

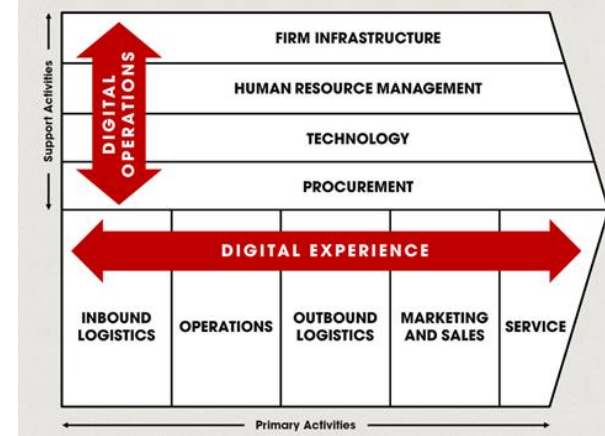


THE DIGITAL VALUE CHAIN: RISKS AND UNINTENDED OUTCOMES

Shimona Shodipo

IAM Annual Conference 2019

INTRODUCTION



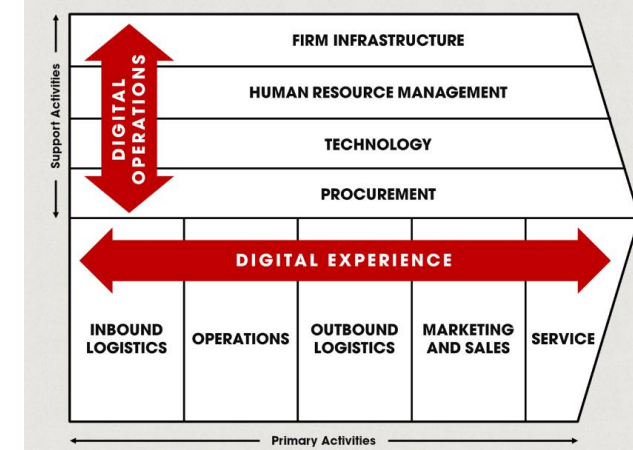
Digital transformation improves customer experience and business operations

The Value Chain can be looked at from the dimension of primary and supporting activities.

These technologies are changing how things are designed, made, and serviced around the globe.

In combination, they can create value by connecting individuals and machines in a new “digital thread” across the value chain—making it possible to generate, securely organize, and draw insights from vast new oceans of data

BACKGROUND



Value chain analysis is a strategic analytical and decision-support tool that highlights the bases where businesses can create value for their customers

The concept value chain analysis was introduced by Michael Porter in 1985

Historically, across industries, executives at several manufacturers identified a need for dramatic improvements in certain software applications.

There have been reports of dissatisfaction with some vendors' products in areas such as computer-aided design (CAD), enterprise resource planning (ERP), and manufacturing execution systems (MES)

