



# A DATA DRIVEN APPROACH TO IMPROVE CUSTOMER ENGAGEMENT

Unlocking a 15%+  
growth opportunity



MARCH  
2021



BCG



 capillary

## About Boston Consulting Group

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we help clients with total transformation—inspiring complex change, enabling organizations to grow, building competitive advantage and driving bottom-line impact.

To succeed, organizations must blend digital and human capabilities. Our diverse, global teams bring deep industry and functional expertise and a range of perspectives to spark change. BCG delivers solutions through leading-edge management consulting along with technology and design, corporate and digital ventures—and business purpose. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, generating results that allow our clients to thrive.

## About Capillary

Capillary Technologies partners with leading retailers, brands and consumer facing companies by providing technology driven solutions for loyalty management, CRM and omnichannel customer engagement through a cloud based B2B SaaS (Software as a Service) platform powered by AI. Founded in 2008, Capillary Technologies has been featured by Harvard Business Review as a pioneer in ‘reverse innovation’.

Capillary works with over 400 merchants, including Fortune 500 enterprises to solve their key challenges around capturing consumer data to drive better engagement and advocacy. Capillary’s platform powers 100+ loyalty programs and supports 500+ million customers and over 120,000 stores across 30 countries. Capillary has local teams based out of South East Asia, China, USA, the Middle East and India. Capillary’s strategic investors include Warburg Pincus, Sequoia Capital, American Express Ventures, Avataar Capital and Qualcomm Ventures.



## About the report

A pressing question for marketing and digital leaders today is how to ensure a rewarding customer experience across multiple touch points by effectively utilizing data. While capturing customer data is only a part of the solution, organizations need to improve their maturity on Data Led Customer Engagement (DLCE) to build strategic data use cases that demonstrate value to customers. In doing so, they must overcome notable challenges, and there is no single guidance or universally accepted approach to help them.

This report aims to address this key unmet need with the introduction of the Stop Hold Purchase (SHoP) framework. SHoP enables assessment of DLCE maturity of organizations across seven key dimensions. Cross sectoral SHoP benchmarks were compiled from an extensive survey of over 100 companies across 5 industries and 13 countries. The results highlighted the key opportunities and gaps across the different customer engagement dimensions which can help unlock 15%+ topline impact.

This report employs these observations to help synthesize top priorities for marketing and digital leaders to advance DLCE maturity, with special focus on creating a roadmap to achieve the optimal end state in the relatively unevolved Loyalty dimension. Also, the introduction of a scientific methodology for determining Loyalty Delivered Sales (LDS) enables assesment of the true business impact delivered by a loyalty program. These findings, if holistically embedded, will help organizations steer their customer engagement strategy in the right direction, setting themselves apart going forward.



# CONTENTS

1

## Introduction

Key customer engagement challenges marketers face

2

## Our Approach

SHoP framework for Data Led Customer Engagement

3

## Key Findings

Identifying gaps and opportunities through a global survey

4

## Deep Dive - Loyalty Programs

A toolkit to build loyal customers that spend more

5

## Summary

Synopsis of key observations

## Businesses face multiple challenges in keeping modern consumers engaged

### Lack of 'newness'

Brands may lose relevance to customers over time, as fresh emerging brands compete and match evolving customer interests



Customers wouldn't notice if **3/4** of brands globally ceased to exist

### Decision fatigue

Customers fatigued by growth of options, causing inability to find appropriate products and making shopping painful and time-consuming



**~70%** of customers would switch to a competitor with an easier process to find and select the desired product

### Easily distracted

Customers shop once, but lose interest or brand fades from memory and are no longer top of mind



