



# THE ROARING DIGITAL TWENTIES

**Four For Four – Four Focus Areas For Four Years**

*Sakthivel, April 04 2023*



thank you!

For Your  
Industry  
Leadership



thank you!

For Your  
Support



CAFII  
Reception



**Kartik Sakthivel, PhD, M.S.-IT-CIS, M.B.A.**  
**Global Chief Information Officer,**  
**Regional Chief Executive Officer (Asia West)**  
**LIMRA and LOMA**

- 25 years in Information Technology
- Diverse technology experience
  - Broad range of industries
- ~15 years in Insurance/Financial Services
  - Dover, NH resident for 26+ years



# REFLECTIONS

**1**

**What lessons did we learn through the pandemic?**

**2**

**Knowing what you know now, what advice would you give yourself in March of 2020?**

# FOUR FOR FOUR: FOUR KEY FOCUS AREAS FOR FOUR YEARS

1.



Let's Talk About CX

2.



Data As A First Class Citizen

3.



Paying Down The Piper

4.



Culture of Innovation AND Integration

# 1. Customer Experience (CX) | Let's Talk About CX – To Level Set



Generation	Age Range 2020	Age Range 2030
Silent	75 – 92	85 - 102
Boomer	56 - 74	66 - 84
Gen X	40 - 55	50 - 65
Millennial	24 - 39	34 - 49
Gen Z	8 - 23	18 - 33

## In 2030...

Most CxOs are Gen X, whose leadership experience is born of the Internet age

Most employees are Millennials, who prize tech-enabled capabilities, collaborative work, rapid promotion