HOW TO GET STARTED

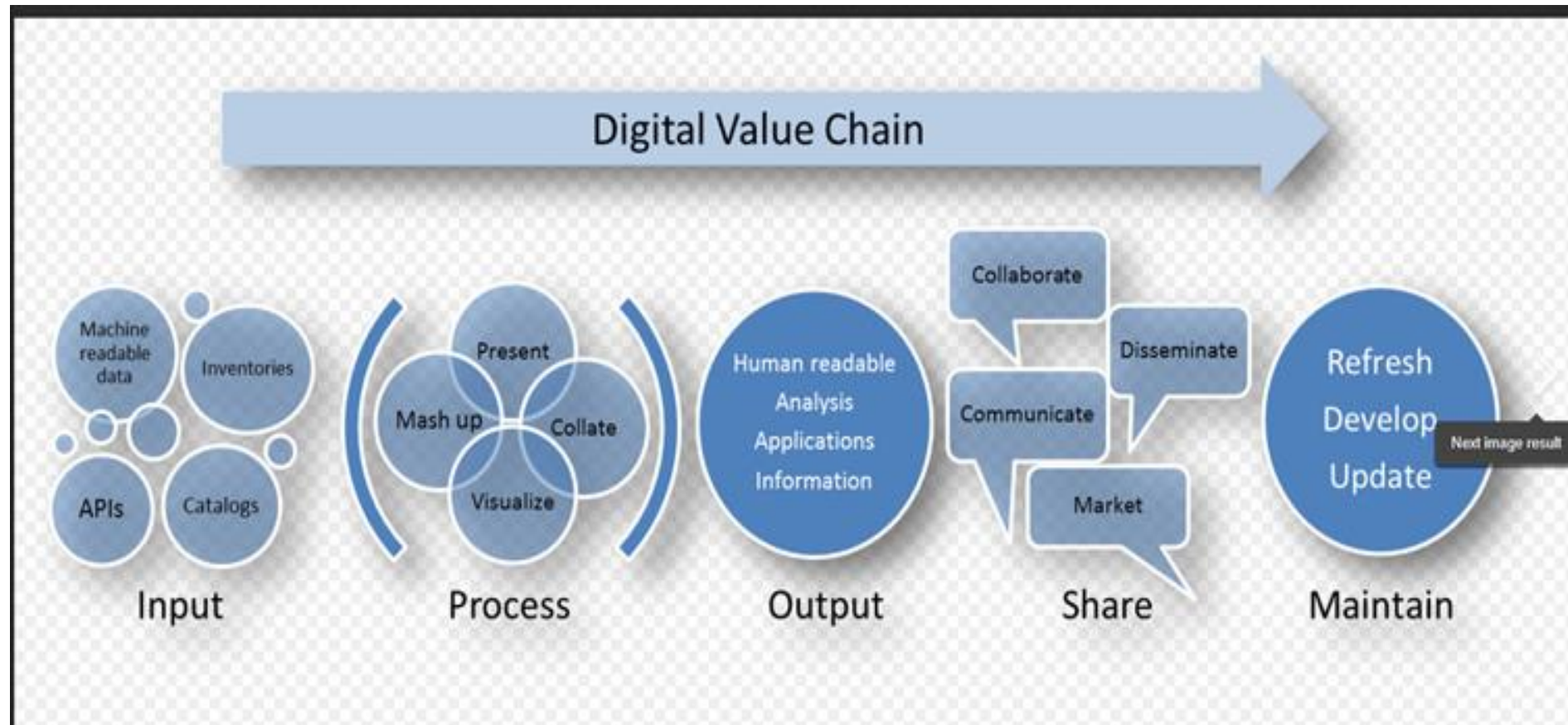
Creating a digital value chain first requires a mapping of the business process as the customer sees it.

- This process should look messy as you identify the