**8 seconds** is the average attention span of a modern customer

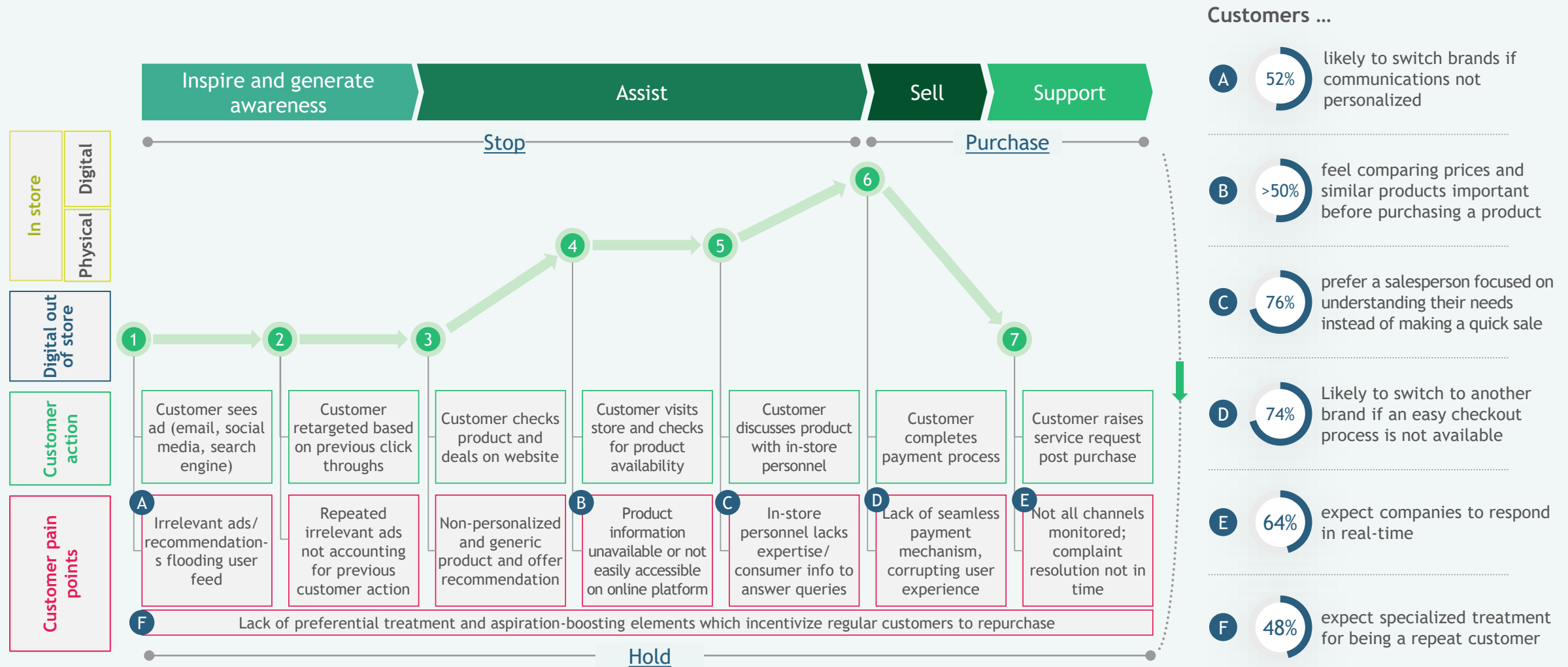
### Managing the spam

Customers unsubscribe from emails due to frequent spam from irrelevant emails, with brands no longer top of mind



**43%** customers unsubscribe from a marketing mailing list when they find information irrelevant

# These challenges manifest across all touchpoints of the consumer journey



... making it necessary to capture and leverage consumer data throughout their journey



Data is the answer for positive journeys, but customers have low trust and willingness to share data



of consumers agree that handing over their data resulted in **better products or services**



customers **blame companies over anyone else**, including a hacker, if a company loses personal information/data



customers now **limit the amount of personal information** they share online



Companies need to build strategic data use-cases to demonstrate value to customers

### Continue to inspire with personalized content

Employ a robust data-driven approach to serve personalized content and show comprehensive understanding of customers

### Help them navigate towards most relevant content

Help customers quickly find what they are looking for, adapt to their behavior, and facilitate seamless purchase pathways

### Craft on-boarding journeys for loyalty

Design customer onboarding journeys to both understand the most about the customer, and incentivize repeat transactions

### Minimize the spam

Ensure personalized frequency or ability to select less frequent communication instead of simple unsubscribe option

This whitepaper focuses on creating a go-to toolkit for leaders to drive Data Led Customer Engagement

Detailed  
3-step  
approach

1



### SHoP framework to measure and drive DLCE maturity

- For solving the most pressing questions of CMOs, **Stop Hold Purchase (SHoP) framework** was conceptualized for assessing maturity of organizations in Data Led Customer Engagement (DLCE)
- We observed that companies span across **4 tiers** based on DLCE maturity



2



### Comprehensive benchmarking of 100+ companies on SHoP

- Extensive survey of 100+ firms across 5 industries spanning 13 countries
- DLCE diagnostic performed across 7 SHoP dimensions and 40+ activators
- Robust cross-sectoral benchmarks established to understand key opportunities and gaps across dimensions



