創造具競爭力的企業

運用數碼轉化和數據分析提升商業決策

張天秀

數碼化聯盟創會主席

香港大學經濟及工商管理學院客席助理教授

12th July 2018

My Personal Profile

- 以諾顧問亞洲有限公司創辦人及首席策略師
- 日本 Ginza West (Hong Kong) 合夥人及香港辦事處代表
- Skytree Investment 合夥人及董事
- Snapask Japan 合夥人
- 陳宇琛工作室合夥人
- 香港大學經濟及工商管理學院客席助理教授 (商業)
- 香港大學文學院名譽助理教授 (全球創意產業)
- 日本岡山県立大學客席教授
- 理工大學文學院客席助理教授 (中文及雙語)
- 香港大學專業進修學院協理客席教授
- 數碼化聯盟 (Digital Transformation Alliance) 創會會長
- 美國 CMO (Chief Marketing Officer) Council 學術聯絡委員
- Professional Mentor Team, 海闊天空創投

What is Digital Transformation

Digital Transformation

Digital transformation involves using digital means to make fundamental changes in how business is conducted in order to help cope with shifts in market environment

This business management approach is widely used to increase revenue or market share, improve customer satisfaction, enhance efficiency and cut costs

Explore Digital Transformation

"One key to surviving in a world of disruption, where the external environment is changing at lightning speed, is to change the game internally."

- John Kotter

5 Myths of Digital Transformation

Digital Transformation is something too new for me to learn

Digital Transformation is the same as Digital Marketing

Not every industry / business needs to go through Digital Transformation

Only large corporations have resources to implement Digital Transformation

Technology deployment is the core of Digital Transformation

How Quick Your Industry will be Transformed is Decided by

Industry Lifecycle	*Technology Readiness*	*User Behavior Willingness to Change*
Compatibleness to Traditional Approach	*Advantages over Traditional Approach*	*Capital and Resources Required*

Nobody can Resist the Change...

Walkman -> MP3 -> Digital Music

Printed Newspaper -> Online Newspaper -> Digital Media

Printed books -> eBooks

*The most important is whether you have
the persistence and drive to achieve Digital Transformation*

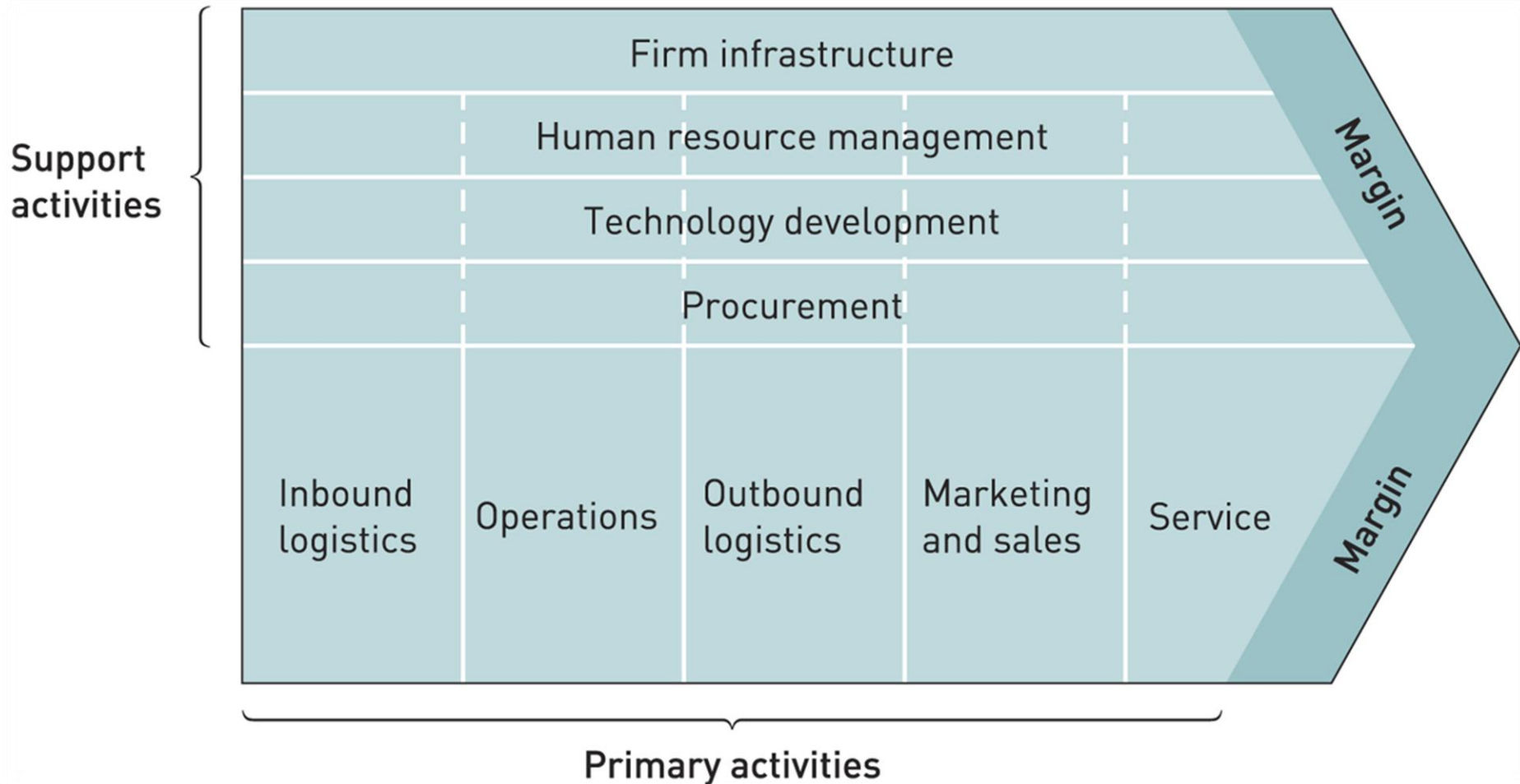**Traditional TV -> Cable TV -> Digital TV -> Digital Media**

