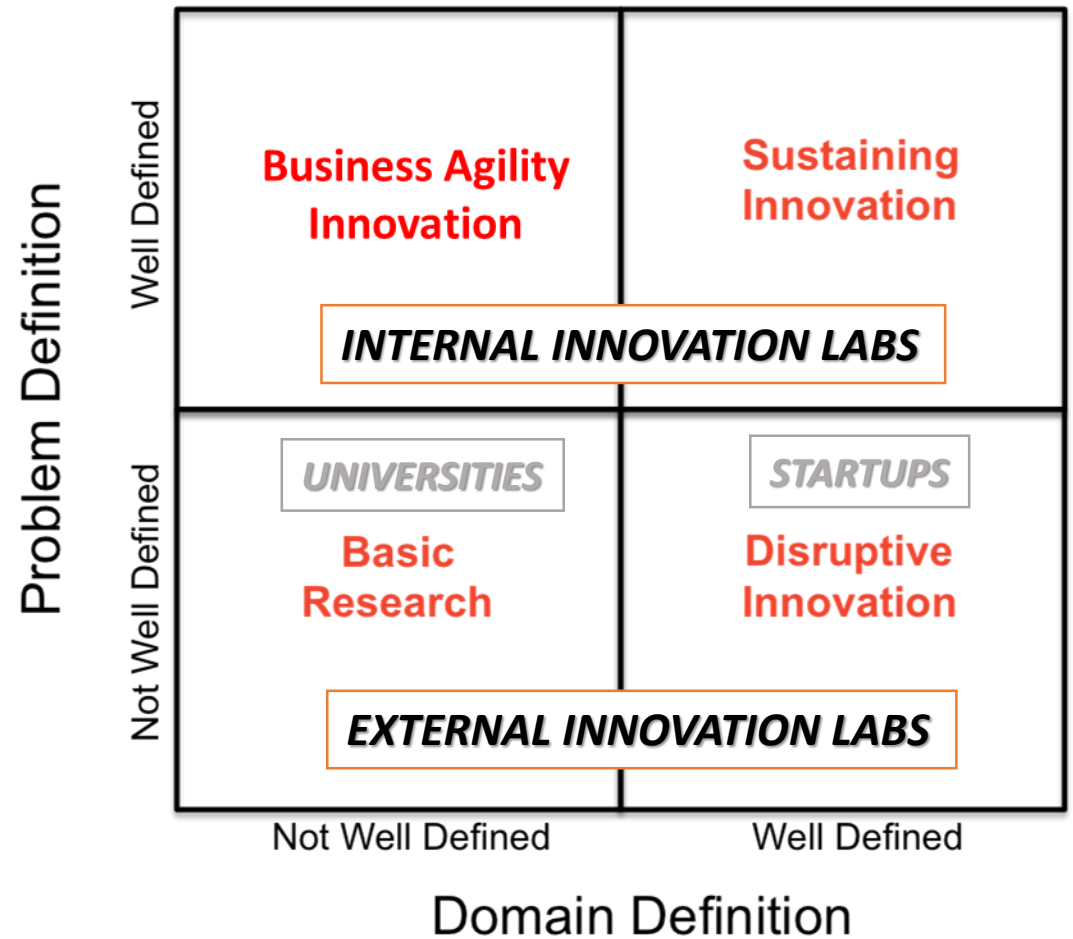


DISRUPTIVE INNOVATION
CANNOT
HAPPEN IN HOUSE

Why (*in-house*)

Innovation Labs and
Accelerators fail? *

Innovation Matrix





Customers and employees are driving innovation.

Part of the reason for the incremental nature of innovation is that the primary sources for innovation are existing customers and employees.

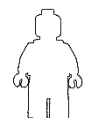


78% of innovation portfolios are allocated to continuous innovation instead of disruptive risks.

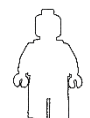
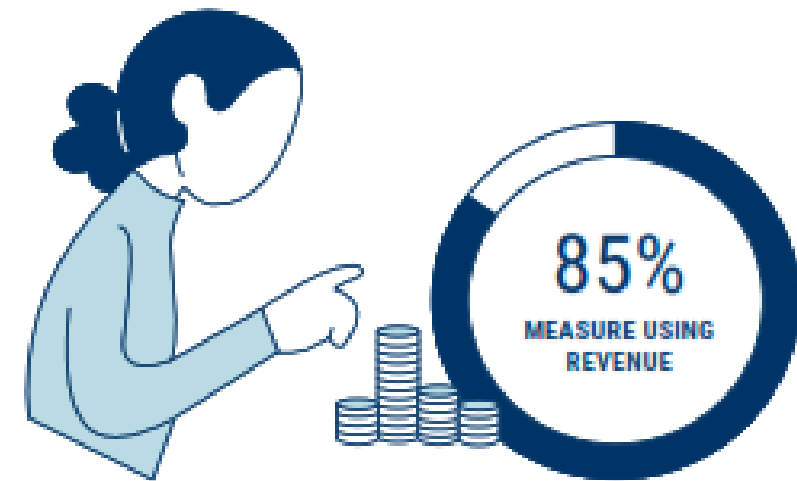
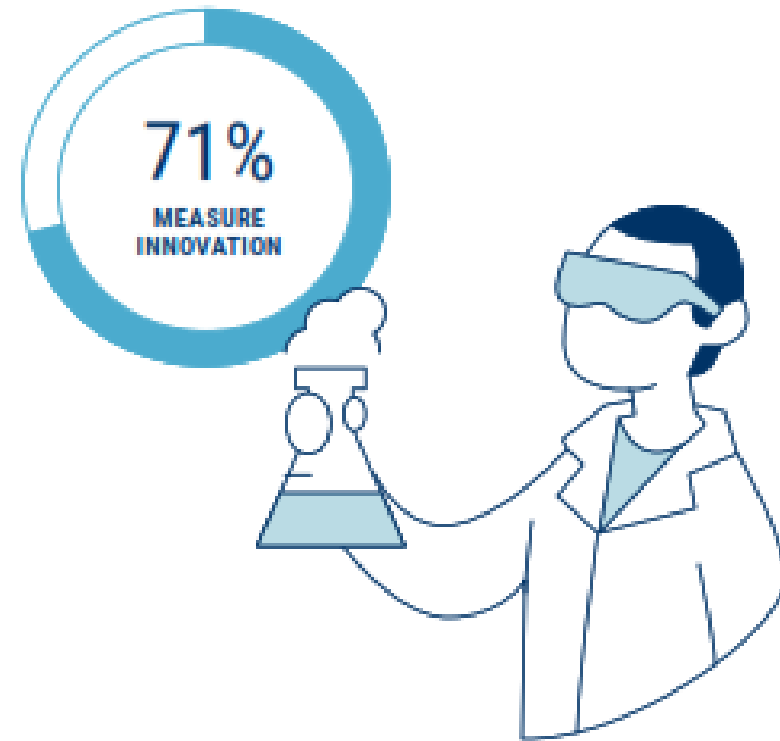
Innovation goals reflect the incremental nature of innovation efforts, with only 1 out of 5 goals focusing on new products and services.

Sustaining Innovation

Innovating in Response to Customers' Feedback



Though most companies don't have a process for innovation, they are focused on measuring it.





INNOVATION ideas
are born in
“locations”
but must be brought to
“FRUITION”

ep if one is
small jumps.

Bringing Goals to Fruition

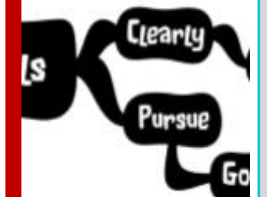
What do I want to achieve?

What's my plan of action?

How will I deal with critics?

How will I deal with difficulties?

How will I overcome setbacks?

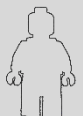


How much power or energy do you have to harness it and focus on a specific target, and how long will it take? you're never going to finish as much as your ability warrants.

Zig Ziglar

What are you doing? What are you doing? Why is it?

Innovation Goals to FRUITION (implementation)





Innovation

You run into
someone, and soon
you're cooking up
all sorts of ideas.

Steve Jobs

*“If a building
doesn't encourage collaboration, you'll lose a
lot of innovation
and the magic that's sparked by serendipity. So we
designed the building to make people
get out of their offices and mingle
in the central atrium with people they
might not otherwise see.”*

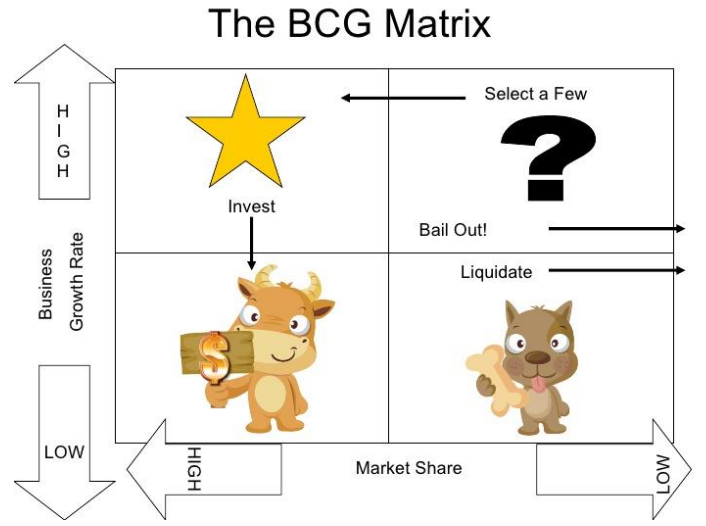
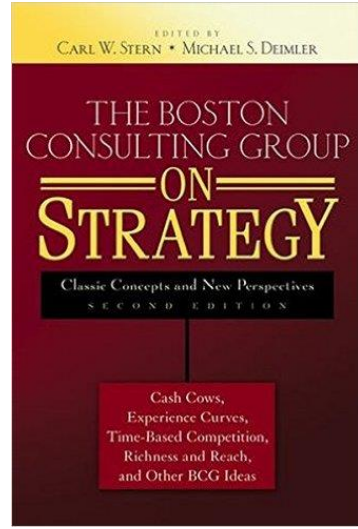



1999: before GOOGLE and all the rest





will tell you a bed time story

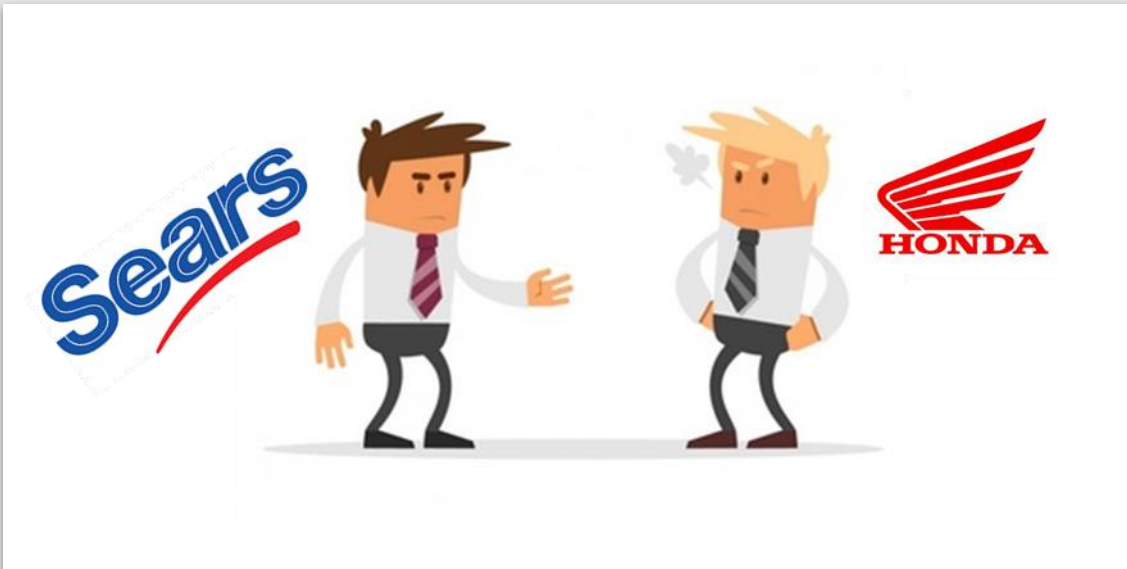
HARVARD | BUSINESS | SCHOOL

9-384-049
REV: MARCH 16, 2011

E. TATUM CHRISTIANSEN
RICHARD T. PASCALE

Honda (A)