3

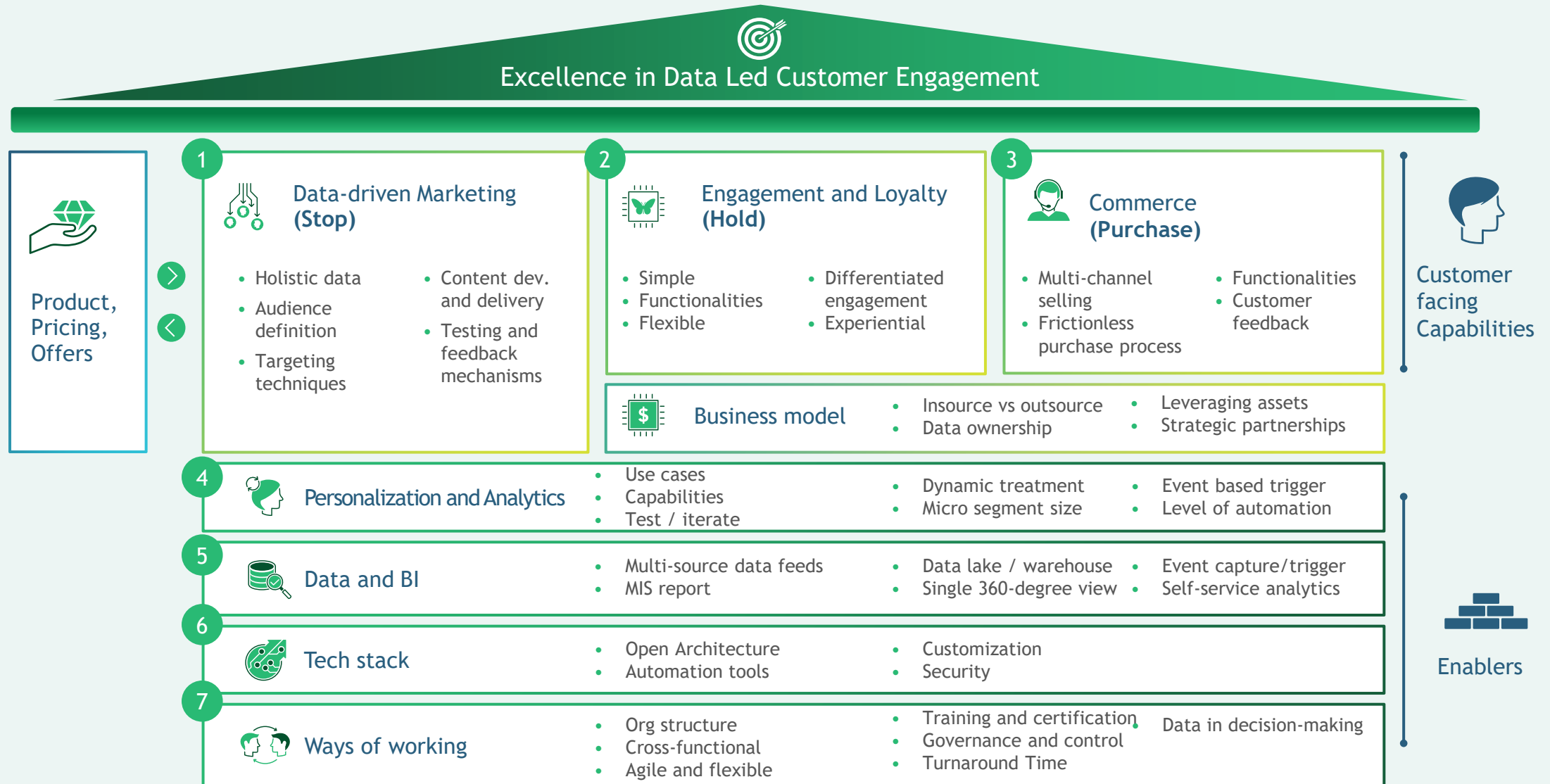


### Synthesizing top priorities for CMOs to advance maturity

- Key differentiators laid out between leaders and laggards on SHoP dimensions
- In-depth analysis of success factors and enablers critical for building capabilities with Part 1 Deep Dive covering details of the Engagement and Loyalty dimension



# Stop, Hold, Purchase (SHoP) framework: 7 key dimensions and 40+ activators of Data led Customer Engagement



Refer to Appendix for more details about individual dimensions and corresponding activators

# Companies span across four tiers based on their SHoP maturity



Typical profile, not comprehensive

## Pioneer

Holistic view of customers from real-time data integration; Dynamic hyper-personalization using AI/ML models; Highly flexible and feature-rich loyalty program rewarding behavioral events and social interactions; Seamless omnichannel journey with one-click checkout



## Progressive

Data feeds from multiple sources integrated daily and employed for content development/delivery; Targeting of smaller customer segments using statistical models; Multi-tier and gamified coalition partner-led loyalty program; Frictionless movement across channels



## Emerging

Multiple internal and external fragmented data sources leveraged for marketing and rule-based targeting of large and static customer segments; Brand-owned tiered multi-channel loyalty program with partnerships for redemption flexibility; Partially-integrated sales channels