Call Taxi -> Taxi App -> Uber

Hotel Booking via Agency -> Online Booking -> AirBnB

Major Obstacles

- In a cross-industry survey by McKinsey & Company, structural and cultural issues pose the biggest challenges to digital success

  - *Difficulty finding talent (functional and technical)*

  - *Organization structure not designed appropriately for digital*

  - *Business processes too inflexible for new opportunities*

  - *Quality data and analytics to inform business decisions lacking*

Organizational Functions to be Transformed

Value chain diagram showing Support activities (Firm infrastructure, Human resource management, Technology development, Procurement) and Primary activities (Inbound logistics, Operations, Outbound logistics, Marketing and sales, Service), with Margin.

May be You Will Say Only Big Corporations Can Implement DT

- *Yes, there are some large corporations such as Amazon that have implemented or are implementing DT successfully*

- *But there are also SMEs that have implemented DT successfully*

- *Industry Case Sharing*

Digital Integrated Organization (DIO) and Digital Analytics for Business Decision Making

Design and Implement DIO Strategy

Define Digital Strategy	Execute throughout Organization	Evaluation Mechanism
• **Major objectives, functions to be transformed**	• **Features & capabilities, process and system, customer interaction, digital champion**	• **Measurement tools, monitoring parameters**

Design and Implement DIO Strategy

Define Digital Strategy

- **Major objectives, functions to be transformed**

Execute throughout Organization

- Features & capabilities, process and system, customer interaction, digital champion

Evaluation Mechanism

- Measurement tools, monitoring parameters

Major Digital Strategy Objectives

Financial Perspective

- **Sales, profit, market share, ROI, cost reduction**
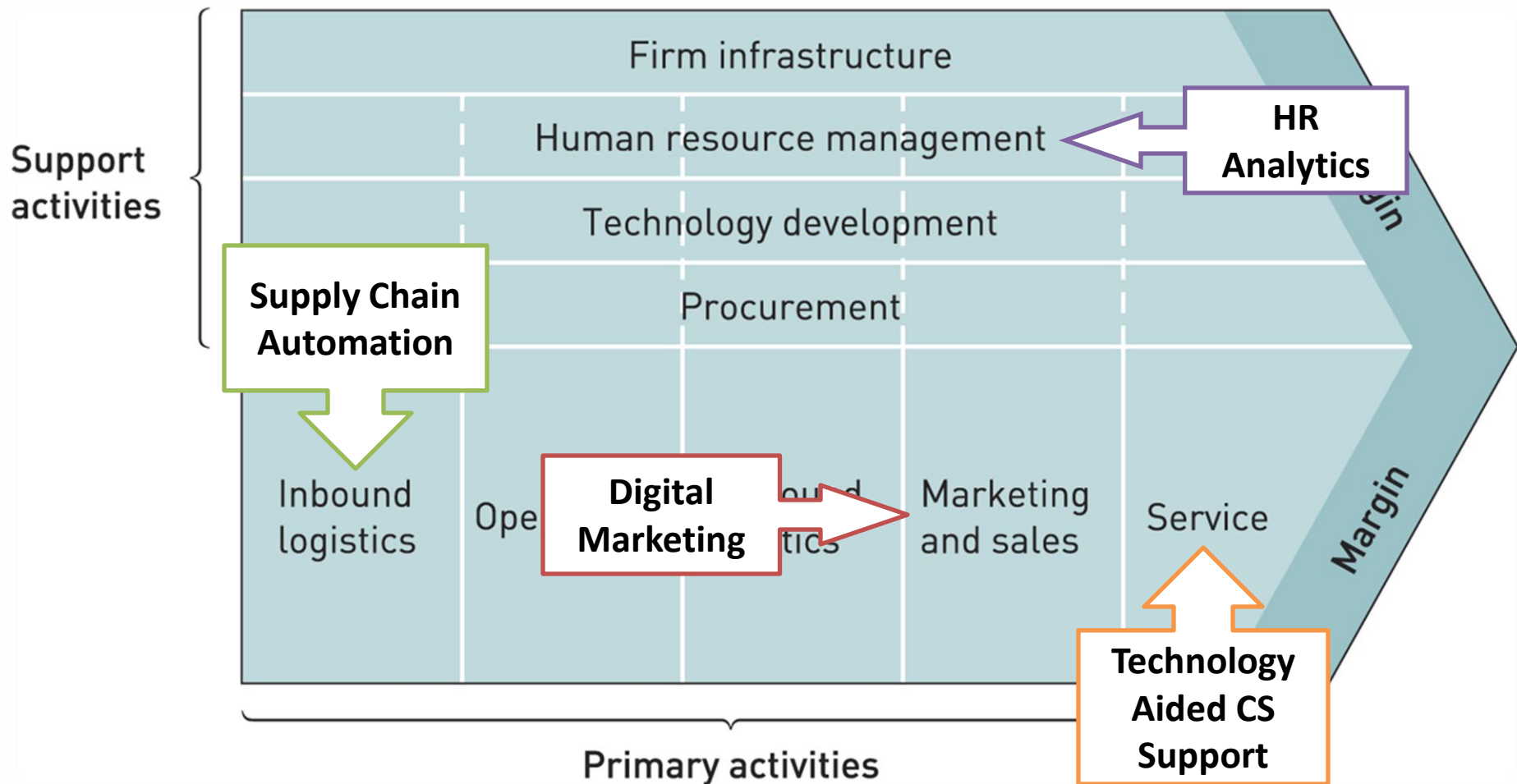
Marketing Perspective