The two decades from 1960 to 1980 witnessed a strategic reversal in the world motorcycle industry. By the end of that period, previously well-financed American competitors with seemingly impregnable market positions were faced with extinction. Although most consumers had an initial preference to purchase from them, these U.S. manufacturers had been dislodged by Japanese competitors and lost position due to technological shifts that could have been anticipated as

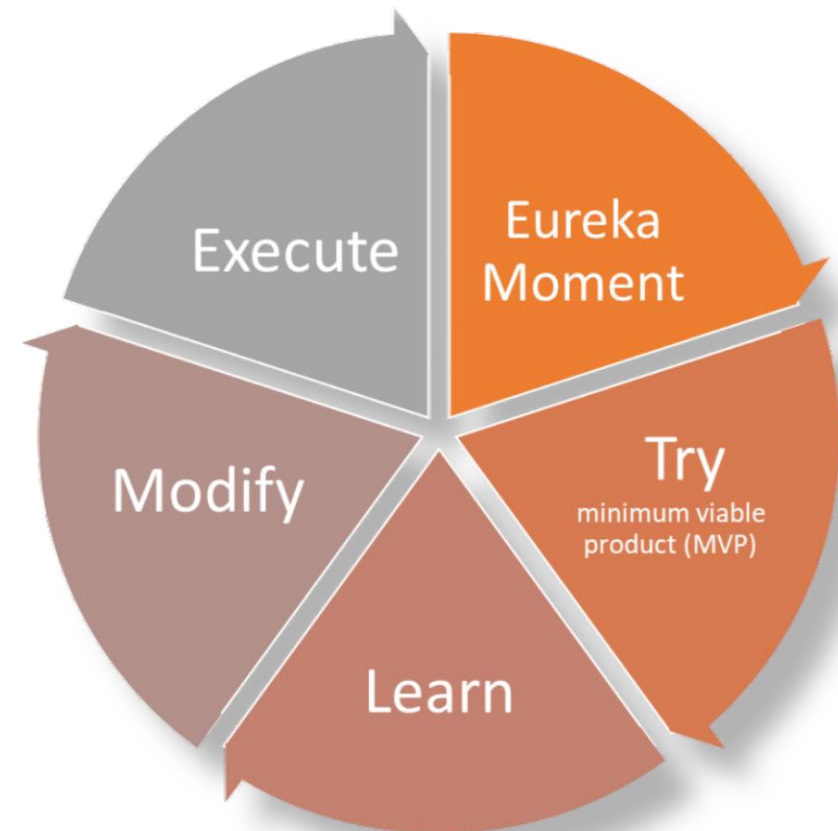




“sustaining innovation”
ACT 1
(strategic planning process)

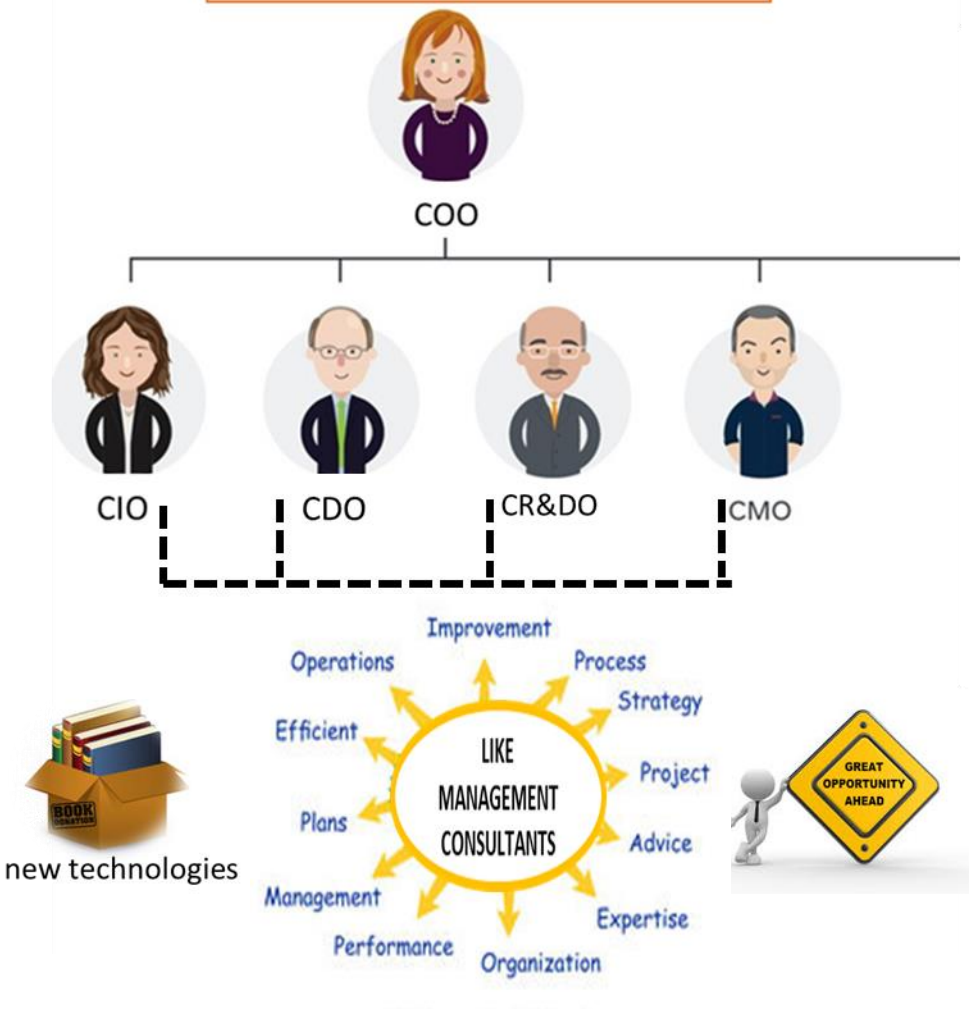


“disruptive innovation”
ACT 2nd
(design thinking process)



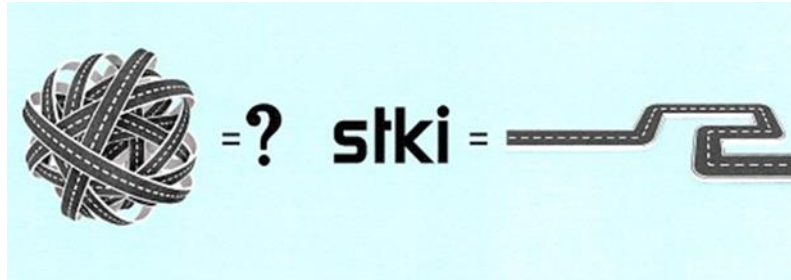


"sustaining innovation"

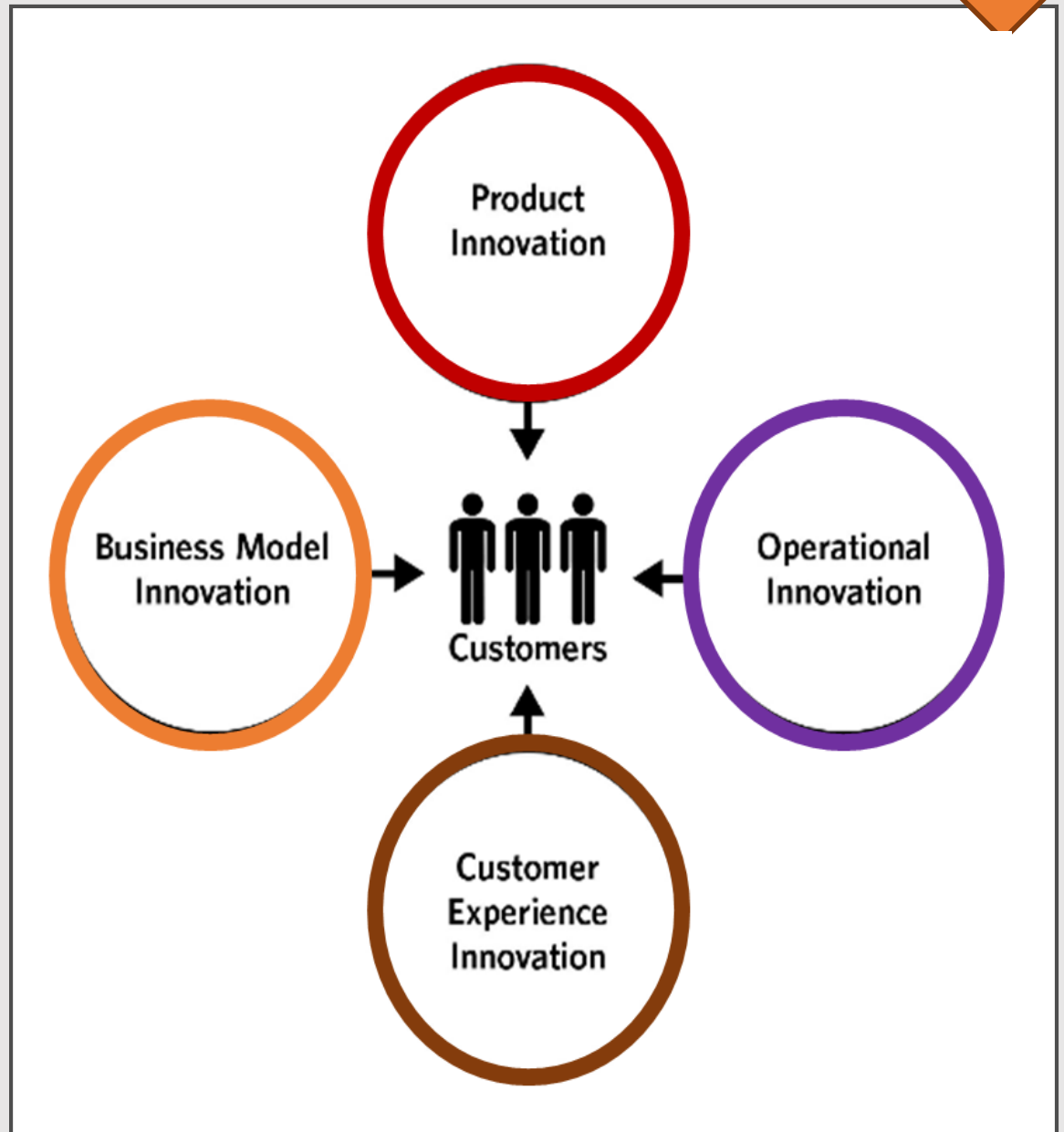
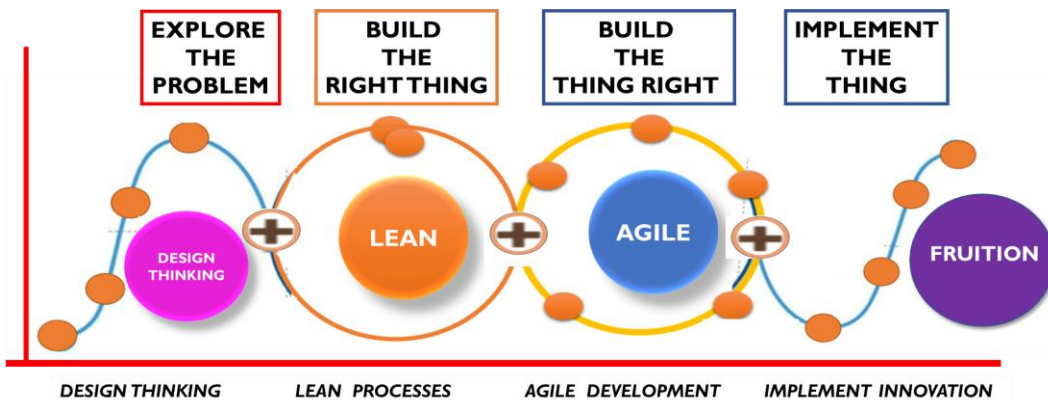


"disruptive innovation"





