

Digital Maturity – Concept and Application







Digitization vs. Digitalization Digital Transformation



What are the drivers of digitalization and digital transformation?





Why does the business landscape change?





What exactly changes in the business landscape?





The impact of digital transformation









Why does society change?





What exactly changes in society?





The need for organizations to transform





Why is it relevant for companies to adapt to these changes?





How can the level of a comapany's digital transformation be assessed?





How can organizations know how to become more digital?





The concept of digital maturity





Maturity Models





Self-actualization

desire to become the most that one can be

Esteem

respect, self-esteem, status, recognition, strength, freedom

Love and belonging

friendship, intimacy, family, sense of connection

Safety needs

personal security, employment, resources, health, property

Physiological needs

air, water, food, shelter, sleep, clothing, reproduction



Maslow's hierarchy of needs



Digital Maturity Models





Architecture





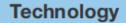
Dimensions / Building Blocks





Culture

A company's approach to digitally driven innovation, and how it empowers employees with digital technology.



A company's use and adoption of emerging technology.



Digital maturity model

Organization

How aligned a company is to support digital strategy, governance, and execution.



How well a company uses customer and business data to measure success and inform strategy.





Available at http://forrester.nitro-digital.com/pdf/Forrester-s%20Digital%20Maturity%20Model%204.0.pdf



What could be other dimensions in addition to *Culture*, *Technology*, *Organization & Insights*?