different touch-points, departments and people the customer goes through
- Should be iterative as you seek to capture all key process within the business

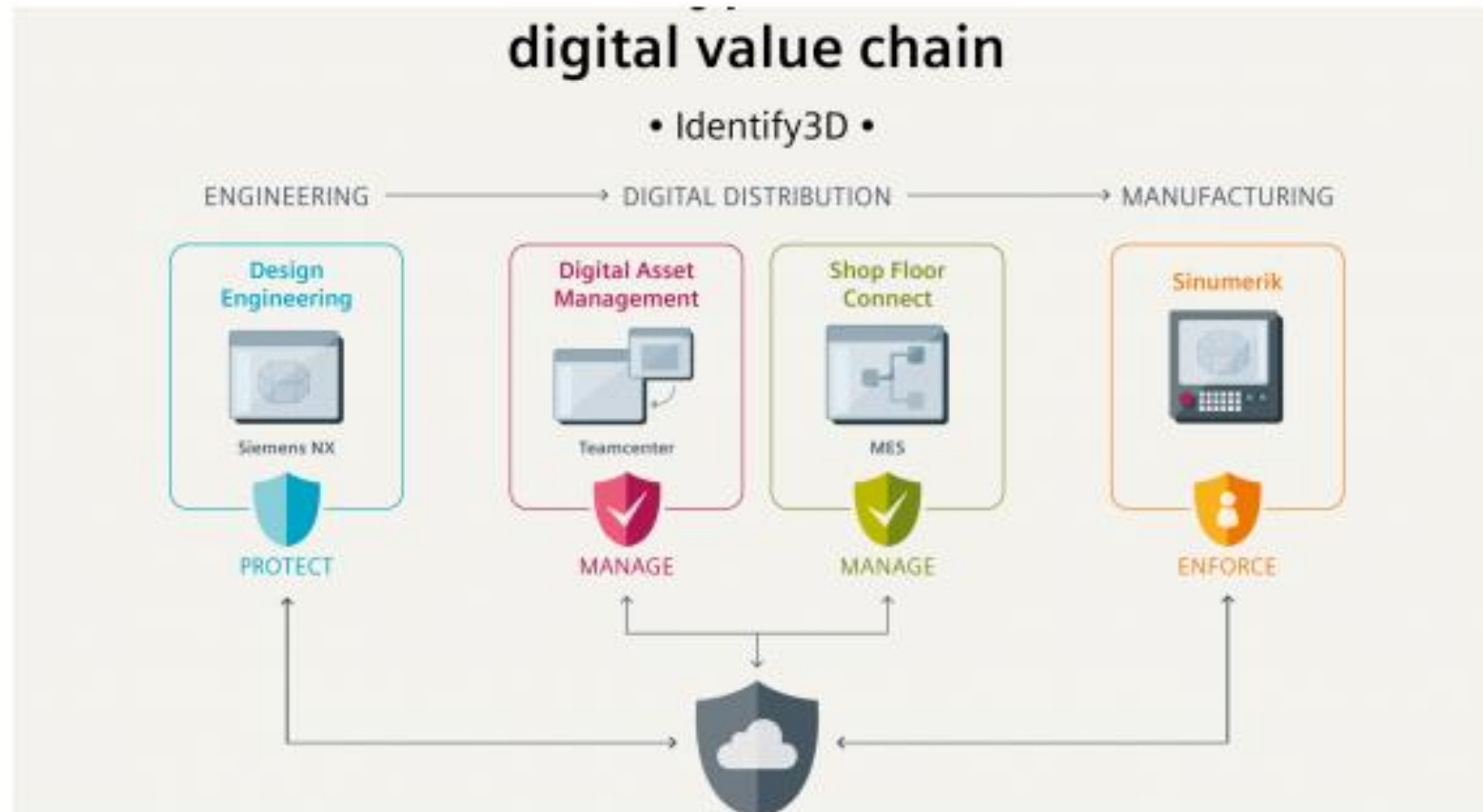
Questions one can ask:

- How would the primary activities run without human support?
- Can the activity be automated?
- What can be done to replicate this experience online or using a mobile device?
- How does information transfer between the primary activities and supporting activities? How can digital make this more efficient?
- What would the experience look like as an app?
- What would it be like if email was banned?

SCHEMATIC EXAMPLES

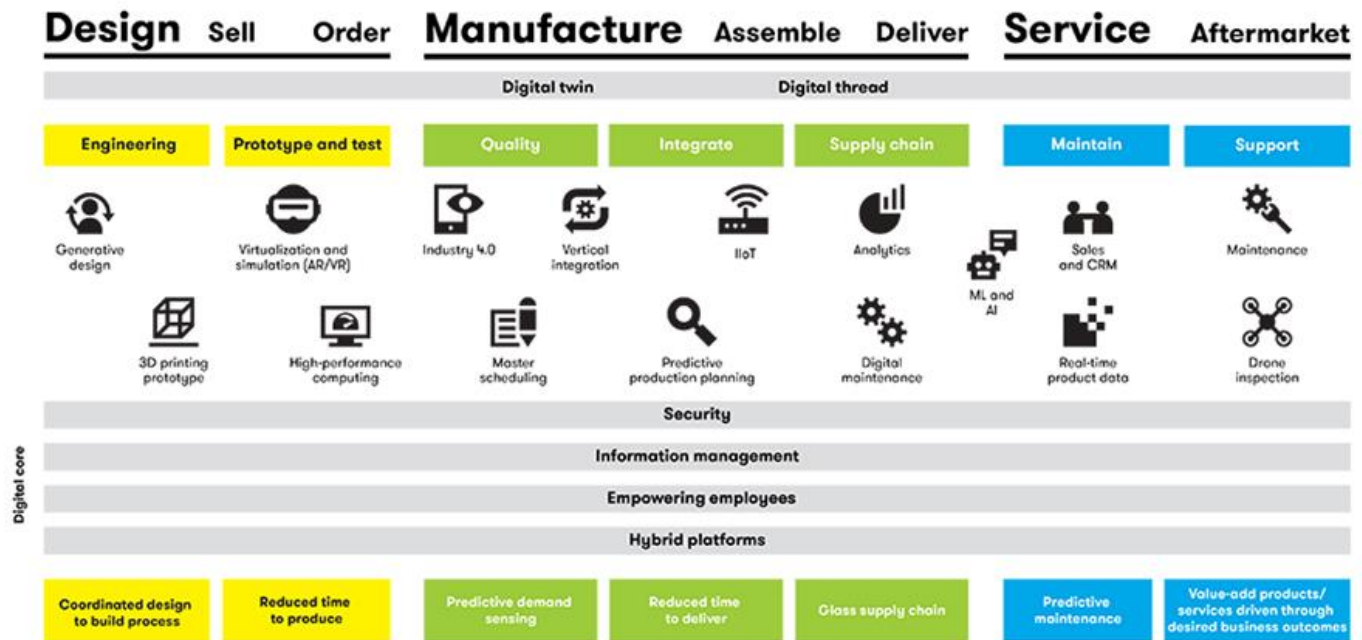


SCHEMATIC EXAMPLES



SCHEMATIC EXAMPLES

Aerospace & Defence



Process and technology vision for the A&D digital value chain

Source: https://www.dxc.technology/aerospace_defense/insights/146368-how_a_d_organisations_can_achieve_digital_transformation

SCHEMATIC EXAMPLES

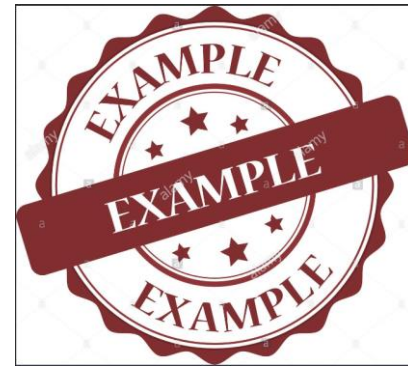
Utility

Exhibit 1

The digital utility of the future captures opportunities all along the value chain.



WELL KNOWN EXAMPLES



Coca-Cola applied a flexible packaging process in its “Share a Coke” campaign, in which firms collaborated throughout the supply chain and helped increase the company’s soft-drink volumes across world markets.

Daimler has rolled out “Mercedes me,” which, among other features, tracks the usage and wear of key automotive parts to help service automobiles more effectively

Nissan launched an innovation program to cut time-to-market and boost product quality. To do this, the management team decided to use the Siemens NX software in its product design operations. The software solution provides data for virtual validation, which helps to uncover problems during the design process and to shorten the development cycle. The virtual tests run at an early stage and enable users to search for design alternatives before production starts and expensive modifications need to be made.

GE Ventures opened a Chicago office in 2014, drawn in large part by opportunities to apply digital manufacturing in America’s industrial heartland

Challenges & Benefits

Challenges

Getting Senior Management to see digital transformation as a priority

Having an unclear digital strategy

Understanding current and future digital capability

Modernize infrastructure and adopt new technologies

Benefits

Digitizing the value chain can have the following benefits:

Activities can be connected end-to-end to speed up the transition from sales to manufacturing - Lead time reduction

Improve Business agility

Facilitating innovation and transparency

Revenue enhancement

Facilitating Overall improved efficiency

UNINTENDED OUTCOMES



Scalability challenges

Introduce the need for new processes or obsolescence of existing processes

Failure to be responsive to market changes, competitor activity or customer needs

Some systems are also closed—they don't communicate with each other or allow others to build upon them

Implementing some digital systems can be resource intensive

Retraining of staff may be needed

Subject to obsolescence as technology moved on rapidly since implementation

Examples of Software applications have been found to be:

- hard to learn
- slow to evolve and adapt
- and sometimes expensive for small businesses

RISKS —THE EFFECT OF UNCERTAINTY



Increased Information security vulnerability

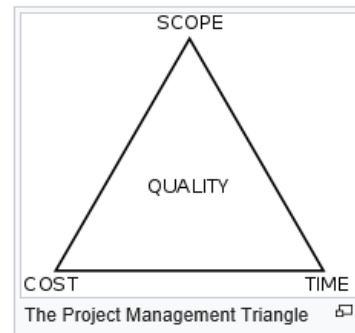
Project triangle 'creep'

Poor data quality which leads to erroneous judgement, decisions and poor product/service quality

Standardized approach rather than a bespoke solution - A 'one size fits all' solution may be problematic for your business

Solution may not deliver the advertised/expected capability

3 Ps



SUMMARY

Enhanced Risk Management System – focussing on Digital Risk Management

Channel the intelligence that comes through enriched data analytics and automated processes into strategic insights that can unlock new opportunities to drive value

Systems need to be updatable, affordable and intuitive to use

The Digital Value Chain becomes more agile and shapes customer experiences

Digital Transformations must drive real value for the customer and improve outcomes for the business – not just technology for technology sake

Change in DNA; recruit and retain the right talent

QUESTIONS?

Thank you!

Shimona Shodipo
SAshodipo@yahoo.com