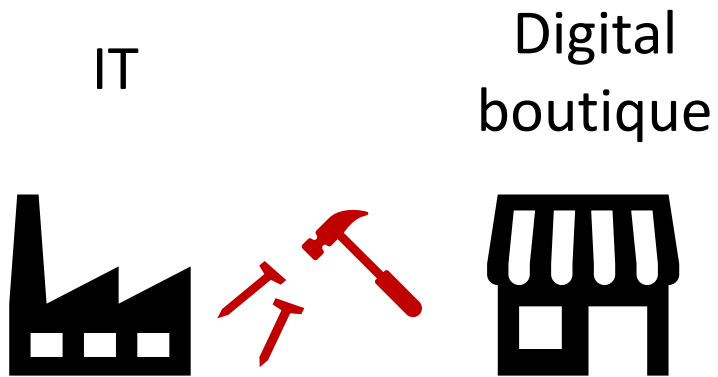
4 methodologies that should be used together



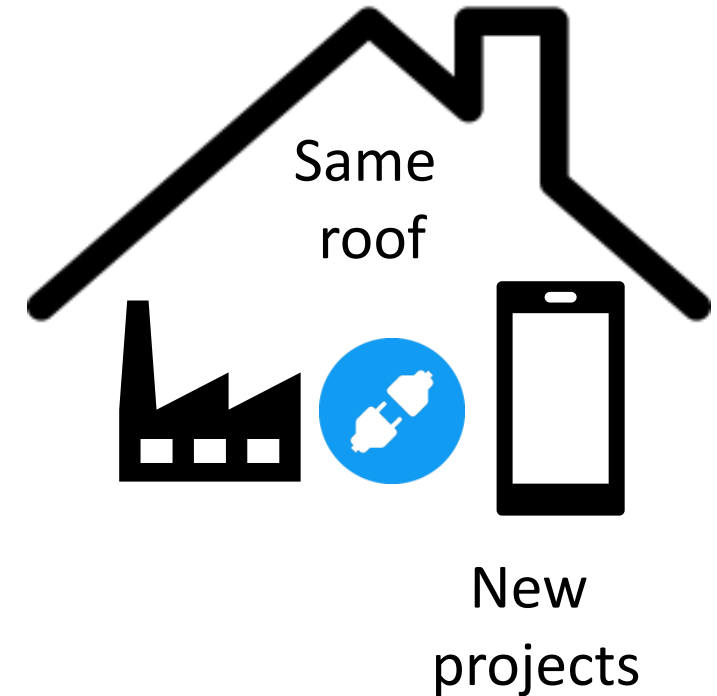
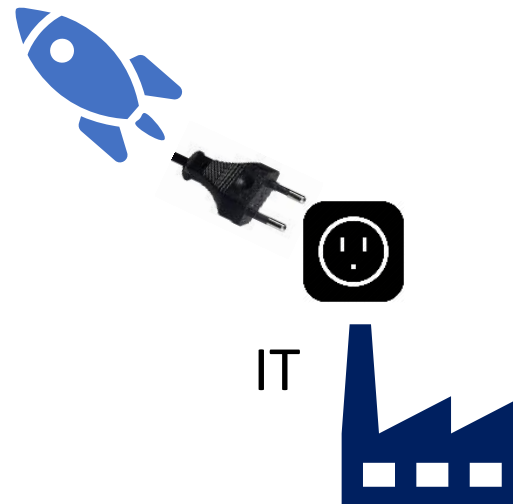


Business needed change and needed it fast

3 market models:

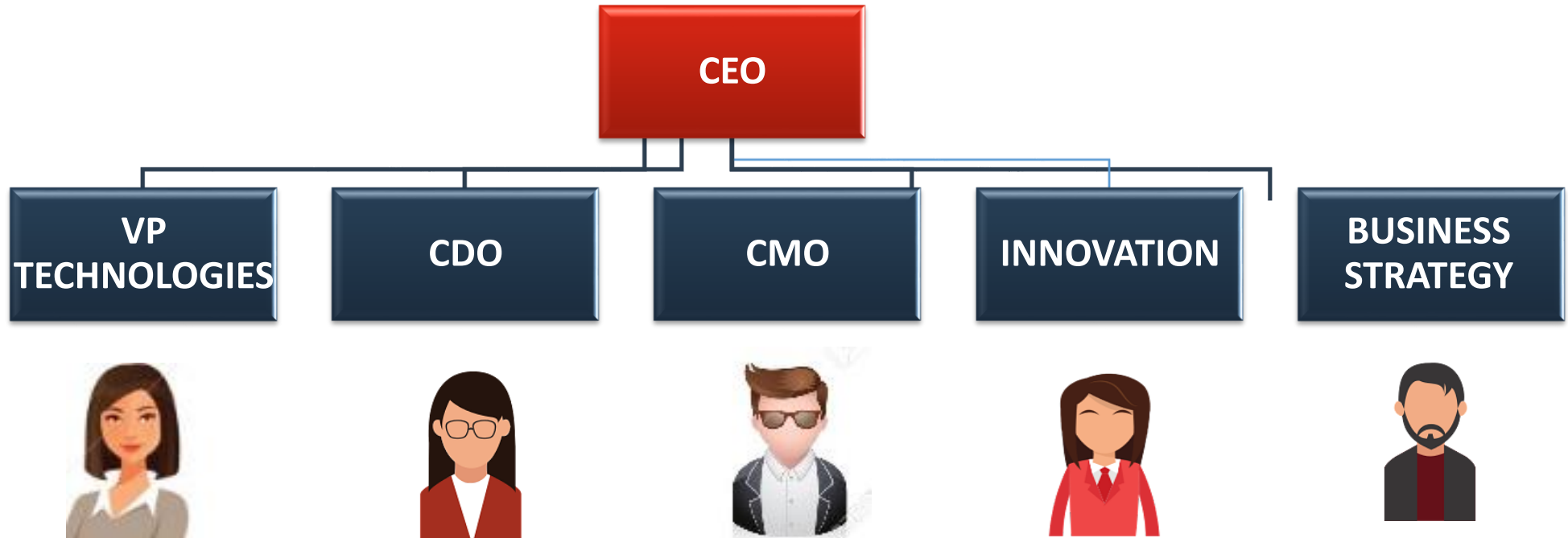


Digital transformation
CDO



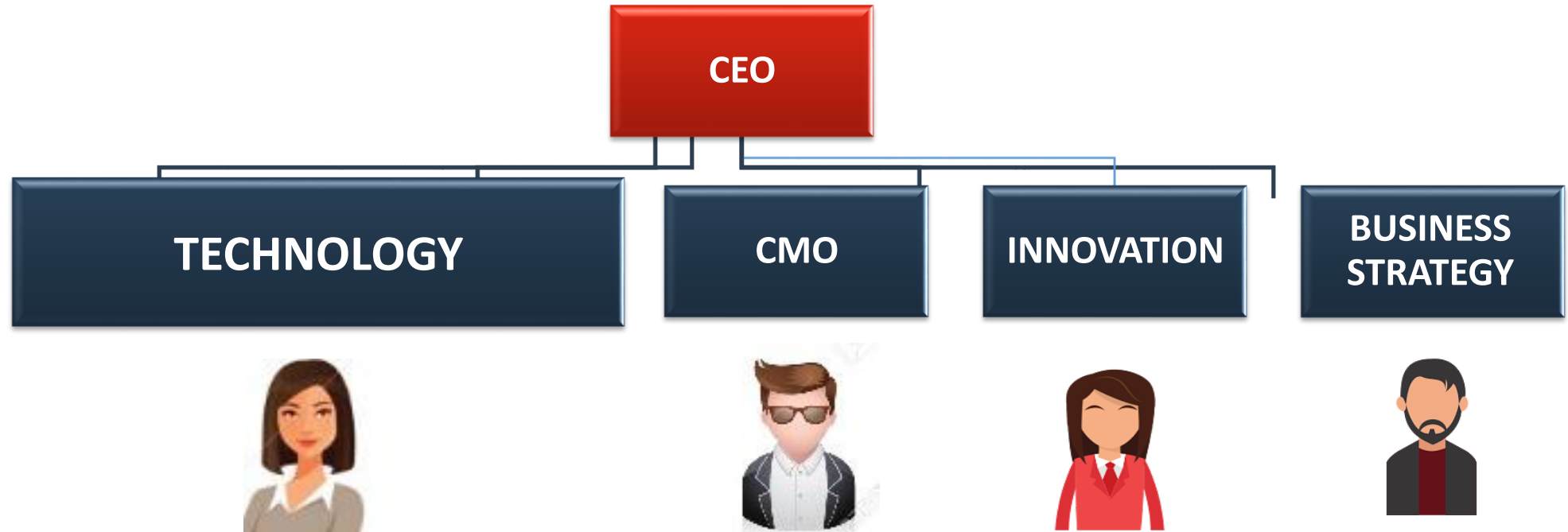


Organizational Structure





Organizational Structure

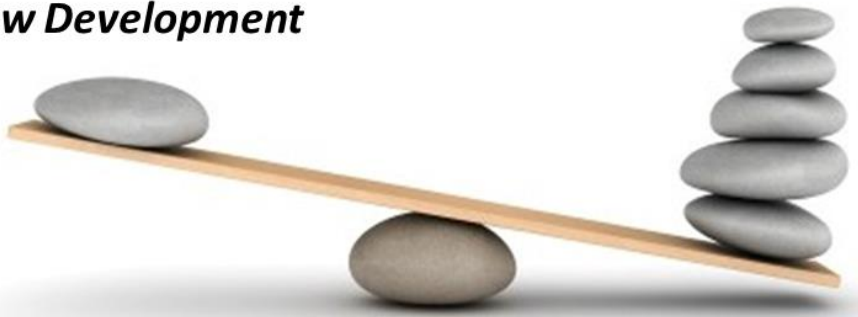




today

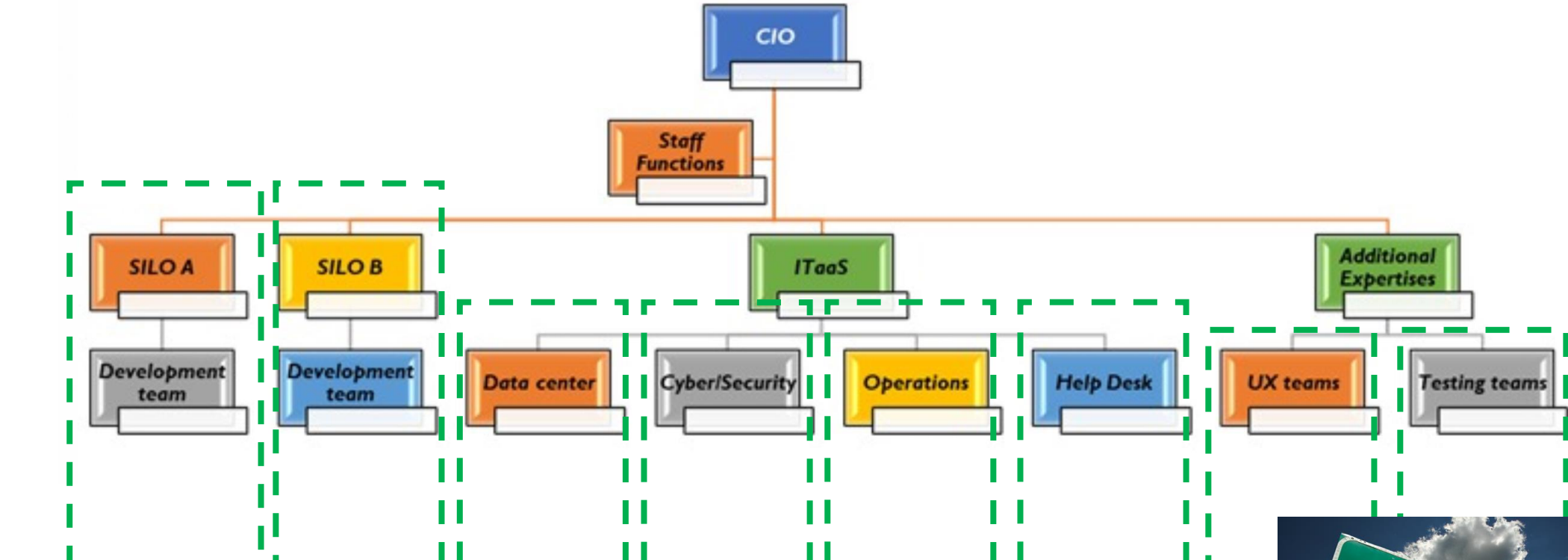
New Development

*Legacy maintenance
and new features*





IT Organizational Structure (today)



Budget & Innovation Trap





Thinking Different - Why Now?