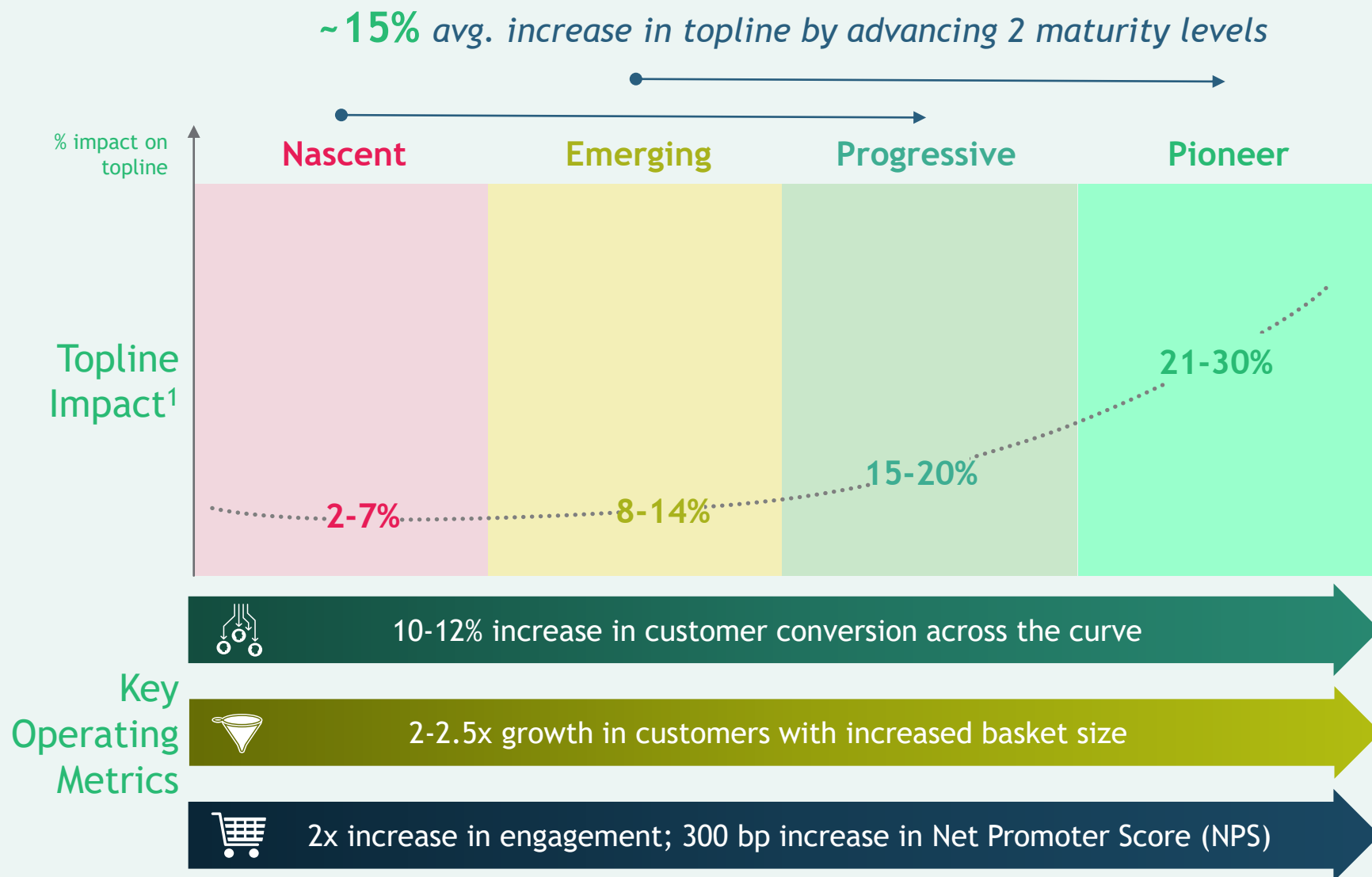


## Nascent

Limited leveraging of customer data for engagement using a one-size-fits-all approach that drives static communication content with no personalization; Rudimentary brand-owned single-tier loyalty program; Standalone sales channel