- **Brand awareness, customer perception, customer satisfaction, churn rate, external stakeholders relationship**

HR and Administration Perspective

- **Employee productivity, internal stakeholders relationship, office automation**

Examples of Organizational Functions That Can be Transformed

Firm infrastructure

Human resource management

HR Analytics

Technology development

Procurement

Supply Chain Automation

Support activities

Inbound logistics

Operations

Digital Marketing

Outbound logistics

Marketing and sales

Service

Technology Aided CS Support

Margin

Primary activities

Design and Implement DIO Strategy

Define Digital Strategy	Execute throughout Organization	Evaluation Mechanism
• Major objectives, functions to be transformed	• **Features & capabilities, process and system, customer interaction, digital champion**	• Measurement tools, monitoring parameters

Examples of Digital Features and Process

Human Resources Function

- Performance monitoring and review via digital analytics
- Recruitment / selection using Linkedin and other digital platforms

Sales and Marketing Function

- Digital marketing research, exposure / awareness and sales lead via SEO, SEM, social media, mobile media / app, etc.
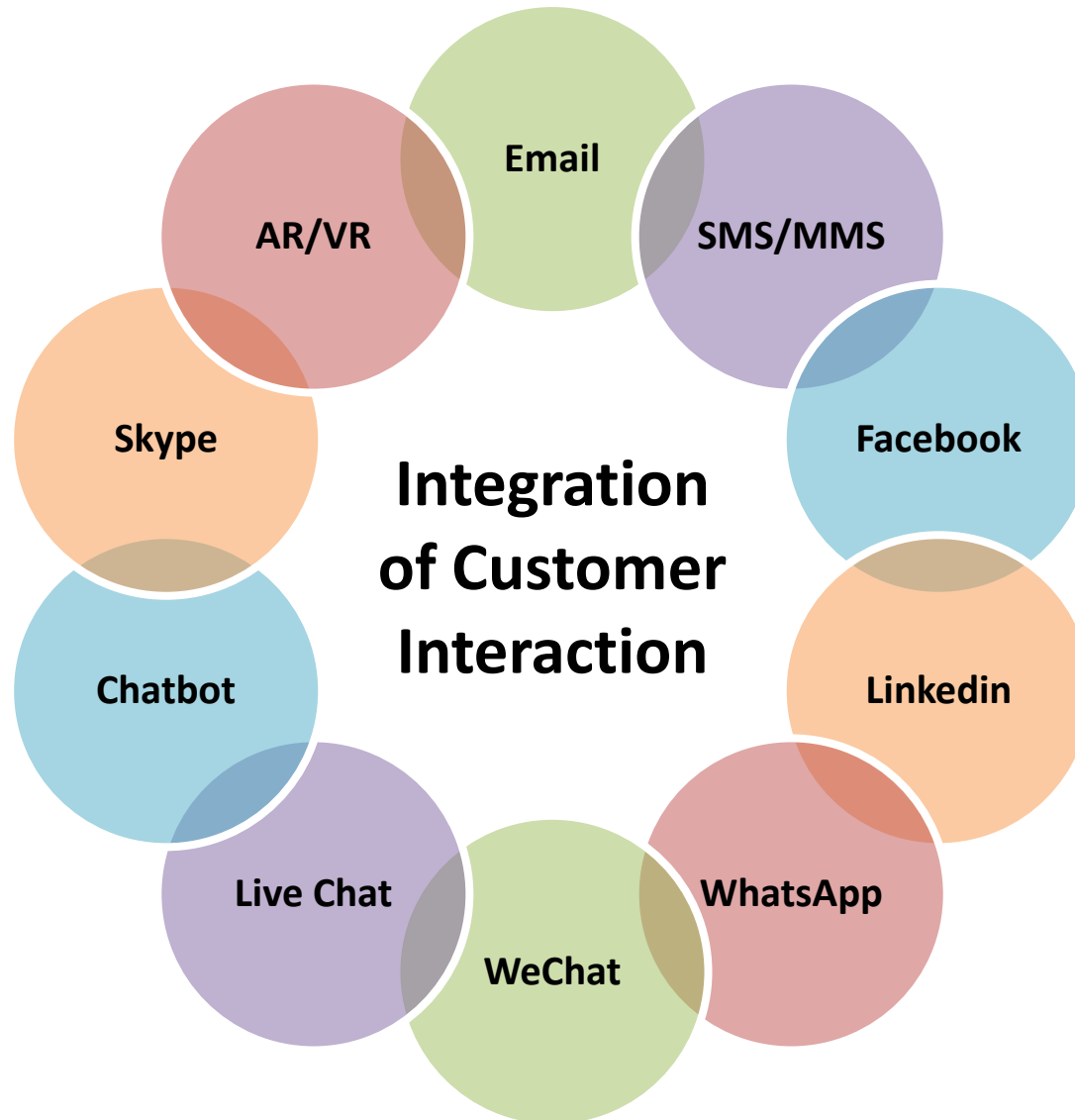- Digital PR via social media and KOL