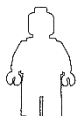
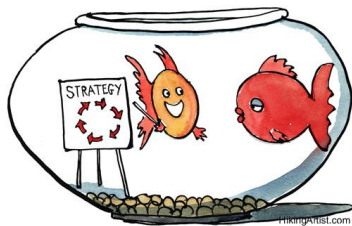
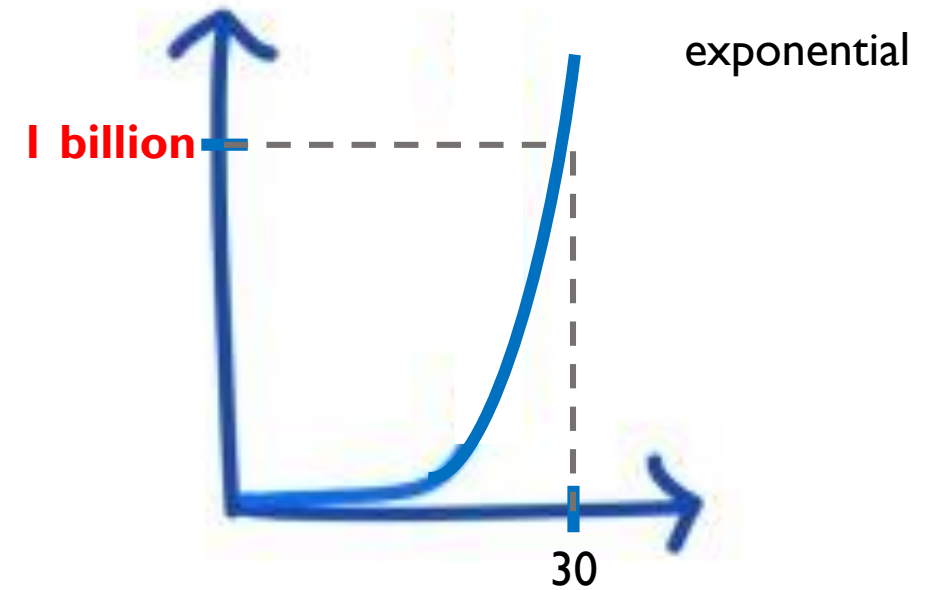
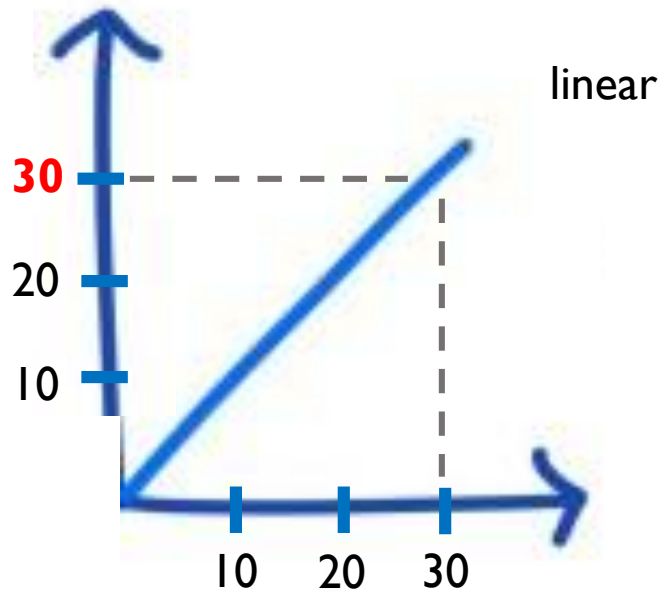
Linear Future

Business as Usual

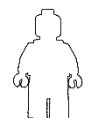
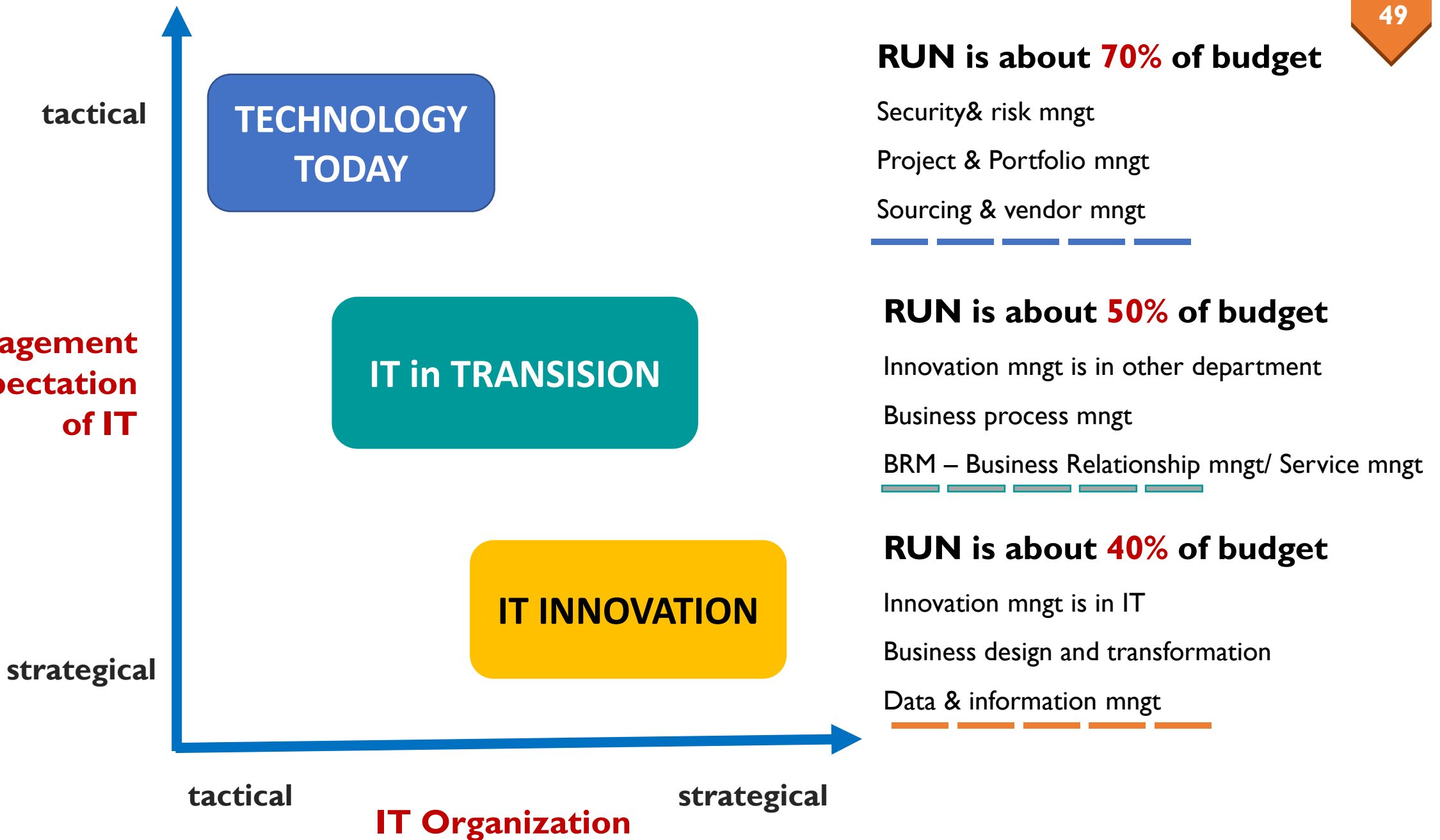
vs.

Unpredictable Future

Fast UNPREDICTABLE change is an absolute certainty



Management expectation of IT



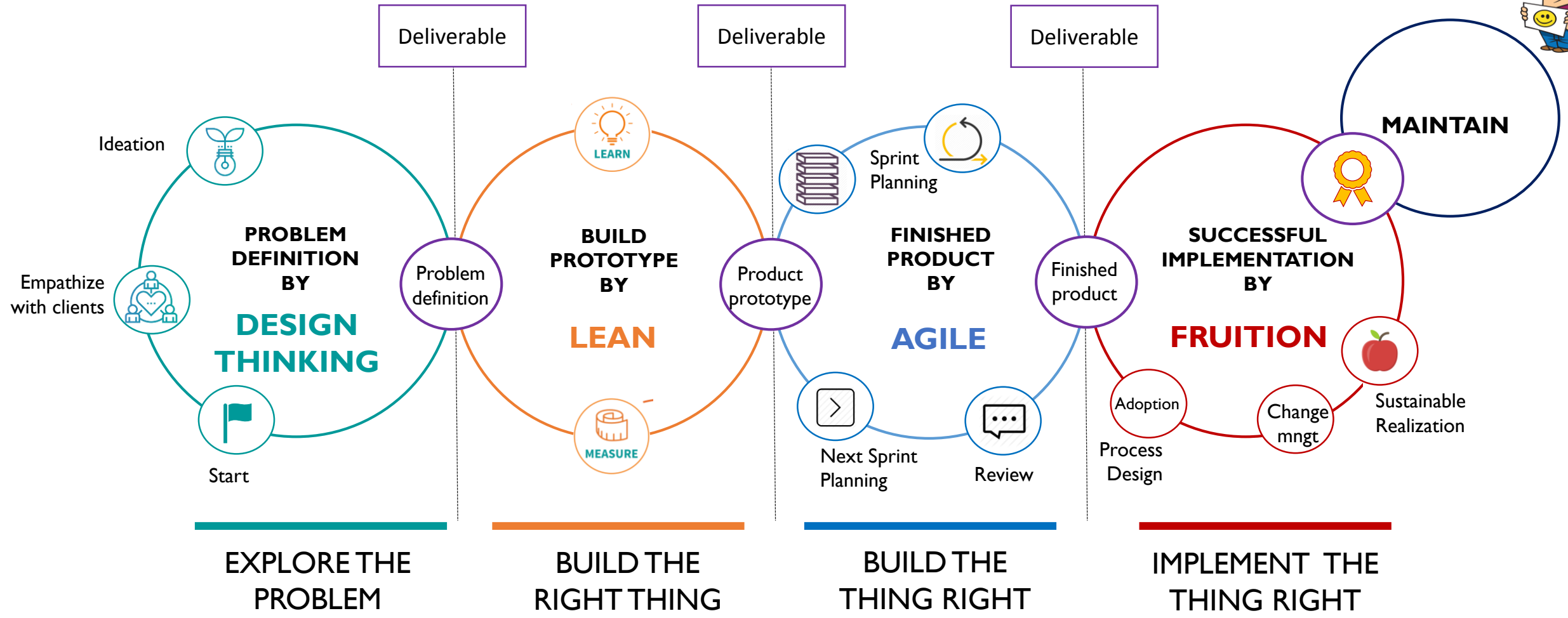


"If there were a perfect structure, we would all use the same one. What you need to do is identify the style and strategy of the service you want to offer, and structure your department to provide that."