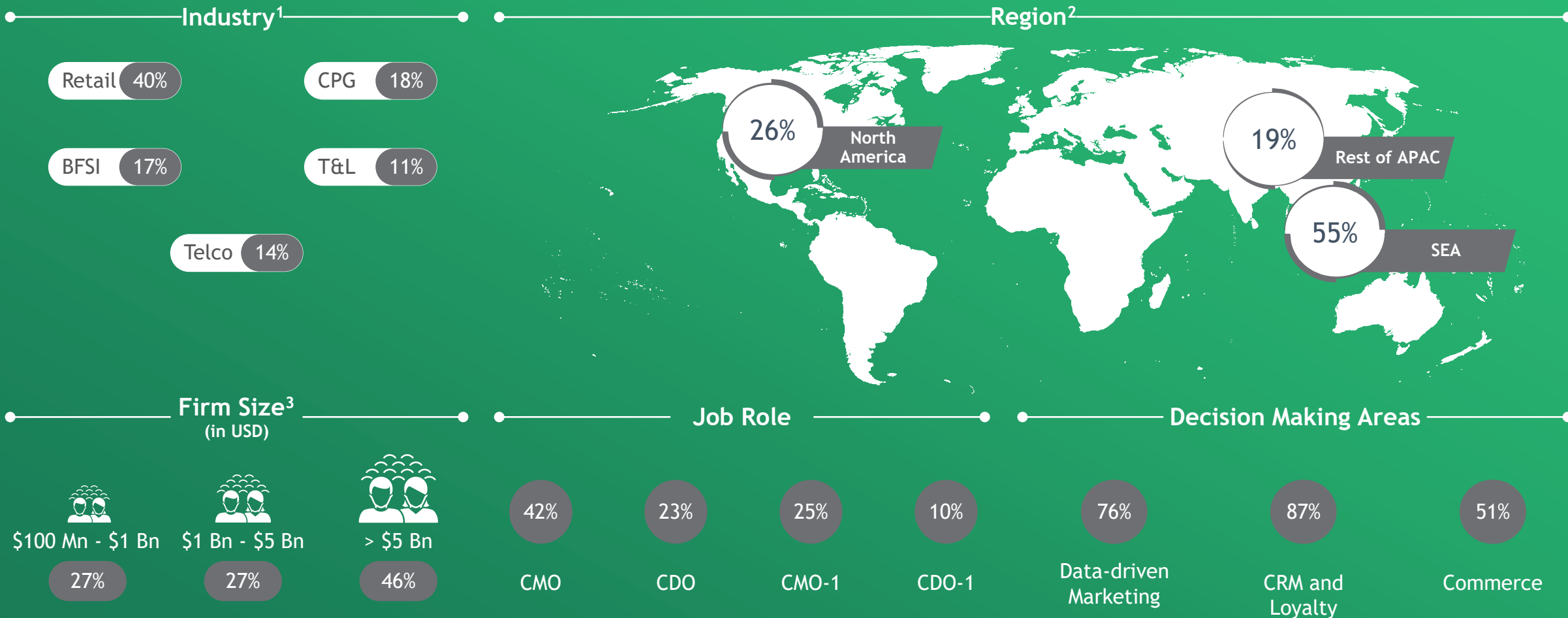
**25-30%**  
incremental  
topline potential  
for companies by  
advancing DLCE  
maturity



1. Impact driven by elements of SHoP framework such as DDM, Loyalty, Commerce, Personalization etc.  
Source: BCG-Google Data driven Marketing Assessment, 2017; Google-BCG Personalization in Retail Consumer Survey, December 2018, Rep Phase; total N=1025; Based on Apparel client benchmarking by Capillary Technologies; BCG analysis



## Starting Point: 100+ companies across 5 industries participated in the global SHoP maturity assessment survey



1. CPG - Consumer Packaged Goods, BFSI - Banking, Financial Services and Insurance, T&L - Travel and Leisure, Telco - Telecommunications

2. Responses collected from: SEA - Singapore, Malaysia, Indonesia, Philippines, Vietnam and Thailand; Rest of APAC - India, Greater China, Japan, Australia and New Zealand; NAMR - United States and Canada;

3. Responses collected primarily from firms with annual turnover from regional operations > \$100 Mn USD.

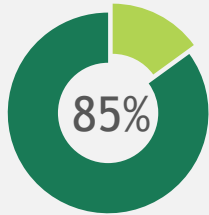
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113

~**75%** of companies acknowledged that data is the most important lever to drive growth and efficiency...



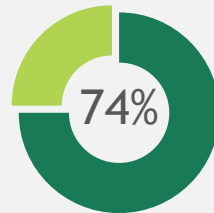
### Drive Growth

via data driven marketing, sales program, building new products



### Drive efficiency

via store operations optimization, supply chain management etc.