Customer Service Function

- Response to customer enquiry via AI, chatbot, live chat, social media platforms and potentially AR / VR
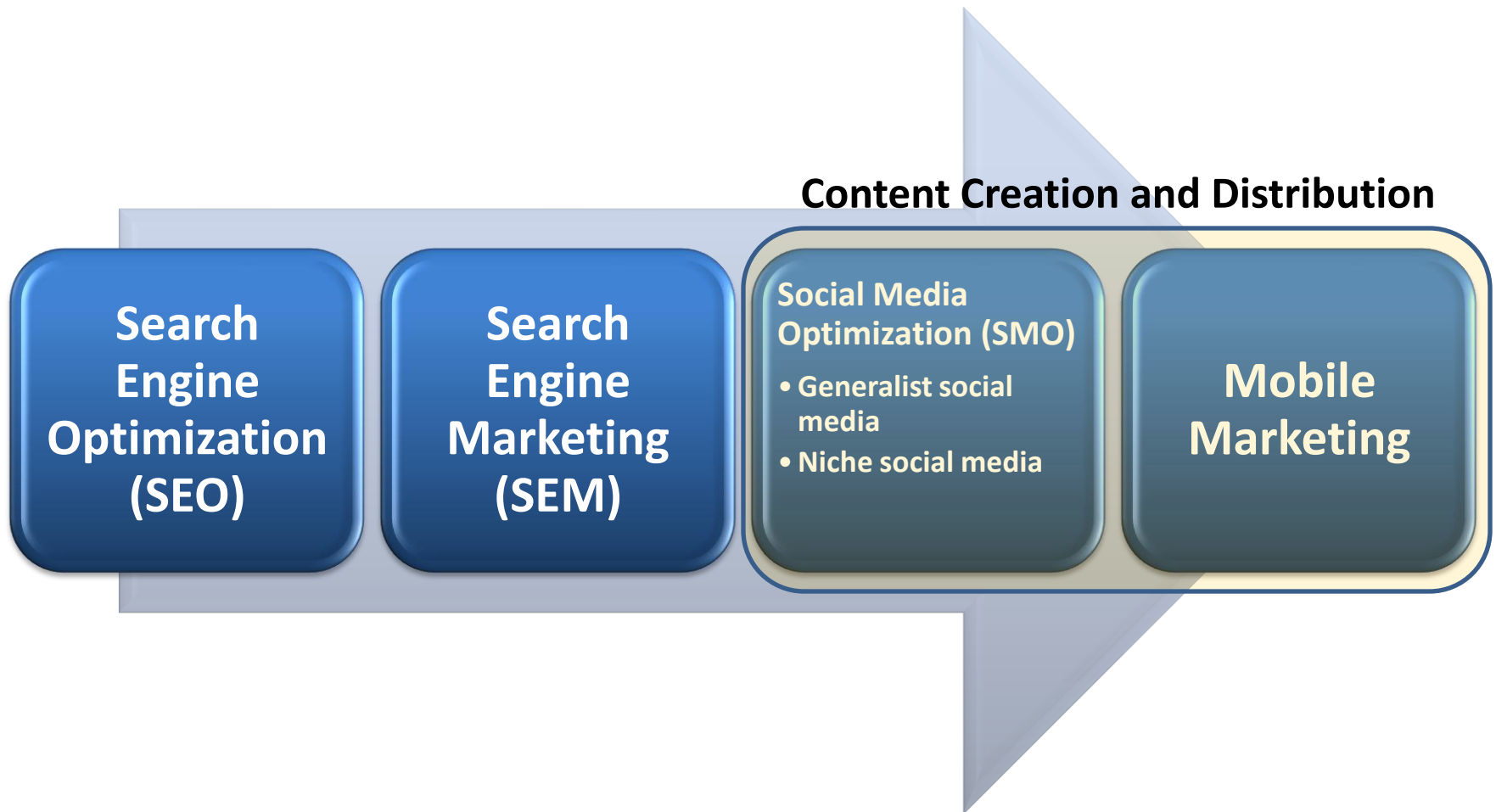- Build and share knowledge via real time tools / databases