David Swayne,
Director Information Systems, Nottingham Trent University



INNOVATION-BASED PRODUCT LIFECYCLE



Innovation Initiative: methodology

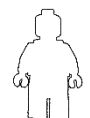


Design
Thinking

Agile

Lean

Implementation
(fruition)

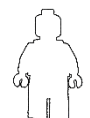
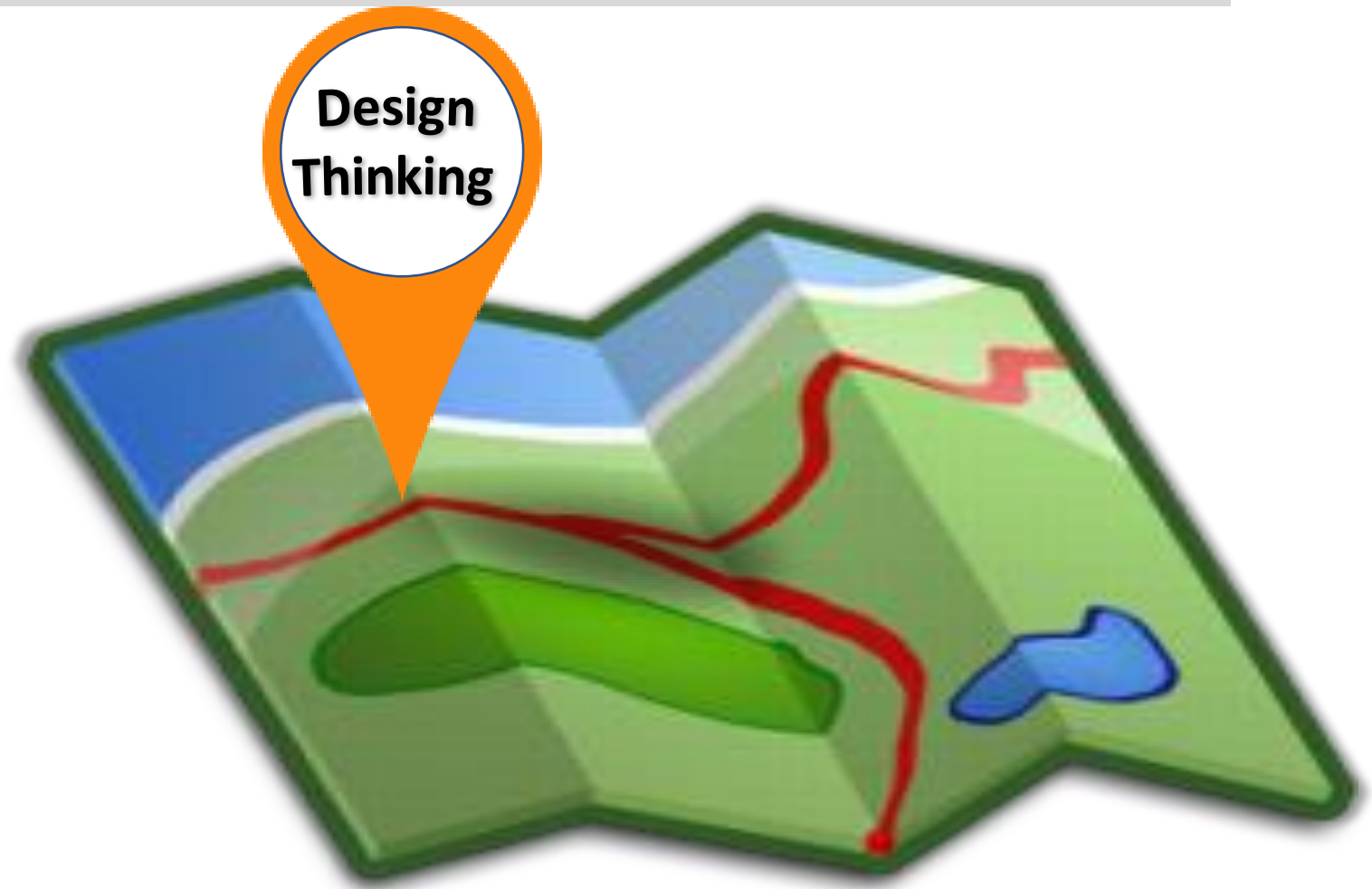


Innovation Initiative: methodology



Trek Name:
Design Thinking

Purpose:
Explore the
problem





Design Thinking

is an imaginative human-centered problem-solving approach

The future cannot be analyzed, it must be **designed**

Edward de Bono, [*Six Thinking Hats*](#)

Why?

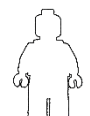
Often enough **THE FIRST IDEA** is **NOT THE BEST IDEA**.

Designers don't try to search for a solution until they have determined **the real problem**, and even then, instead of solving that problem, they stop to consider **a wide range of potential solutions**. Only then will they finally converge upon their proposal.

Don Norman, [*The Design of Everyday Things*](#)

Trek Name:
Design Thinking

Purpose:
Explore the problem



Design Thinking Trek



EMPATHIZE



empathetic
understanding
of your client

DEFINE



Exploration of
the **problem**
BEFORE thinking
about the **solution**

IDEATE

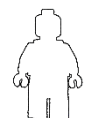
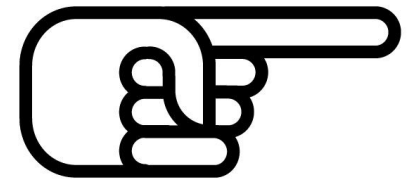


ideas are
generated **FROM**
ALL levels within
the organization

PROTOTYPE



GO LEAN



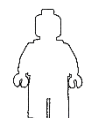
Innovation Initiative: methodology



Lean

Trek Name:
Lean Enterprise

Purpose:
Build the Right
Thing





Lean

is a method to improve evolving value proposition and business models

The **problem** with the **hexagons** is that **they've created THE design process**, and that **sounds grand and all encompassing, but in reality they are just a first recipe, a suggestion for how to get started.**

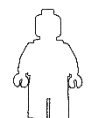
Carissa Carter

Design is an ability.

We get better by practicing

Trek Name:
Lean Enterprise

Purpose:
Build the Right
Thing

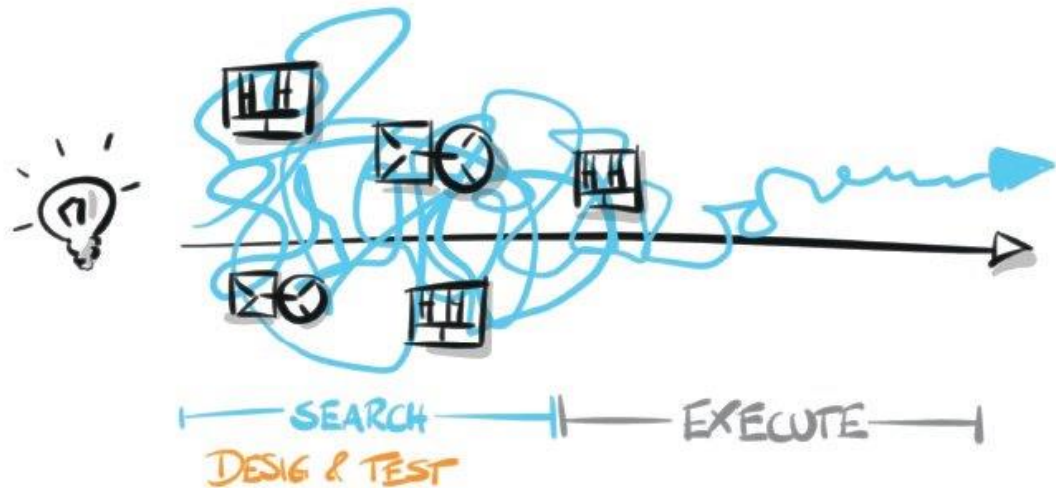




Lean

Innovation is NOT an Idea Problem

Why?



7 OUT OF 10

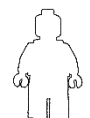


products and services
fail to deliver on
expectations

#1 reason startups fail is because of
a lack of viable business model

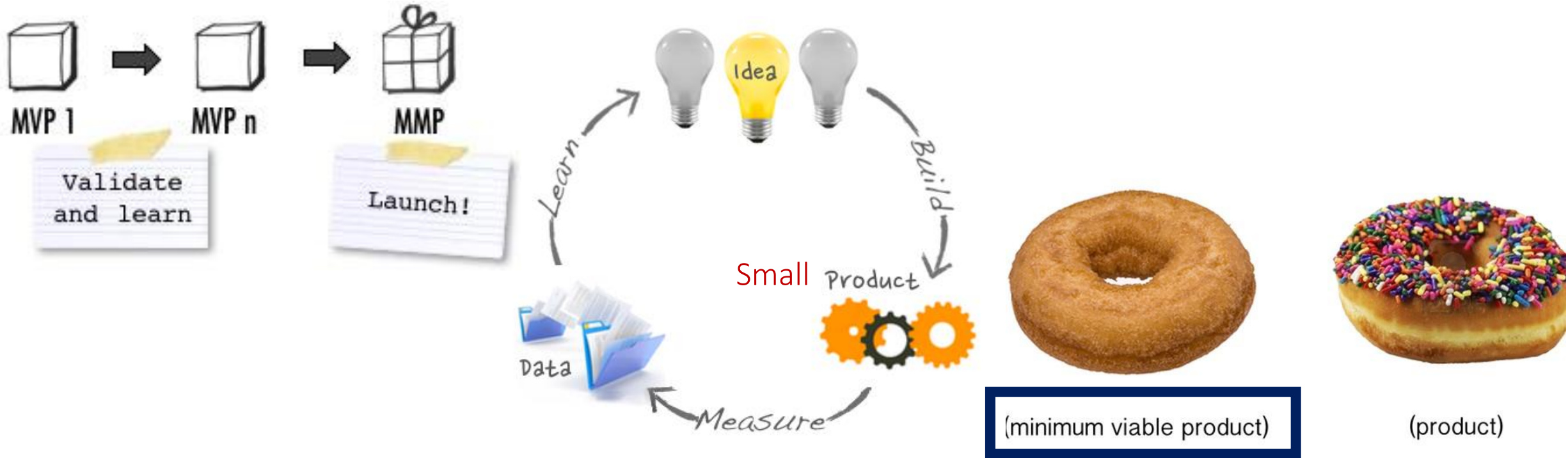


lack of testing and
adapting the idea
until it functions





Lean



Wait for feedback
 Avoid spending time on products nobody wants

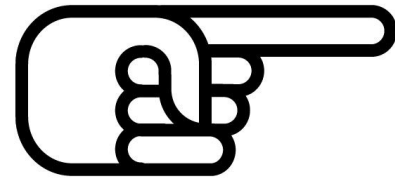


Lean Trek

Build the Right Thing



GO Agile



Test assumptions
find evidence that you're
on the right path

 Pivot



Innovation Initiative: methodology

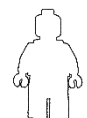
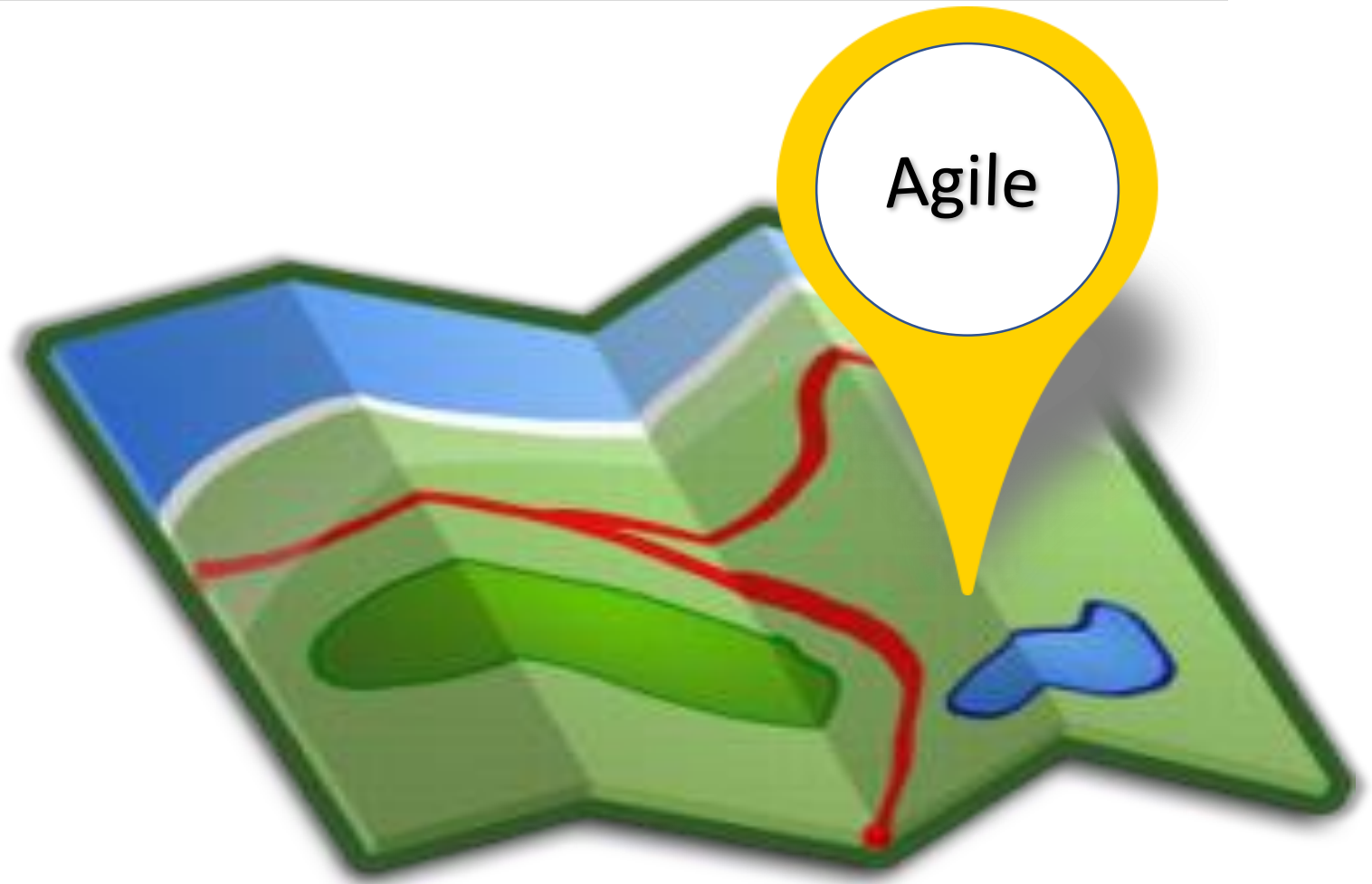