New employees are Gen Z, who have had smartphones since elementary school

# 1. CX | The Customer Feedback Loop



## 1920

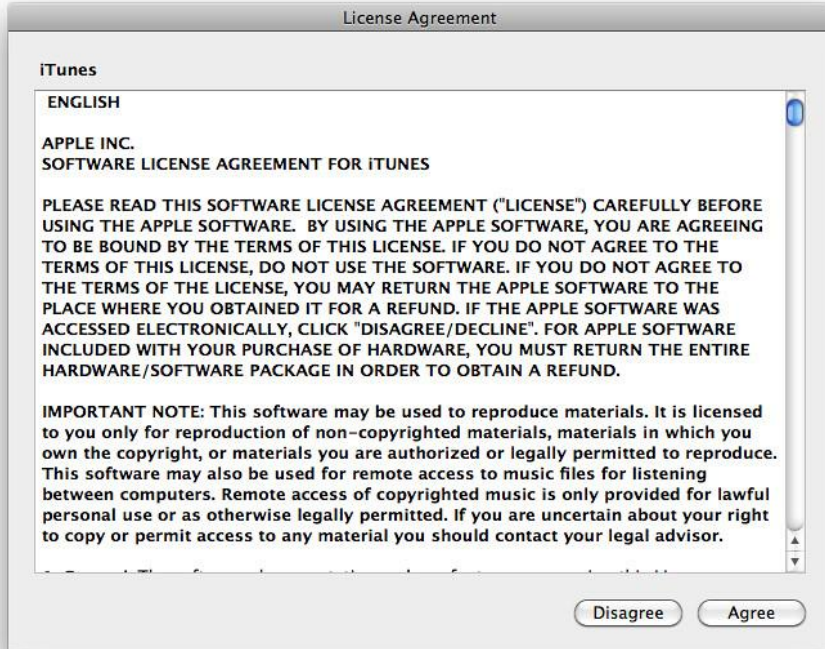


## TODAY





# 1. CX | SIMPLE WORKS!!!



# 1. CX | A Great Digital UI Doesn't Always Mean Great Digital CX



UI



UI



UX



UX



Even the greatest of digital customer engagement tools

...don't necessarily mean the best customer experience



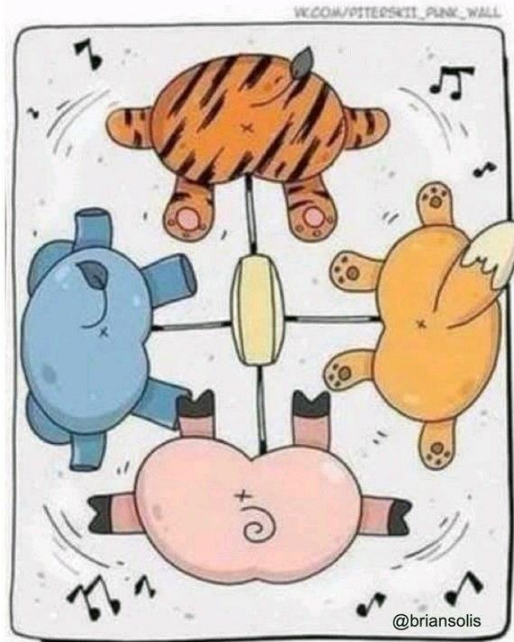
# 1. CX | Consumers May Not Always Have A Voice



Customer Experience



Customer's Experience



Our end users might not have the most say in the CX process....

...and their view – maybe a bottom-up perspective, is invaluable

# 1. CX | Hyper-Personalization: Personalize By Person, NOT Persona



- Male
- Born in 1948
- Raised in the UK
- Married Twice
- Lives in a Castle
- Wealthy and Famous



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CX and Personalization by data points to create a proxy – a persona – is not the same as personalization

# 1. CX | Are We Reaching Our Intended Audience?



We might think we are designing our products for the right audience....

...but are we really?



**DATA IS A BUSINESS  
ISSUE LONG  
MASQUERADING AS  
AN IT ISSUE**



## 2. Data and Analytics: To Enable AI At Scale, Solve For...



01



Data is nowhere, anywhere  
and everywhere

Data Management

02



Data quality is inconsistent?

Data Quality

03



Is it the right type of data for use?

Data Mastery

04



Is it the right system for the  
right data?

Data Governance

05



We have data, where are  
the insights?

Data Surfacing /  
Analytics



Data as a  
By-Product



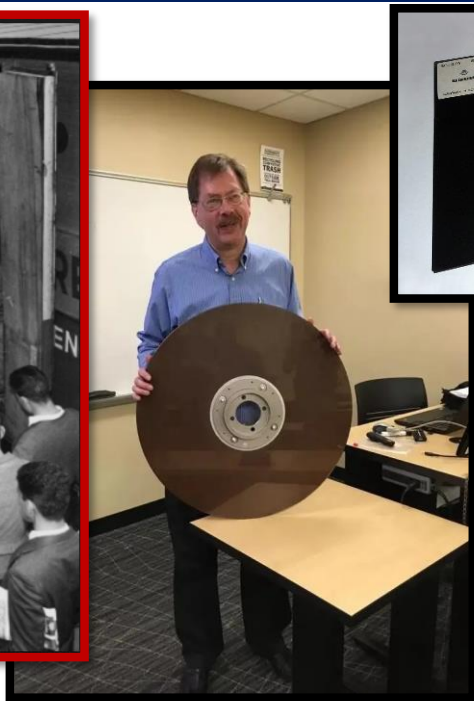
Data as a  
Product



# Think of How Much Data We Produce Today



**IBM Storage Drive**  
5 MB  
1960s



**Storage Disc**  
10 MB  
1980s



**Floppy Disk**  
1.44 MB  
1990s



**Micron MicroSD – Year 2020**  
1TB (1,000,000 MB),  
200,000 5 MB drives  
40-story building in 1956 terms

# Think Of How Much Data We Produce Today



The total amount of data consumed globally in 2021 was 79 zettabytes, an annual number projected to grow to over 180 zettabytes by 2025

ONE zettabyte is equal to a thousand exabytes, a billion terabytes, or a trillion gigabytes.

One zettabyte is roughly equal to 1125899906842600 megabytes (MB).