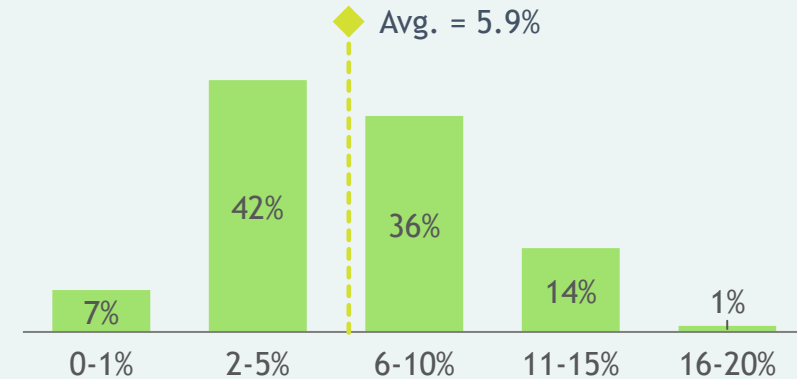


Firms recognize the **potential of DLCE** to advance their business agenda

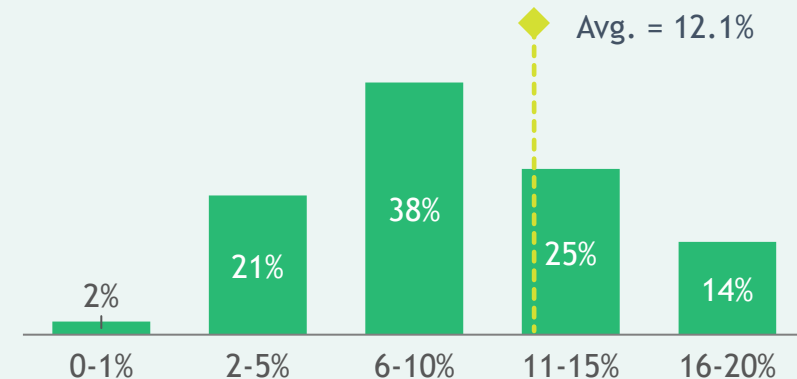
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113; BCG Analysis

... and self-acknowledged **5-6%** additional topline potential with better DLCE maturity

*What level of annual incremental revenue has your company achieved from DLCE?*

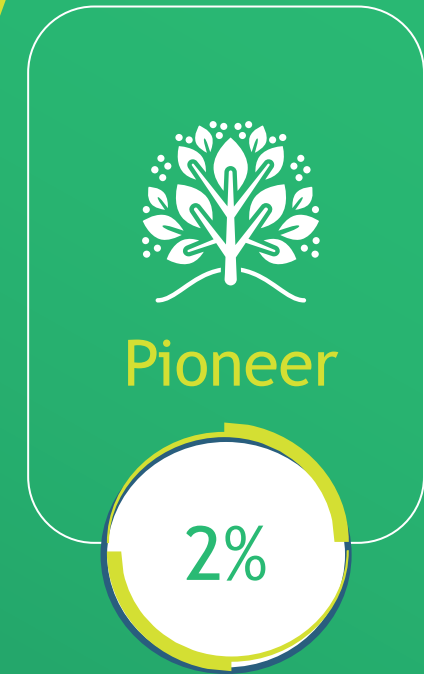
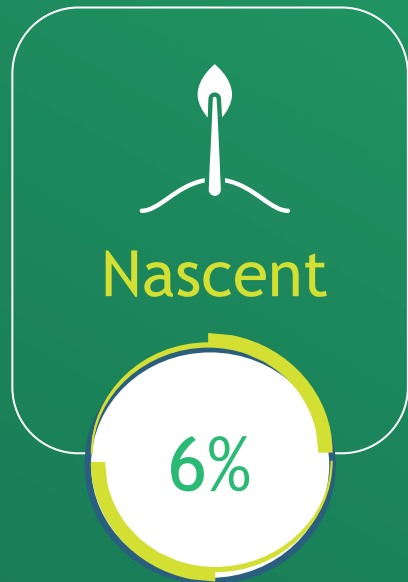


*What level of annual incremental revenue can be achieved in your company from DLCE running at full potential?*



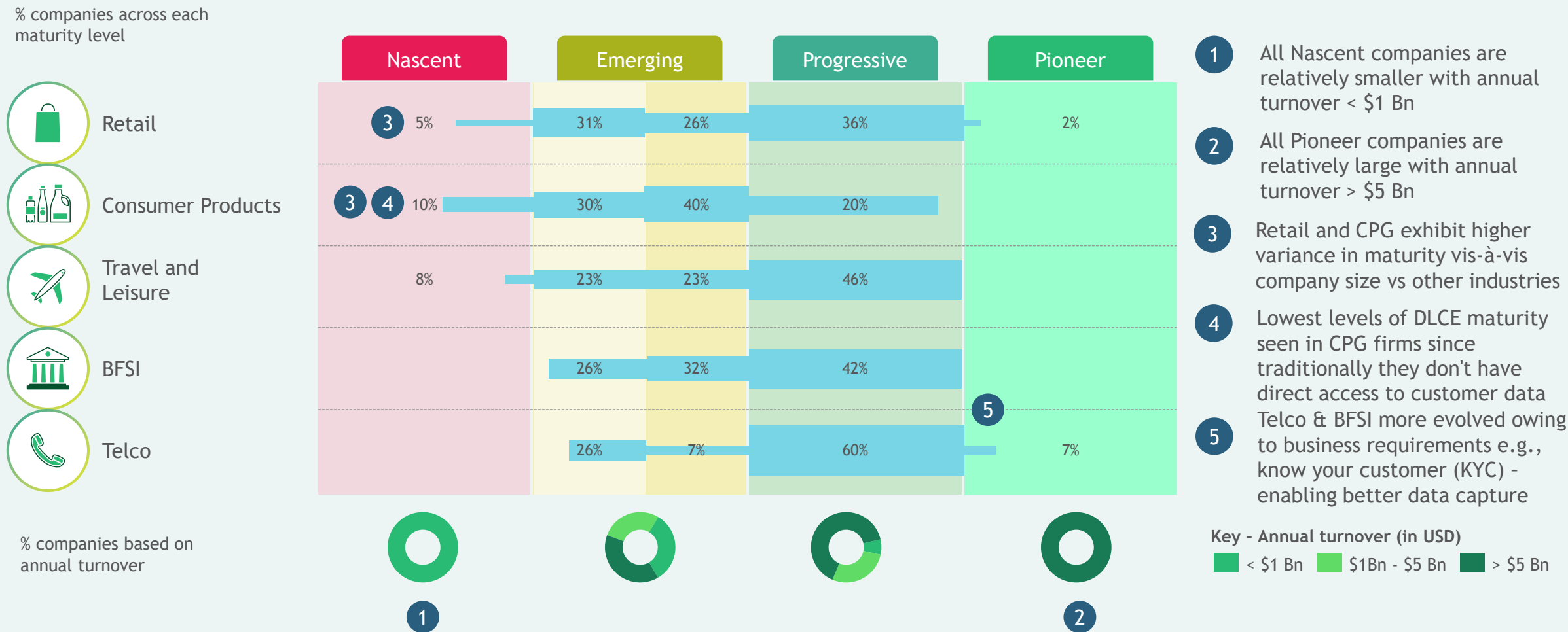
**~95% of companies have started their DLCE maturity journey**