Trek Name:

Agile

Purpose:

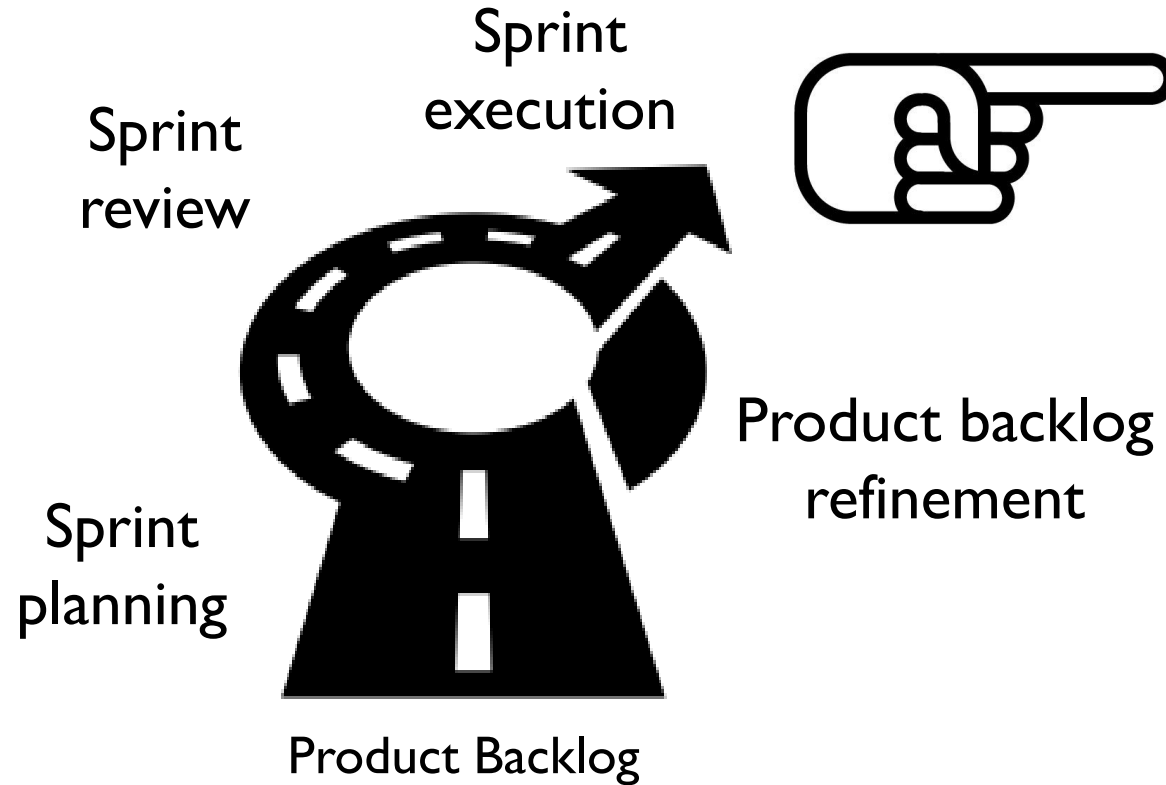
Build the
Thing Right



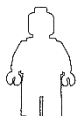


Agile Trek

Build the
Thing
Right

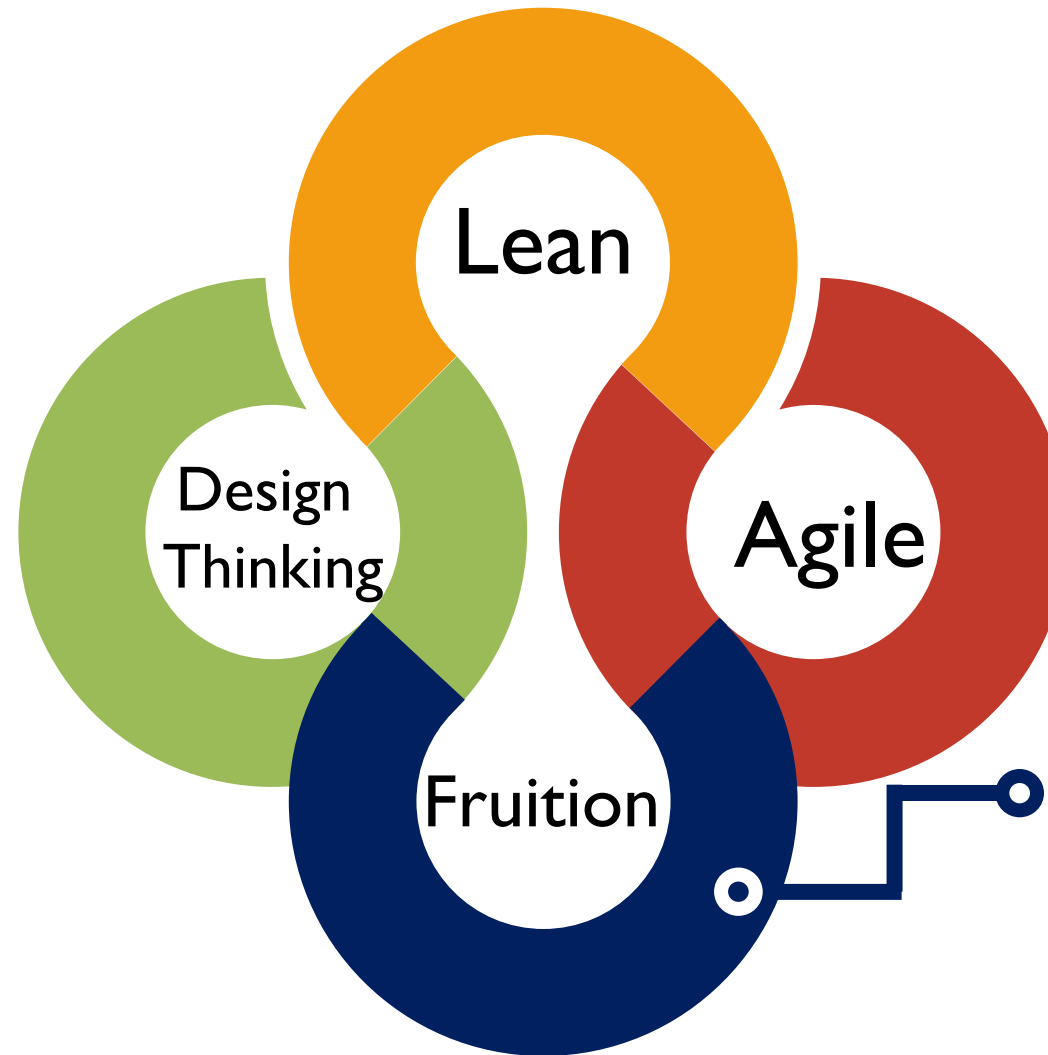


GO Implement -
Fruition





The 4th Force of Innovation - FRUITION



Dictionary

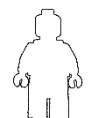
fruition

fru·i·tion

/frōō'ish(ə)n/ 

1. The point at which a plan or project is realized.
"the plans have **come to fruition** sooner than expected"

2. *literary*
the state or action of producing fruit.





FRUITION

What is successful innovative product delivery???



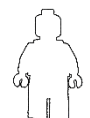
SW acceptance &
actual usage in 5 years

Maintainable after 5 years

Easily connected to
other applications

Successful Hatmaa

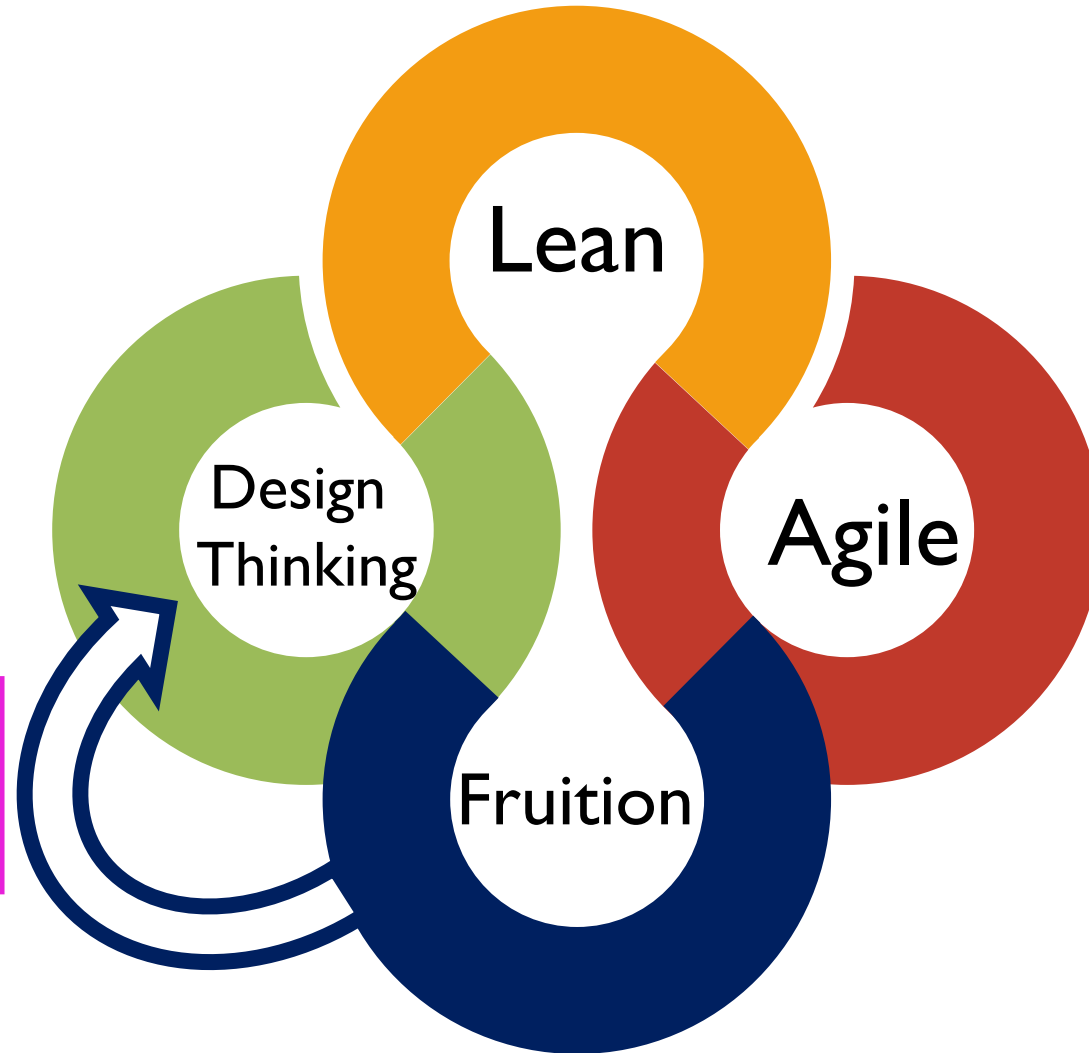
- Training
- Key Users understanding
- Working Pilot branches
- Call Center alignment





Incubation

Buy-in across the organization



INCUBATION PHASE

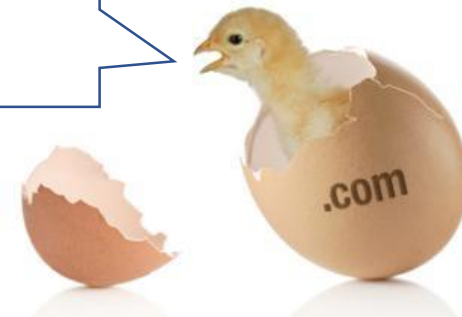


Incubation Phase - Why?