79 zettabytes equates to 88946092640567000 megabytes (MB) - or  $8.8946092640567 \times 10^{16}$  megabyte in scientific notation

**Consider how unimaginably large a zettabyte is. Megabytes, gigabytes, and terabytes seem quite arbitrary to most people, so let's use time as an analogy**

**A single day on Earth, 24 hours, converts to 86,400 seconds.**

**A million seconds is 12 days.**

**A billion seconds is approximately 32 years.**

**A trillion seconds is approximately 32,000 years.**

**Consider 1 byte as 1 second, and you can begin to fathom the incredibly large amounts of data**



# Why are we talking about data as a business issue?



Industry leaders from CEOs to COOs to CUOs to CMOs to CIOs are talking about AI

Everyone expects something different – revenue potential, new opportunities, operational efficiencies, streamlining, etc.

AI is Machine Learning. AI self-learns. Humans don't. We're here today to talk about HUMAN Learning in relation to AI. HELPING humans to learn is a leadership responsibility

How  
To  
Understand  
Humans

# SINCE WE LAST SPOKE IN SEPTEMBER 2022...





ChatGPT has triggered a global “AI Arms Race”, spending on AI **BEFORE** ChatGPT projected at \$500B in 2024










Investment of \$10 billion from Microsoft in December of 2022



**ChatGPT is the fastest growing consumer application in human history**

-  Estimated 100 million active monthly users in January, just two months after its launch
-  Reached one million users in just 5 days

Contrast this growth to reaching one million users to other platforms:

-  Instagram (2.5 months since launch in 2010),
-  Spotify (5 months since launch in 2008),
-  Dropbox (7 months since launch in 2008),
-  Facebook (10 months since launch in 2004),
-  Twitter (2 years since launch in 2006),
-  Airbnb (2.5 years since launch in 2008),
-  Netflix (3.5 years since launch in 1999)