*However, >50% companies stuck in Emerging maturity tier with only 2% reaching the Pioneer tier*



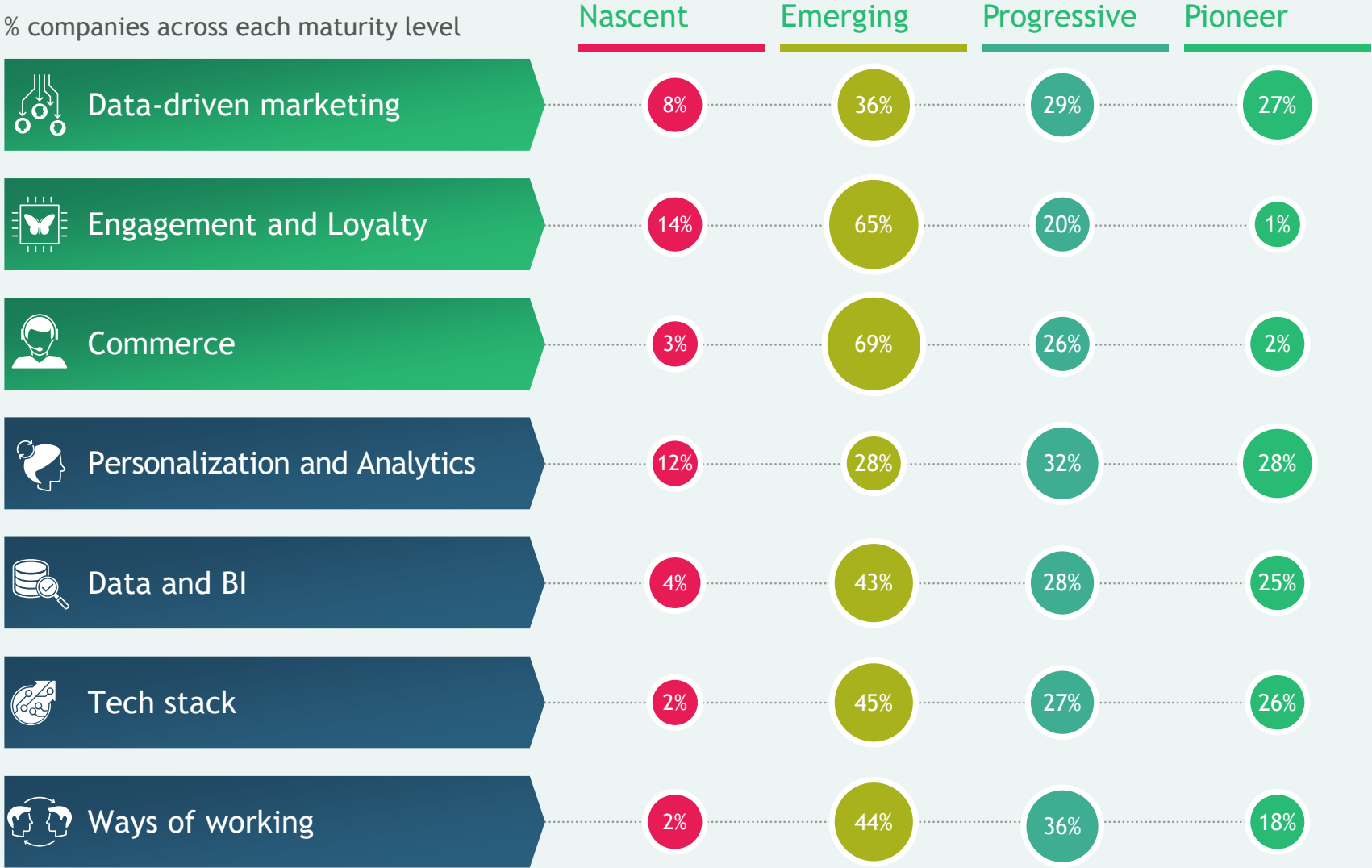


# Among industries, Telco reveals higher maturity with ~70% companies Progressive and above; Retail & CPG have a wide spectrum which varies based on firm size