IT Function

- Monitor, collect and display data via right analytical tools
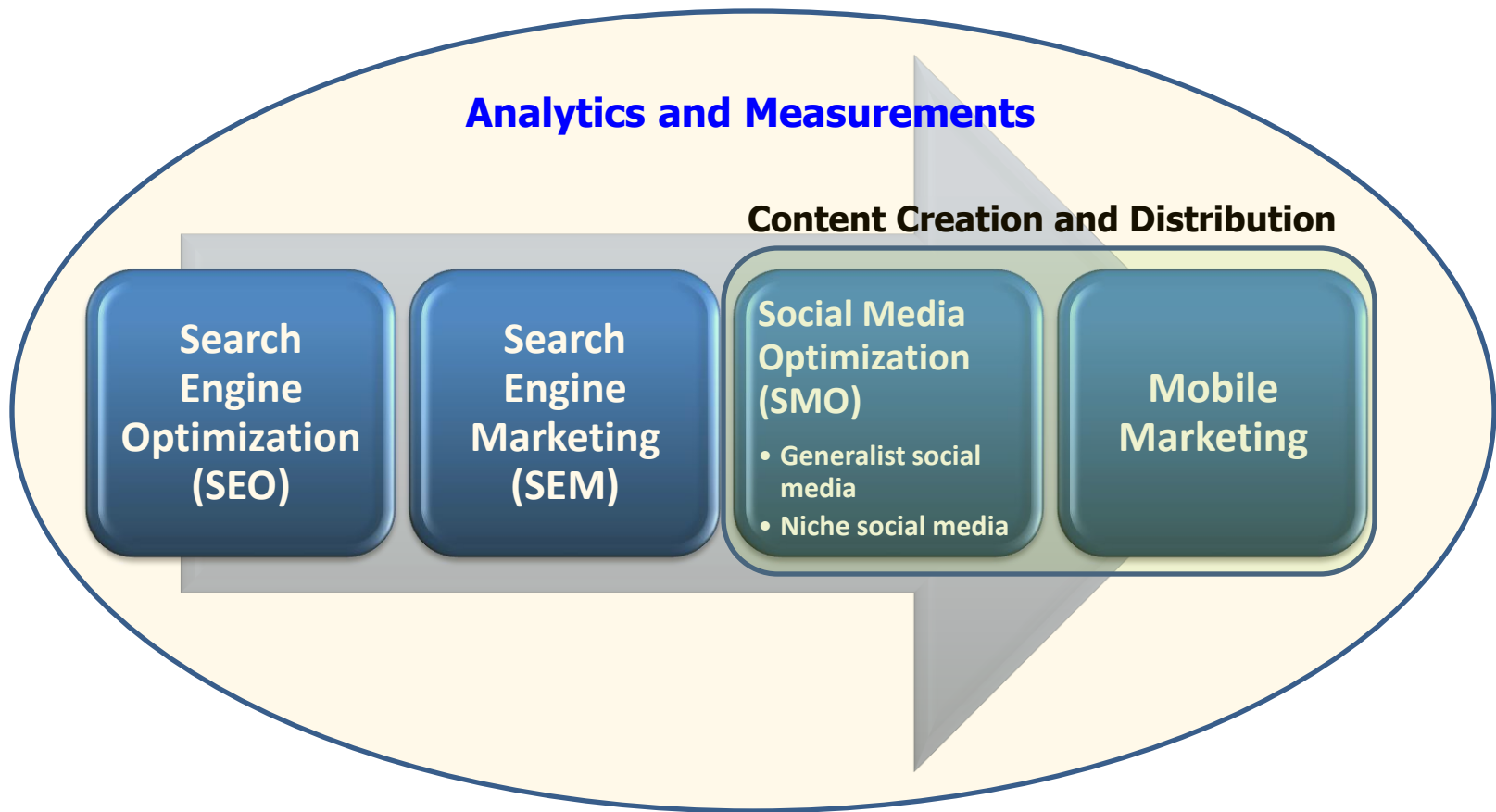- Data analytics support to different functions

創造具競爭力的企業 - 運用數碼轉化和數據分析提升商業決策

Examples of Digital Transformation on CS Function

Integration of Customer Interaction

- Email
- SMS/MMS
- Facebook
- Linkedin
- WhatsApp
- WeChat
- Live Chat
- Chatbot
- Skype
- AR/VR

Examples of Digital Transformation on Sales and Marketing Function

Content Creation and Distribution

Search Engine Optimization (SEO)

Search Engine Marketing (SEM)

Social Media Optimization (SMO)
- Generalist social media
- Niche social media

Mobile Marketing

Digital Integration between S&M and IT Functions

Analytics and Measurements

Content Creation and Distribution

Search Engine Optimization (SEO)

Search Engine Marketing (SEM)

Social Media Optimization (SMO)
- Generalist social media
- Niche social media

Mobile Marketing

Digital Integrated Organization (DIO)

Digital Integrated Organization (DIO)

Analytics and Measurements

Content Creation and Distribution

Search Engine Optimization (SEO)

Search Engine Marketing (SEM)

Social Media Optimization (SMO)
- Generalist social media
- Niche social media

Mobile Marketing

Roles and Functions of Digital Champion

Digital Technologies

Digital Culture, Mindset and Competence

Digital Innovation Unit (DIU)

- Sales [DC]
- Marketing [DC]
- [DC] Customer Service
- Human Resources [DC]
- Information Technology [DC]
- [DC] Administration & Finance
- Manufacturing [DC]
- [DC] Procurement