# AI/ML CAUTIONARY TALES



1

Amazon Recruitment

2

Microsoft Tay

3

Mortgage Industry

4

Credit Lending Industry

5

Medical Insurance

6

Automobile Insurance and Zip Codes

REUTERS World Business Markets Breakingviews Video More

RETAIL | OCTOBER 10, 2018 / 7:04 PM / UPDATED 3 YEARS AGO

## Amazon scraps secret AI recruiting tool that showed bias against women

By Jeffrey Dastin

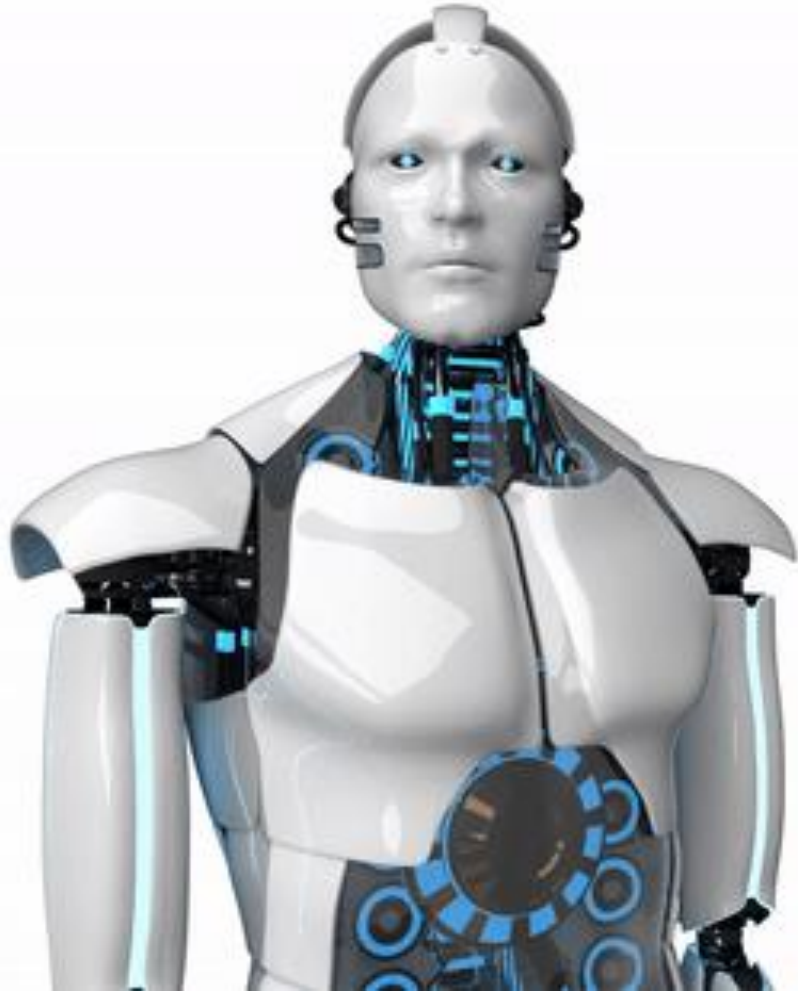
8 MIN READ



SAN FRANCISCO (Reuters) - Amazon.com Inc's AMZN.O machine-learning specialists uncovered a big problem: their new recruiting engine did not like women.



IF THIS CAN HAPPEN TO ESTABLISHED TECHNOLOGY COMPANIES, WHAT ARE THE CHANCES THAT INDUSTRIES SLOW TO TECHNOLOGY ALSO EXPERIENCE THESE ISSUES?



**GREAT AI  
+ BAD DATA  
= AWFUL AI**

# Whose Problem Is This?



Data does **NOT**  
belong to IT

Data does **NOT** belong to the  
Business



Data **belongs** to IT

Data **belongs** to the  
Business

Data is **EVERYONE'S** Responsibility

# Think about OUR industry...



AI could contribute up to \$15.7 trillion to the global economy in 2030 - more than the current output of China and India combined. Of this, \$6.6 trillion is likely to come from increased productivity and \$9.1 trillion is likely to come from consumption-side effect



# What is Data Literacy?



**Gartner**

The ability to **read, write and communicate data** in context, including an understanding of data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case, application and resulting value.

**MIT** Massachusetts  
Institute of  
Technology

Data literacy describes the ability to **read, work with, analyze, and argue** with data

**Qlik** 

Data literacy is the ability to **read, work with, analyze and communicate with data**. It's a skill that empowers all levels of workers to ask the right questions of data and machines, build knowledge, make decisions, and communicate meaning to others.

**LIMRA**   
Navigate With Confidence

Data literacy is the ability of LIMRA LOMA associates to be **able to read, analyze, synthesize, share, and leverage our high quality data assets using a shared understanding**, in order to help our members navigate with data-driven confidence, increase internal efficiencies, and optimize our revenue potential by allowing us to monetize and apply our data.



# The Cost of Poor Data Literacy



**\$ 3 T**

Bad data costs the US \$3 Trillion each year



40% of enterprise data is either inaccurate, incomplete, or unavailable, which results in businesses failing to achieve their data-driven goals



Cost of bad data is 15% to 25% of revenue for most companies



Only one-third of us can confidently understand, analyze and argue with data

# The Cost of Poor Data Literacy



2/3rds of employees cannot distinguish between good data and bad data



**The View of the Majority**




2/3rds of our employees look at data from their perspective.

Missing the bigger picture, they cannot discern bad information or find anomalies in the data.



**The Full Picture**



Without this bigger picture look, we might be missing obvious oddities in our data, oddities that have real costs associated with them.

Can we run a company relying only on a 1/3<sup>rd</sup>?