McKinsey, 2015

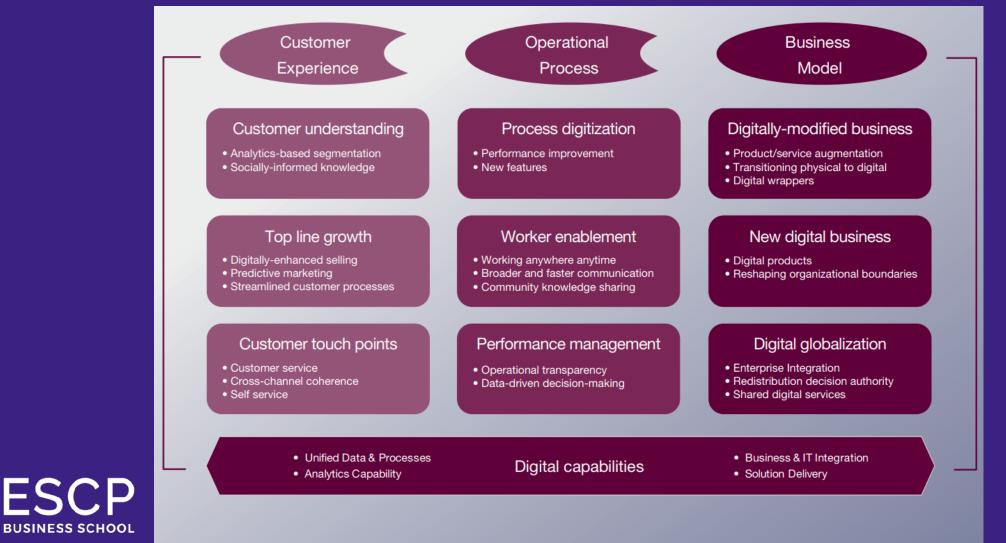


Dimensions	Central Concepts	Reference Models (e.g.)				
Broader Organization						
Culture & Expertise	Culture of mistakes and propagation of digital competencies	Berghaus et al. (2016), Gill and Van Boskirk (2016)				
Collaboration	Provide flexible working models and opportunities for collaboration	Berghaus et al. (2016), Catlin et al. (2015)				
Operational Processes	Process efficiency, Process agility, adaptability, continuous reevaluation	Westerman et al. (2012), Colli et al. (2018)				
Business Model	Product/ Service augmentation, Transitioning physical to digital, new digital business	Westerman et al. (2012), Lichtblau et al. (2015)				
Customer Experience	Customer Understanding, Customer touch points, digitally enhanced selling	Westerman et al. (2012)/ Berghaus et al. (2016)				
Management						
Digital Strategy	Strategic alignment with digital challenges and systematic prioritization of digital projects	Berghaus et al. (2016), Catlin et al. (2015)				
Designated Roles and Positions	Designated position/ roles in charge of steering the transformation, clearly defined	Berghaus et al. (2016) see transformation mngt.				
Performance Measurement	Targets are defined, measurable and transparent, continuously monitored	Berghaus et al. (2016) see transformation mngt.				
Management Support	Top management drives digital projects forward	Berghaus et al. (2016)/ see transformation mngt.				
Product Innovation	Improving processes with regards to the product	Westerman et al. (2012)/ Berghaus et al. (2016)				
Information Technology						
IT Usability	Provide internal users with services that are intuitive and easy to use, functional support	Nolan (1992)				
IT Automation, Integration & Security	Degree of IT automation, integration, security	Nolan (1992)/ Westerman et al. (2012)/ Berghaus et al. (2016)				
Requirements Management	Common understanding of requirements that need to be addressed by IT, basis for planning	Paulk et al. (1993)				
Technology Change Management	Identifying beneficial new technologies and transfer them into the organization	Paulk et al. (1993), Catlin et al. (2015)				
Process Change Management	Continually improve the software processes quality, productivity, decreasing cycle time	Paulk et al. (1993)				
Refined after Interviews Has not ye	t been covered by DMMs					



Thordsen & Bick, 2021





CapGemini, 2011



Digital Maturity Levels





	Maturity segment	Characteristic behavior	Strategy	Score range
High	Differentiators	Leveraging data to drive customer obsession.	Blend the digital and physical worlds.	72-84
Level of	Collaborators	Breaking down traditional silos.	Use digital to create competitive advantage.	53-71
maturity	Adopters	Investing in skills and infrastructure.	Prioritize customer relationships over production.	34-52
Low	Skeptics	Just beginning the digital journey.	Prompt a willing attitude.	0-33





FASHIONISTAS

- Many advanced digital features (such as social, mobile) in silos
- No overarching vision
- Underdeveloped coordination
- Digital culture may exist in silos

DIGIRATI

- Strong overarching digital vision
- Good governance
- Many digital initiatives generating business value in measurable ways
- · Strong Digital culture

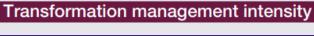
Digital intensity

BEGINNERS

- Management skeptical of the business value of advanced digital technologies
- May carry out some experimentation
- Immature digital culture

CONSERVATIVES

- · Overarching digital vision exists, but may be underdeveloped
- · Few advanced digital features, though traditional digital capabilities many be mature.
- Strong digital governance across silos
- Taking active steps to build digital skills and culture





CapGemini, 2015



o	Initiation	Basic IT to support to daily business		1) O	rgan	izatio	on	2) Ma	mage	eme	nt		nfor			
I	Enabling	IT growth throughout the entire organization; Training of employees							S					Security		nt	
II	Regulation	IT initiatives integrated & Strategic alignment of IT with business goals	Expertise	tion	ocesses	lodel	erience	asurement	and Positions	Strategy	Support	vation	ability	and	nagement	Technology Change Management	e. Process Change Management
ш	Digital Business Model	Digital Strategy & Digital business model implementation	pu	b. Collaboration	Operational Processes	Business Model	Customer Experience	Performance Measurement	Roles	Digital Stra	Management Support	Product Innovation	Software Usability	ion, Integration	Requirements Management	ogy Change	s Change M
IV	Customer Centricity	Customer experience as source of competitiveness, Use of new technologies	a. Cu	q	c. Op	ď.	e. Cu	a. Perfo	b. Designated	C.	d. Ma	e. Pı	a. S	b. IT Automation,	c. Requi	d. Technok	e. Proces
v	Optimization	Continuously reflect on and challenge all dimensions															



Thordsen & Bick, 2021



How can the different dimensions of maturity be measured?





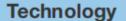
Please think of 5 statements to measure the following concepts





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"How much do you agree with each of the following statements?"