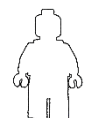
Everyone wants innovation in their organization
it drives growth, revenues, and moves the org.
forward **BUT**

- Innovation has a disruptive side **without definitive ROI**
- **Resource constraint**
- People are **too busy** on everyday tasks
- **Lack** of new **skills**
- Management & employees **RELUCTANT TO CHANGE**

Who is with
me???



INNOVATION INITIATIVE
REAL SUCCESS depends on
having support and buy-in
across the enterprise





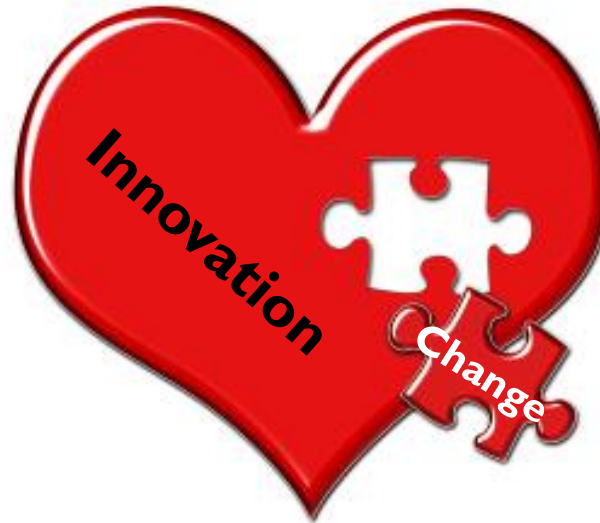
Innovation and Change Management

How does your organization respond to new ideas?

Innovation mngt deals with a lot of unknowns

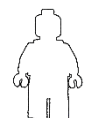
Change mngt deals with a lot of knowns

INNOVATION develops new business model or product/ service starting from **creative idea to launch**



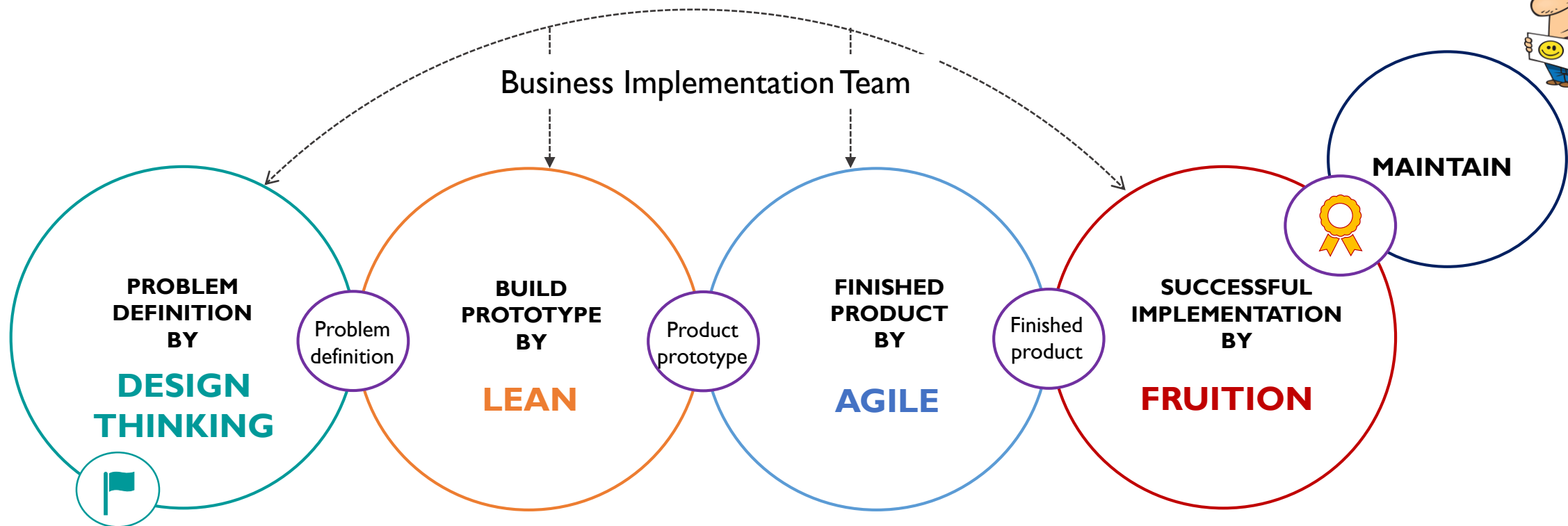
CHANGE MNGT is an approach of transitioning organization from state A to state B

**INNOVATION NEEDS
CHANGE MNGT TO SUCCEED**





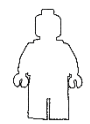
INNOVATION-BASED PRODUCT LIFECYCLE



Time line

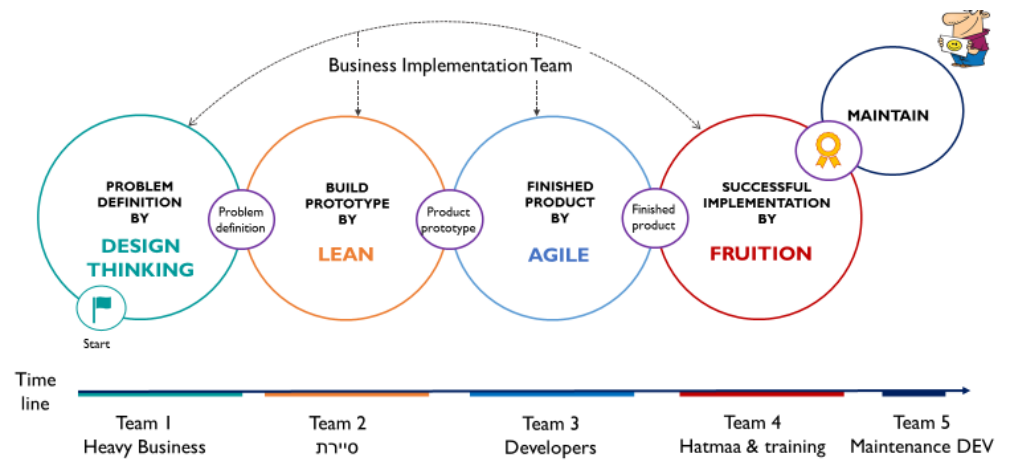


- Team 1 Heavy Business
- Team 2 סוירת
- Team 3 Developers
- Team 4 Hatmaa & training
- Team 5 Maintenance DEV

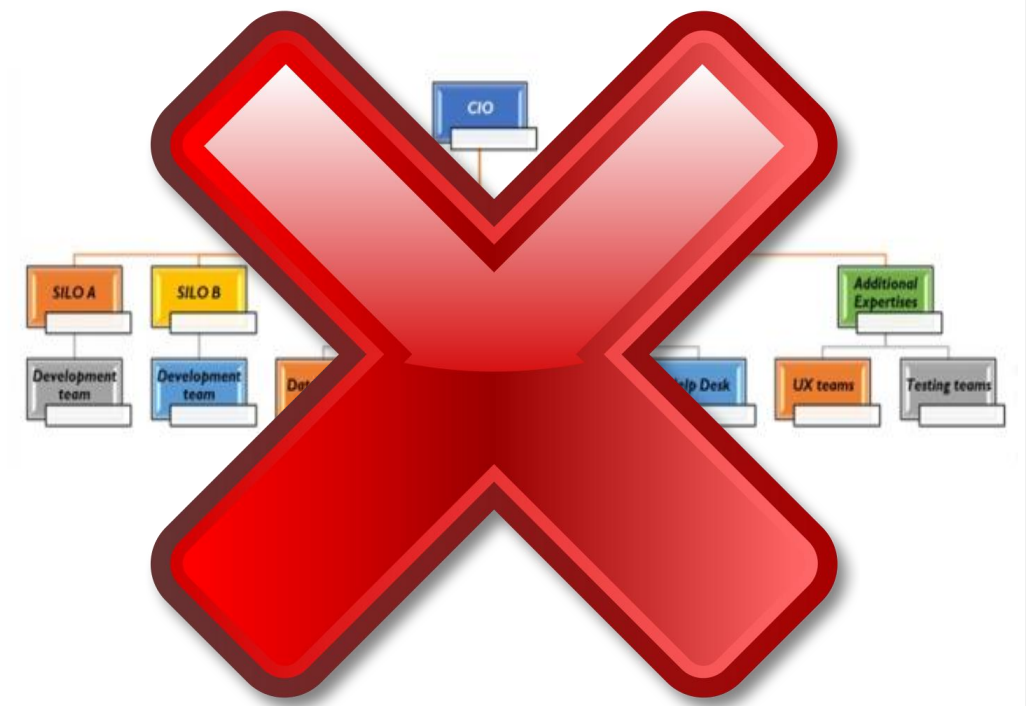




Innovation-based Product Lifecycle



Current IT Organizational Structure





how do we organize to be innovative?

*legacy
services*

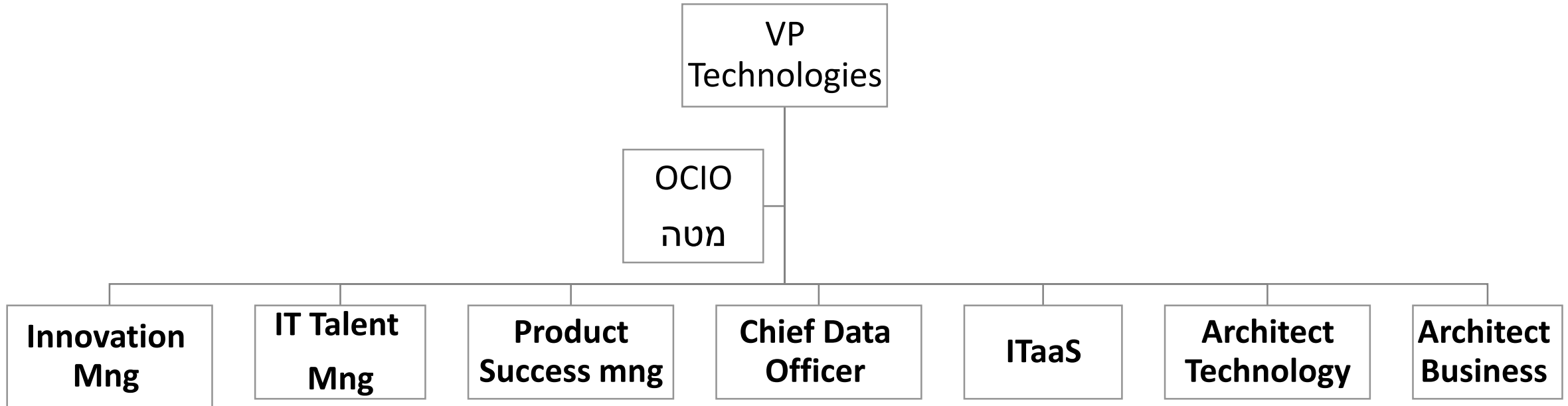


*“new” IT
products and
services*





IT ORGANIZATIONAL STRUCTURE ENABLING INNOVATION





VP Technologies

מטה

Innovation

Takes a lead in Design Team, takes a part in creating the a prototype and in charge of the change mngt, incubation & fruition

**Product
Success mng**

Product Life
Time Success
Managers

**IT Talent
mng**

Skills forecasting and
team resource mng
(Resource dispatcher:
bring the right
talent
at the right time)

Skills pools:



ITaaS

Availability
and
reliability
of the IT
processes

**Chief Data
Officer**

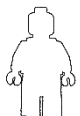
Align Data with
Business Strategy
and Objectives:
Data leverage,
Data monetization
and Data Governance