# The Cost of Poor Data (1:10:100 Rule)



## DURING CREATION

*\$1 - Cost of fixing bad data at creation*



**= cost of prevention**

## DURING DEVELOPMENT

*\$10 - Cost of fixing bad data during construction*



**= cost of correction**

## IN PRODUCTION

*\$100 - Cost of fixing bad data in production*



**= cost of failure**

# Five Steps to Data Literacy



1



**MAKE DATA AN  
ENTERPRISE  
PRIORITY**

Incorporate and feature data as a priority in the corporate vision and mission

2



**COMMUNICATE FROM  
THE CEO ON DOWN**

Your CEO **HAS** to set the tone. This tone **NEEDS** to be amplified by each of you

3



**THINK GLOBAL, ACT  
LOCAL**

Set **ENTERPRISE** standards for **PEOPLE, PROCESS, TECHNOLOGY**, but empower **LOCAL** implementation

4



**TRAIN AND EDUCATE  
EMPLOYEES**

Formalize industry education **AND** data education as part of your learning and development plans

5



**ENGAGE AND  
EMPOWER  
EMPLOYEES**

Communication, repeat, reiterate – **BUILD** a **CULTURE** around data

### 3. Legacy Systems and Modernization...Set Realistic Expectations



We all want to build skyscrapers....

...but no one can build a skyscraper on quicksand

### 3. Legacy Systems...Treat Legacy Systems as Competitive Threats



“We single-handedly managed the successful upgrade and deployment of a new environmental illumination system, with zero cost overruns, zero defects, and no safety incidents...”

...but no one can build a skyscraper on quicksand



### 3. Legacy Systems ...Be Wary of Institutionalized Workarounds



Some of your technical debt started off as  
BUGS....

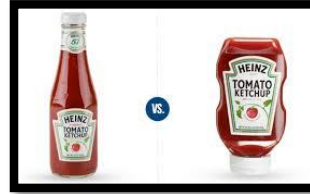
...but are now a feature



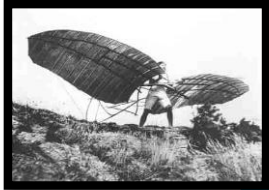
# 4. Innovation AND Simplification | Innovation FOR Simplification



Focus on the people we are creating for



Focus on human-centered products, services, and internal processes



Reduce the risk associated with launching new ideas.

Fail fast,  
learn faster

Foster a fail fast culture that learns faster



Generate solutions that are innovative, not just incremental

# Remember

1



**Regardless of Size, Everyone Has the SAME Challenges**

2



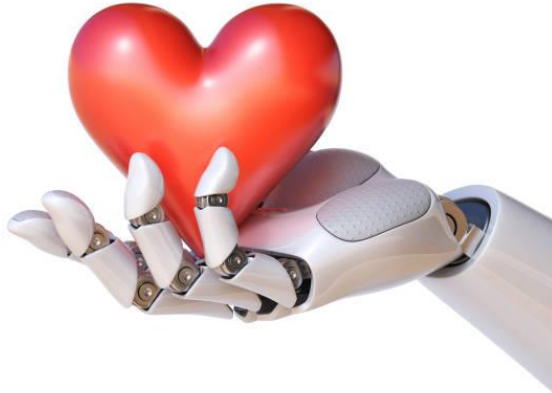
**Innovation Transformations are CULTURAL**

3



**Cultural Transformations Require Committed Leadership**

## And Finally...The Hardest Skills Are The Softest Skills



AI and robots are thinking machines that try to feel....

Humans are feeling machines that try to think...

# Four For Four - Recap



**1**

**EACH OF YOU HAVE AT ONCE A MASTERPIECE  
AND A BLANK CANVAS**

**2**

**THE NEXT INSURANCE DECADE  
WILL BE DRAMATICALLY DIFFERENT THAN THE PAST**

**3**

**EACH ONE OF US ARE INDUSTRY LEADERS**

**4**

**EACH ONE OF US ARE CRITICAL COGS IN THE GLOBAL  
FINANCIAL SERVICES INDUSTRY**

**5**

**DON'T WASTE A GOOD CRISIS**



**THANK YOU FOR  
YOUR SERVICE  
TO THE GLOBAL  
INDUSTRY**