[DC] **Digital Champion / Integrator**

Design and Implement DIO Strategy

Define Digital Strategy	Execute throughout Organization	Evaluation Mechanism
• Major objectives, functions to be transformed	• Features & capabilities, process and system, customer interaction, digital champion	• Measurement tools, monitoring parameters

Digital Transformation KPIs and Digital Balanced Scorecard

Financial

Customer
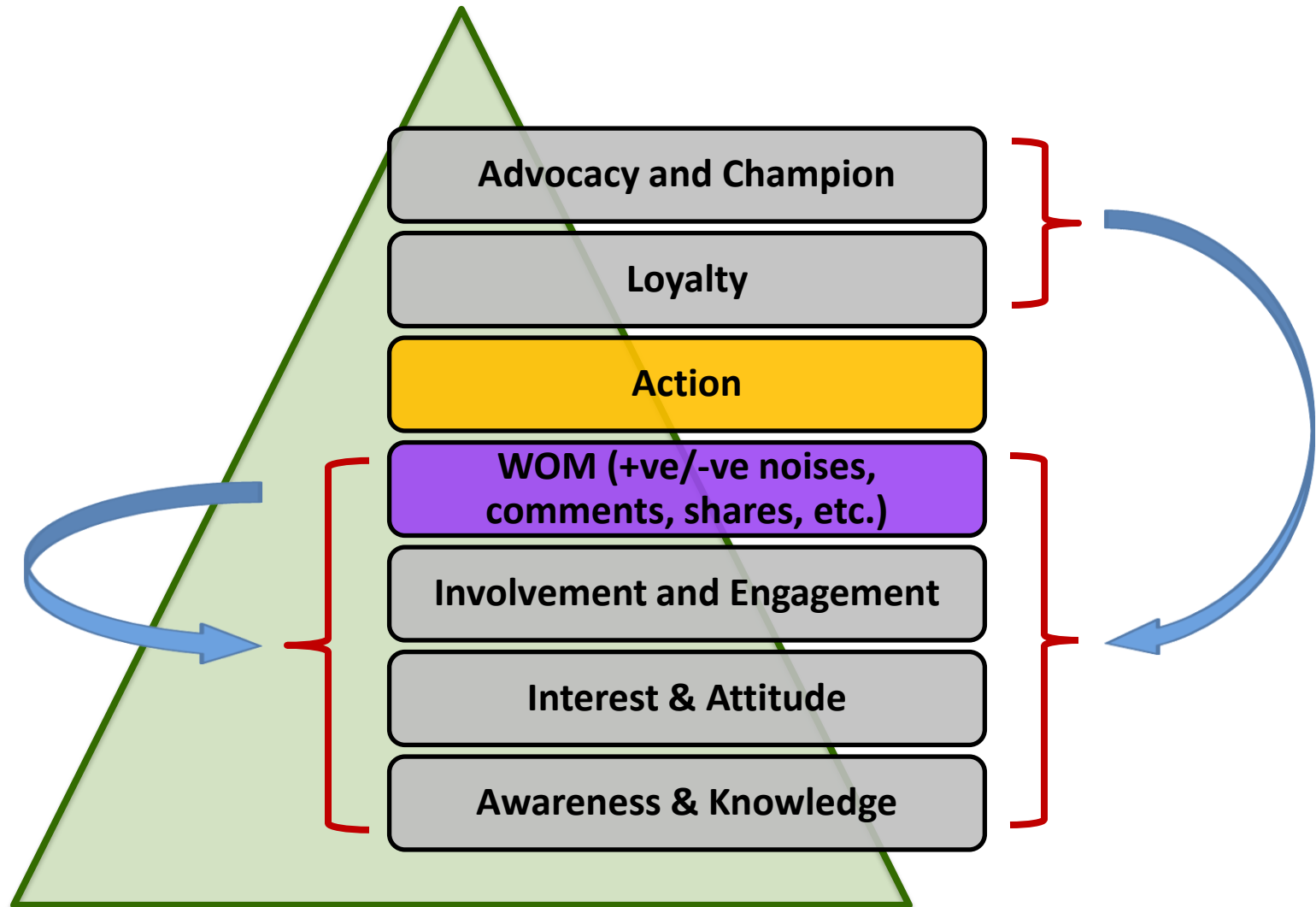
Internal Business Process

Learning and Growth

Social
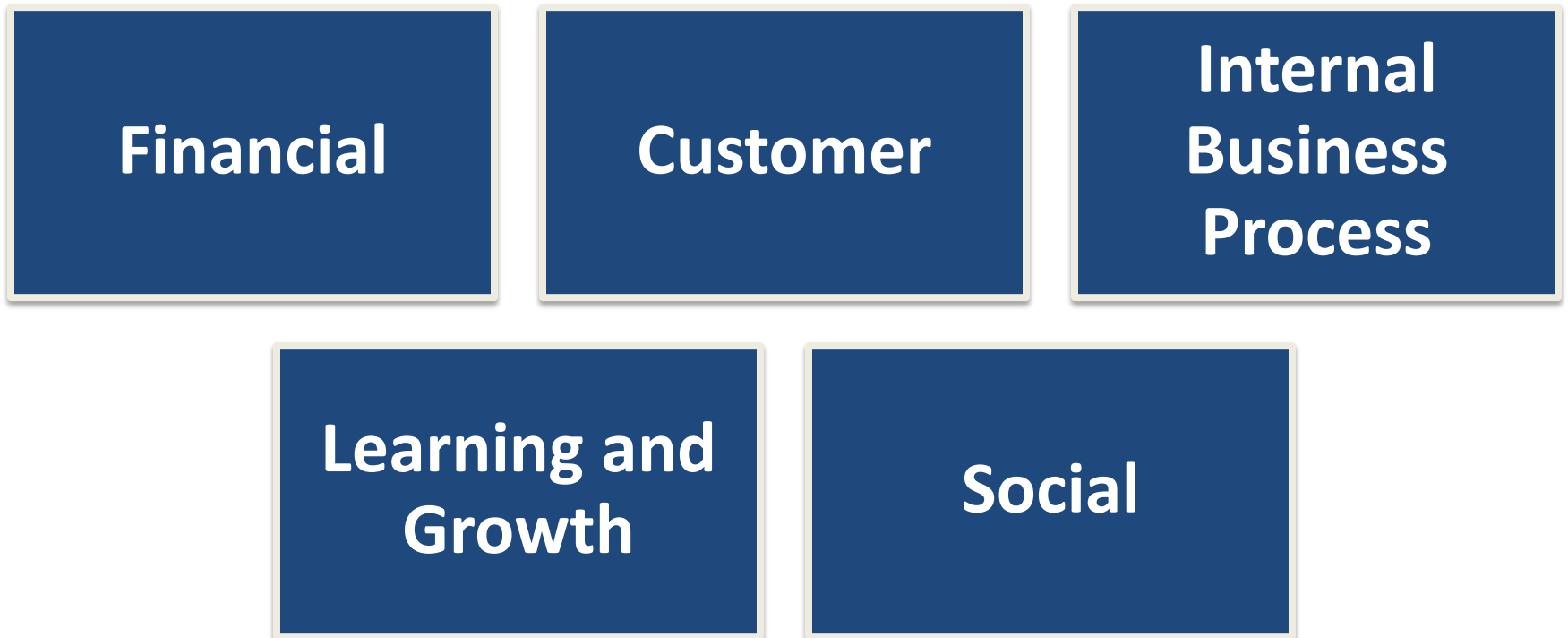
*Source: Digital Balanced Scorecard by Baniel Cheung (2016), adapted from Balanced Scorecard

創造具競爭力的企業 - 運用數碼轉化和數據分析提升商業決策

Establishing targets based on cause-effect scenarios

Strategic Theme

Targets

	Objective	Measure
Financial	Dramatically increase net income	Net income
	Grow share of customer spending	Revenue per customer
Customer	Increase customer retention	Customer churn
Process	Provide responsive personal service	Time to meet customer request
Learning and Growth	Reduce employee turnover	Key employee turnover

Targets:
- +50%
- +20%

The Value Gap

- −25%
- −30%
- −20%

The Cause-Effect Scenario

Analytical Measurement Model for Digital Marketing

Advocacy and Champion

Loyalty

Action

WOM (+ve/-ve noises, comments, shares, etc.)

Involvement and Engagement

Interest & Attitude

Awareness & Knowledge

創造具競爭力的企業 - 運用數碼轉化和數據分析提升商業決策

Digital Marketing Key Performance Indicators

Campaign Performance Metrics

- Impressions, likes, comments, shares, clicks, sales leads, access duration
- Effective engagement = (no. of like + comment + share) / no. of post
- Diffusion depth and speed, lifespan of effectiveness
- Level / amount of interaction, customer sentiment

Engagement Level Metrics

- Awareness and Knowledge, Interest & Attitude, Involvement and Engagement, +ve / -ve WOM, Action, Loyalty, Advocacy and Champion

Business Value Metrics

- Sales, profit, market share, ROI
- Brand awareness, customer perception, customer satisfaction, churn rate
- Employee productivity, cost reduction, stakeholders relationship