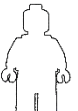
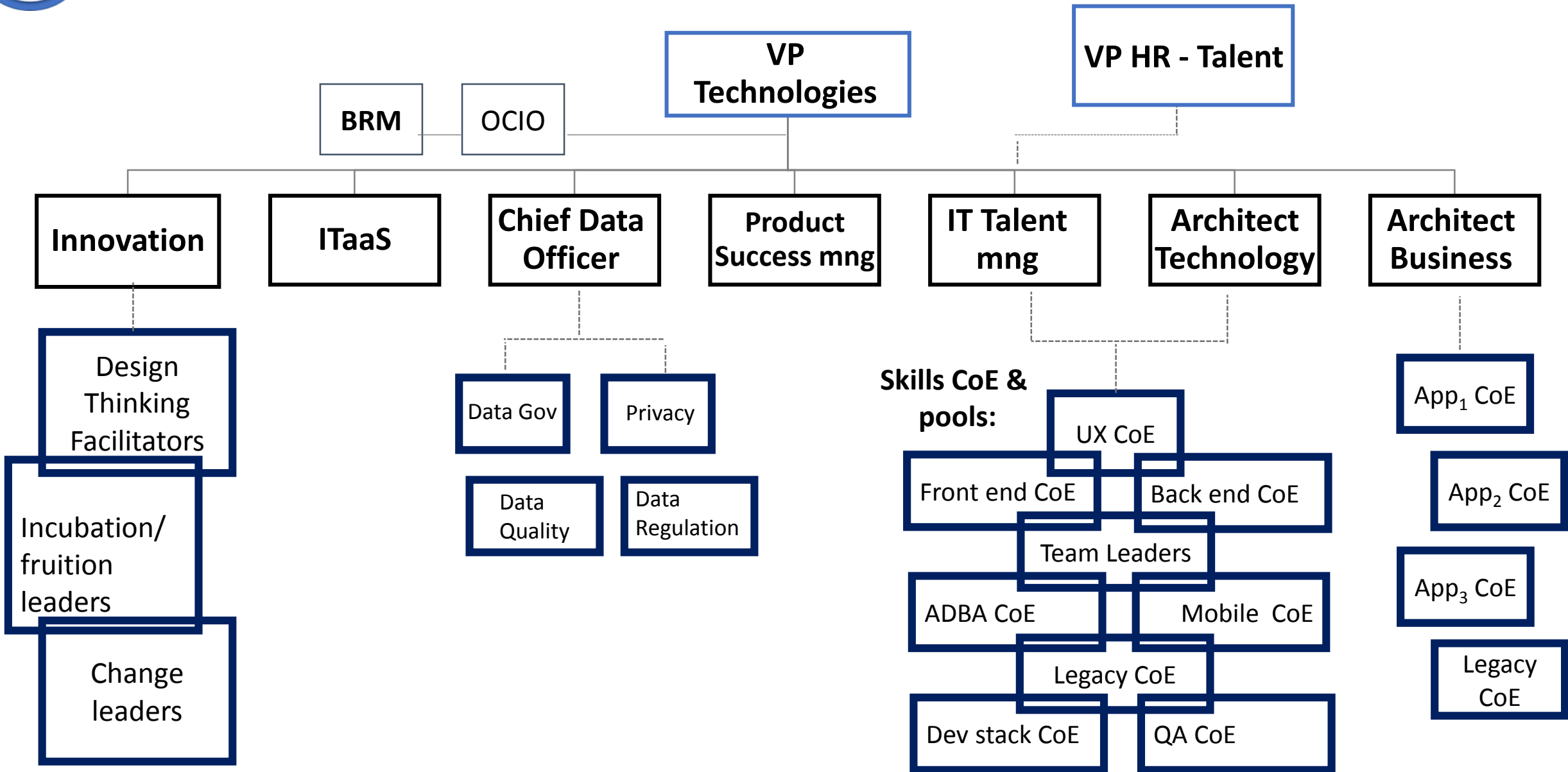
**Architect
Technology**

Responsible
for the
professional
“Know How”

**Architect
Business**

Business
Applications
Center of
Excellence







Personalized services just in time

BRM



the client's
foreign minister
into IT organization

- 🎯 understands business strategy
- 📈 mega technology trends
- 👤 organizational risk appetite
- 🎧 customers' demands
- 🕒 budget allocation



DESIGN THINKING

LEAN

AGILE

FRUITION

MAINTAIN

Team 1
Heavy Business

Team 2
סיירת

Team 3
Developers

Team 4
Hatmaa & training

Team 5
Maintenance DEV

Design thinking
facilitator



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Business Leaders



Product Success mng



Architect Business



Chief Architect
Technology



if problems



if problems



Team leaders

Front End

Back End

UX

Legacy



(as needed)



(as needed)



(as needed)



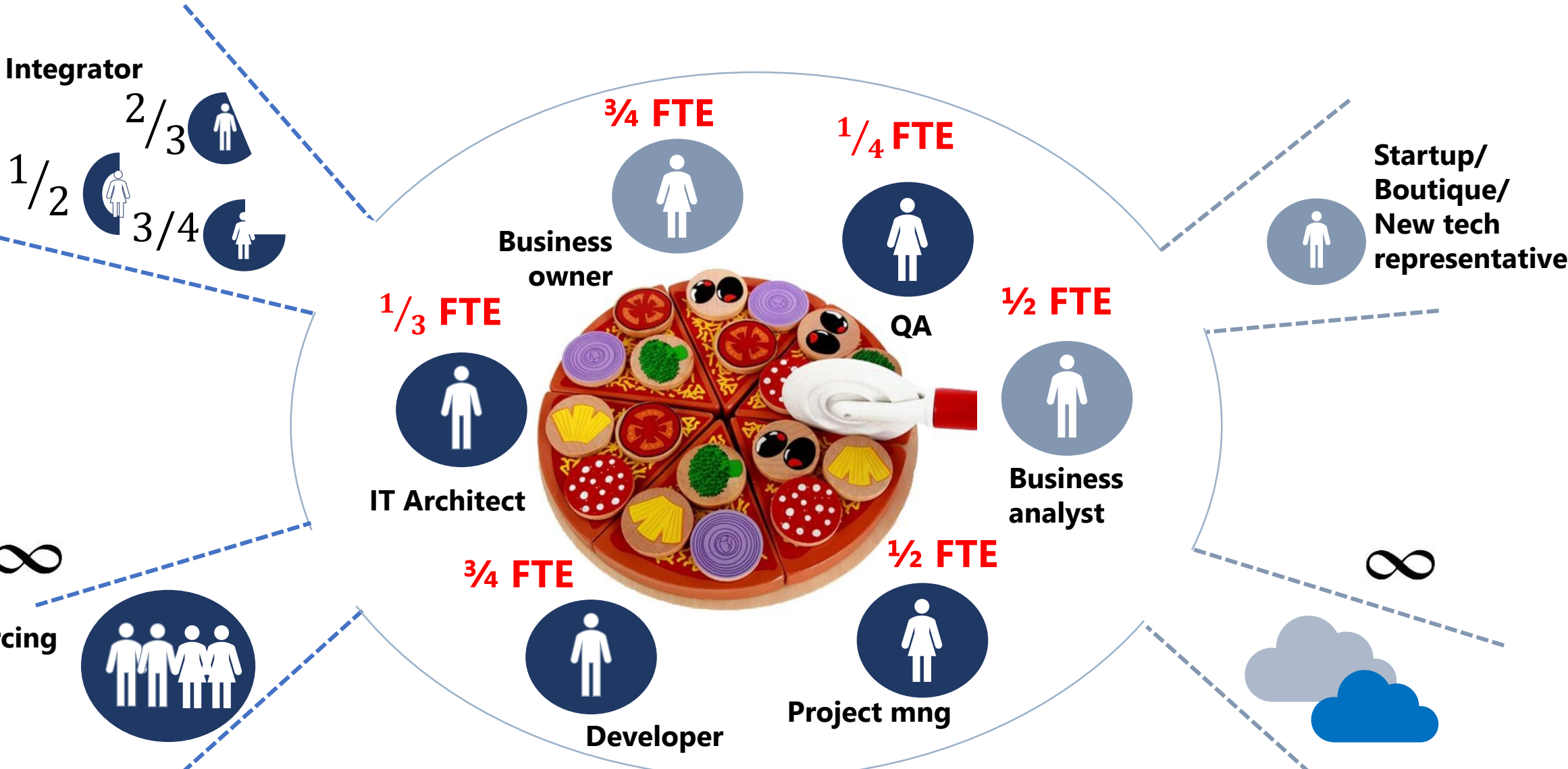
(as needed)



(as needed)

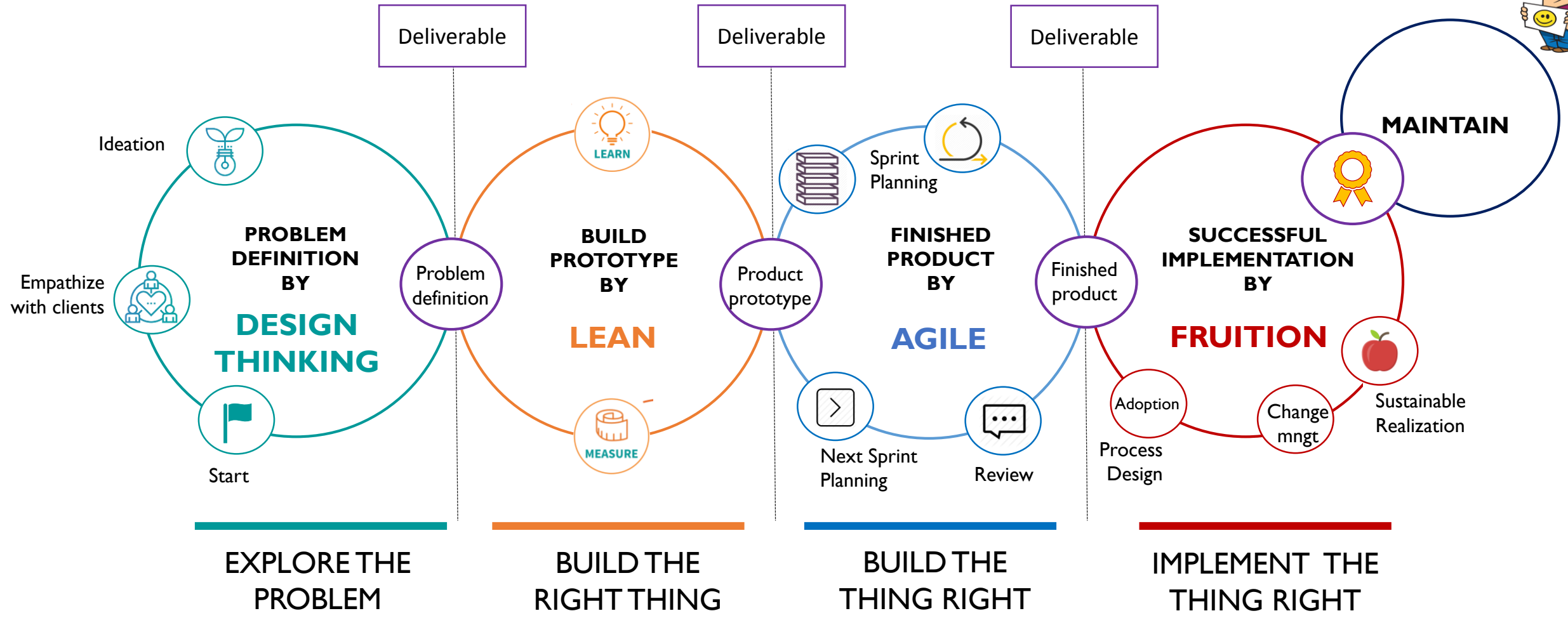


Unbounded Enterprise





INNOVATION-BASED PRODUCT LIFECYCLE





GOOD LUCK.

HAVE FUN! MAKE CHANGE HAPPEN!

Act 1

EXPLORE

Act 2

IMAGINE

Act 3

ATTEMPT

Dr. Jimmy Schwarzkopf

jimmy@stki.info

054 70 000 20

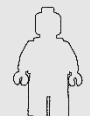
09 790 7000

Galit Fein, MBA, MRO

galit@stki.info

054 70 000 22

09 790 7000

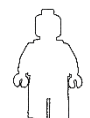




Glenn Gore
Chief Innovation Architect
Amazon Web Services



-“Working for companies that change how we work, live and communicate is what excites and motivates Glenn”-





Q&A



- **Team Assembling:**

How much involvement does **HR** have in assembling teams?

- How to choose a team leader?
- How do you pass from one stage to another without losing knowledge?
- What is the definition of maintenance and when maintenance becomes the next version of the product?