0 = Completely disagree 2 = Somewhat agree 1 = Somewhat disagree 3 = Completely agree

Culture

We believe that our competitive strategy depends on digital
Our board and our C-level executives back our digital strategy
We have the right leaders to execute on our digital strategy day-to-day
We invest in targeted digital education and training at all levels of our organization
We clearly communicate our digital vision both internally and externally
We take measured risks in order to enable innovation
We prioritize overall customer experience over the performance of any individual channel





Organization
Our organization structure prioritizes customer journeys over functional silos
We dedicate appropriate resources to digital strategy, governance, and execution
The staff supporting our critical digital functions are best in class
We have digital skills embedded throughout our organization
Our organization model encourages cross-functional collaboration
We have defined and repeatable processes for managing digital programs
Our vendor partners deliver value that enhances our digital competencies





d map
design





ess





Please choose one organization and fill out the questionnaire.



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Our organization model encourages cross-functional collaboration				
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Our vendor partners deliver value that enhances ou	r digital competencies			
Technology				
Our technology budget is fluid to allow for shifting p	priorities			
Our marketing and technology resources work toge	ether to co-create our digital technology road map			
We have a flexible, iterative, and collaborative appro	pach to technology development			
We leverage modern architectures (APIs, cloud, etc.	.) to promote speed and flexibility			
We measure our technology teams by business out	comes not just system up-time			
We use customer experience assets, like personas	and journey maps, to steer our technology design			
We use digital tools to promote employee innovation	n, collaboration, and mobility			
Insights				
We have clear and quantifiable goals for measuring	the success of our digital strategy			
Every employee understands how her performance	s ties to corporate digital goals			
We use customer-centric metrics like Net Promoter	Score or lifetime value to measure success			
We measure how channels work together to accom	plish a desired outcome			
Customer insight actively steers our digital strategy				
Customer insights inform digital design and develop	oment			

We feed lessons learned from digital programs back into our strategy



BUSINESS SCHOOL



Results

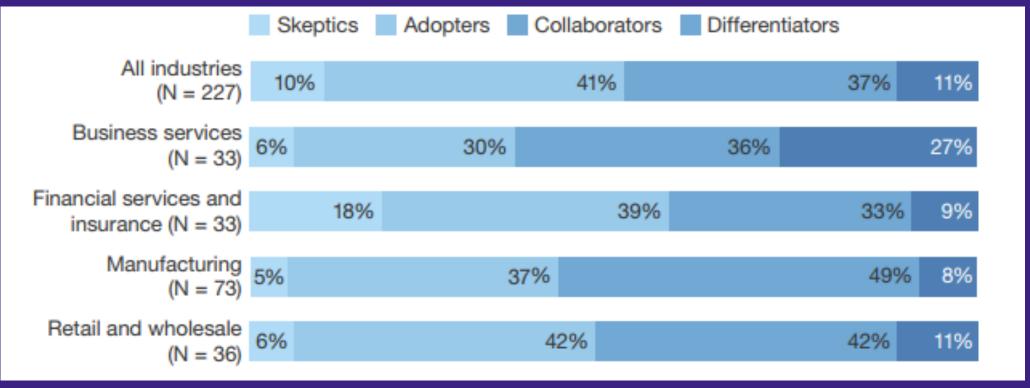




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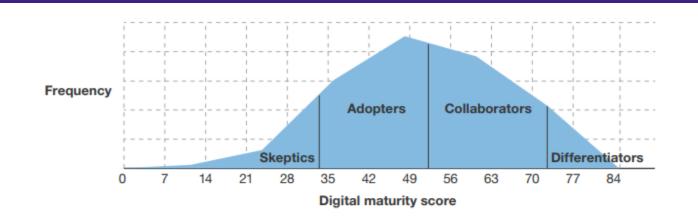




Status Quo 2016







Adopters

Collaborators

Differentiators

Skeptics

	(N = 23)	(N = 94)	(N = 84)	(N = 26)
Industry bias	Public sector, B2B	Healthcare, Utilities	Manufacturing, multichannel retail	Online retail
Percentage of revenue that comes through online channels	17%	32%	54%	57%
Average number of employees	46,100	17,800	13,200	1,600
Average 2015 marketing technology and software budget	\$8.9 million	\$15.3 million	\$51.1 million	\$41.5 million
Top critical marketing priority over the next 12 months	Improve customer acquisition	Improve customer loyalty	Build brand awareness	Increase organ- ization's use of data and analytics for customer insight





Does every organization need to reach digital maturity?





Thank you for your attention!