Making Effective Business Decision
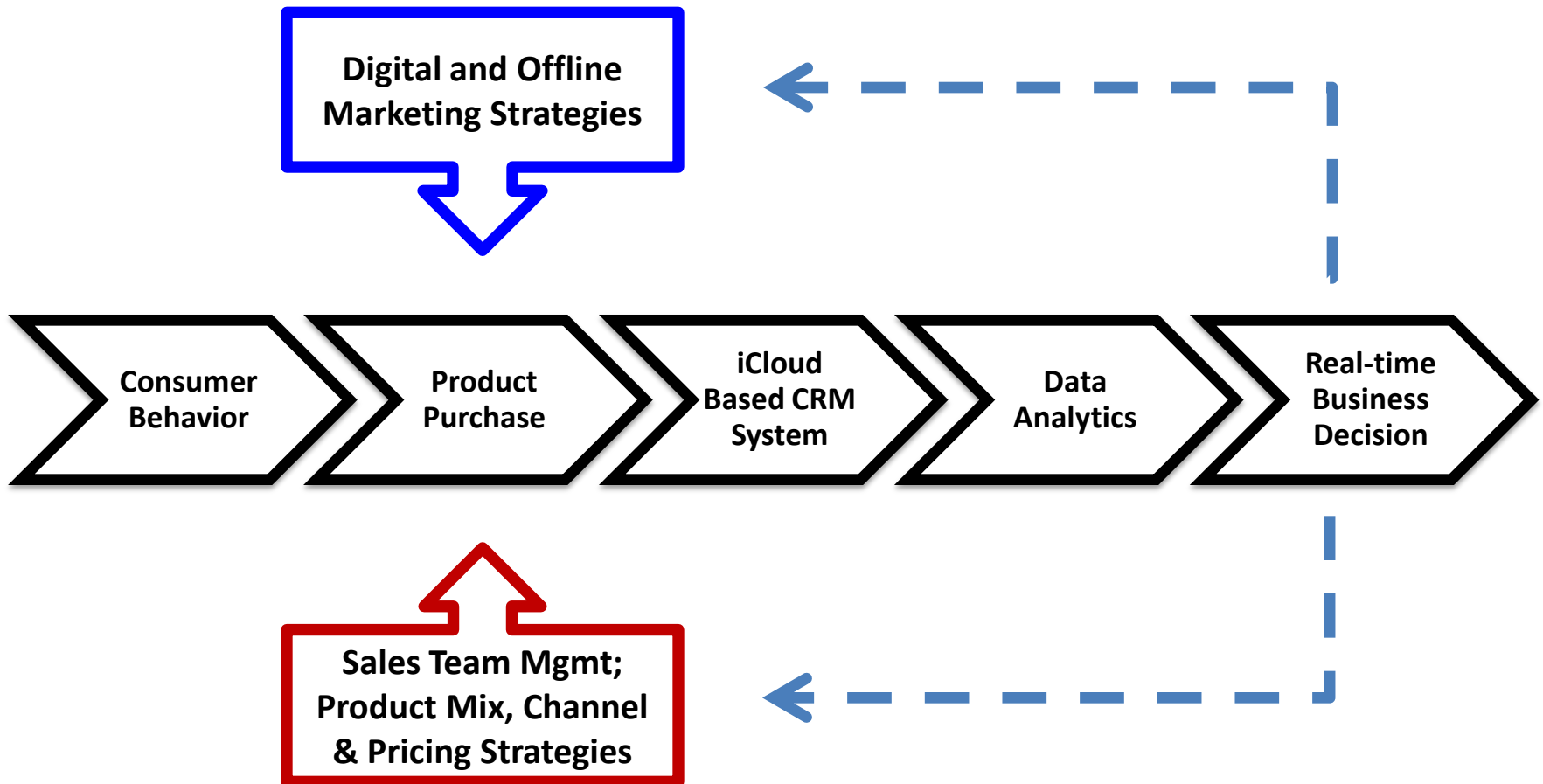
Examples of Digital Analytics and Measurement Tools for Social Media

Business Objective	Key Performance Indicator	Social Analytics Platforms
Foster Dialog	Share of Voice	Alterian SM2, Radian6, Scout Labs, Statsit, Trendrr, Visible Technologies
	Audience Engagement	Coremetrics, Webtrends, Radian6, Scout Labs, Converseon, Filtrbox (Jive), Visible Technologies
	Conversation Reach	Alterian SM2, Radian6, Scout Labs, Social Radar, Statsit, SWIX, Trendrr, Visible Technologies
Promote Advocacy	Active Advocates	Biz360, Filtrbox (Jive), Radian6
	Advocate Influence	Cymfony, Filtrbox (Jive), Lithium, Radian6, Razorfish, (SIM Score), SAS, Telligen, Twitalyzer, Visible Technologies
	Advocacy Impact	Coremetrics, Lithium, Omniture, Webtrends, SWIX, Telligent
Facilitate Support	Resolution Rate	Filtrbox (Jive), RightNow Technologies, Salesforce.com, Telligent
	Resolution Time	Filtrbox (Jive), RightNow Technologies, Salesforce.com, Telligent
	Satisfaction Score	ForeSee Results, iPerceptions, Kampyle, OpinionLab
Spur Innovation	Top Trends	Alterian SM2, Cymfony, Filtrbox (Jive), Radian6, SAS, Scout Labs, Social Mention, Social Radar, Trendrr, Visible Technologies
	Sentiment Ratio	Alterian SM2, Converseon, Cymfony, Filtrbox (Jive), Radian6, SAS, Scout Labs, Social Radar, Trendrr, Visible Technologies
	Idea Impact	Biz360, Cymfony, Filtrbox (Jive), LugIron, Radian6, Scout Labs, Visible Technologies

*Source: Objectives, KPIs and Social Analytics Platforms by Ira and Chris (2015)

創造具競爭力的企業 - 運用數碼轉化和數據分析提升商業決策

Best Practices to Achieve DIO

- **Equip leaders with digital mindset and courage to change**

- **Establish a digital and fast-adopting culture within the organization**

- **Invest in trainings, digital resources and technologies**

- **Build collaborative and interdisciplinary teams with digital competence**

- **Capable to develop and support Integrated Digital Strategy (IDS) to connect / engage customers**

- **Appropriate monitoring / evaluation of digital performance and ROI**

- **Make effective use of data collected from all channels**

* Best practices based on research insights by DTA from 250 HK, China, Japan, US and European SMEs and large corporations

End of Presentation