Note: Ends of blue ribbon denote the lowest and highest maturity score for the dimension  
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113; BCG Analysis

# Significant variation in maturity level of companies evidenced across SHoP dimensions

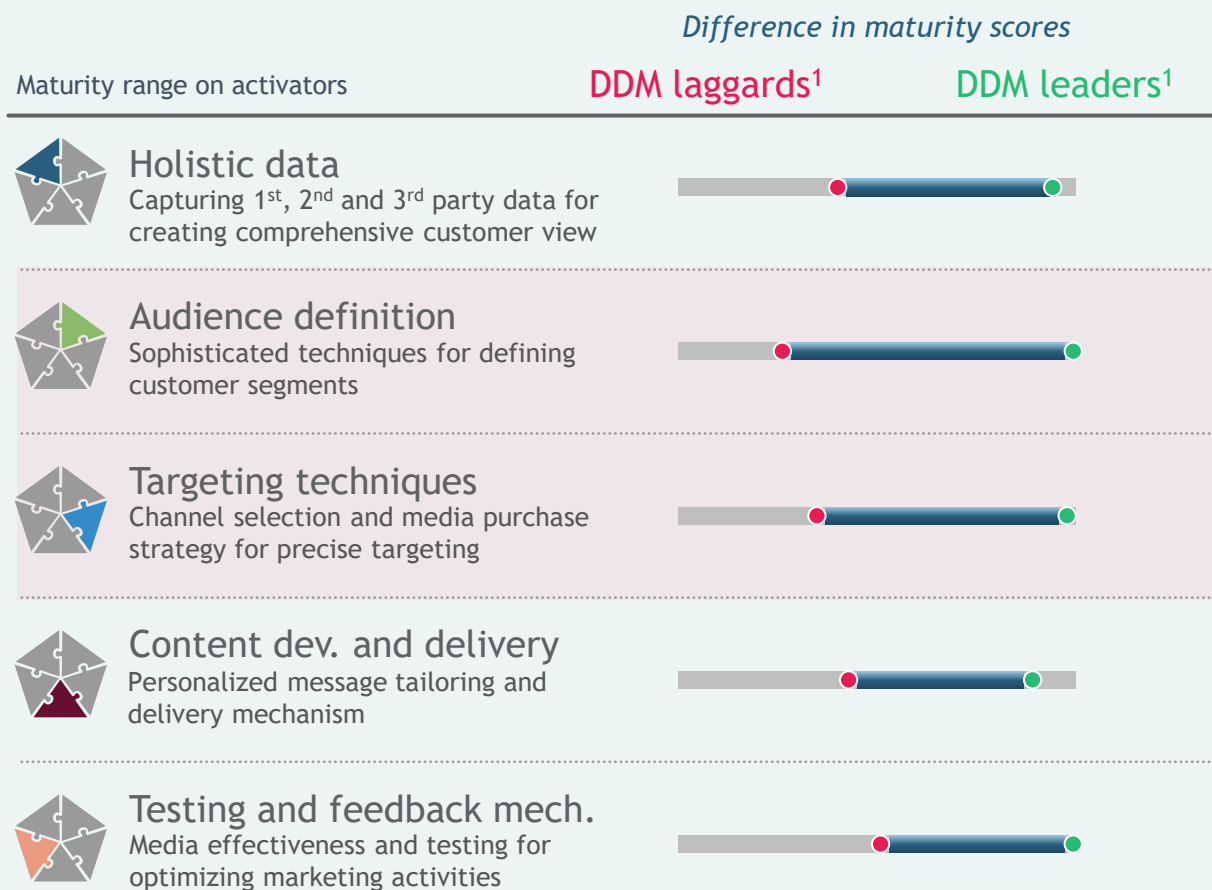


Important to understand what differentiates companies with leading maturities

Source: SHoP DLCE Maturity Assessment Survey 2021; n=113



Most firms establish **good data collection & feedback mechanisms**, but leaders truly unlock **data-led opportunities** (e.g., personalization)



1. Laggards and leaders - Responses with dimension score falling below 10<sup>th</sup> and 90<sup>th</sup> percentile respectively  
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113; BCG Analysis

**94%** companies enrich in-house customer data using external data

and **>80%** use channel effectiveness reports as a feedback mechanism regularly in media buying decisions

But only...

**25%** companies buy media programmatically across all channels

while **~20%** companies personalize both channel and timing of communication

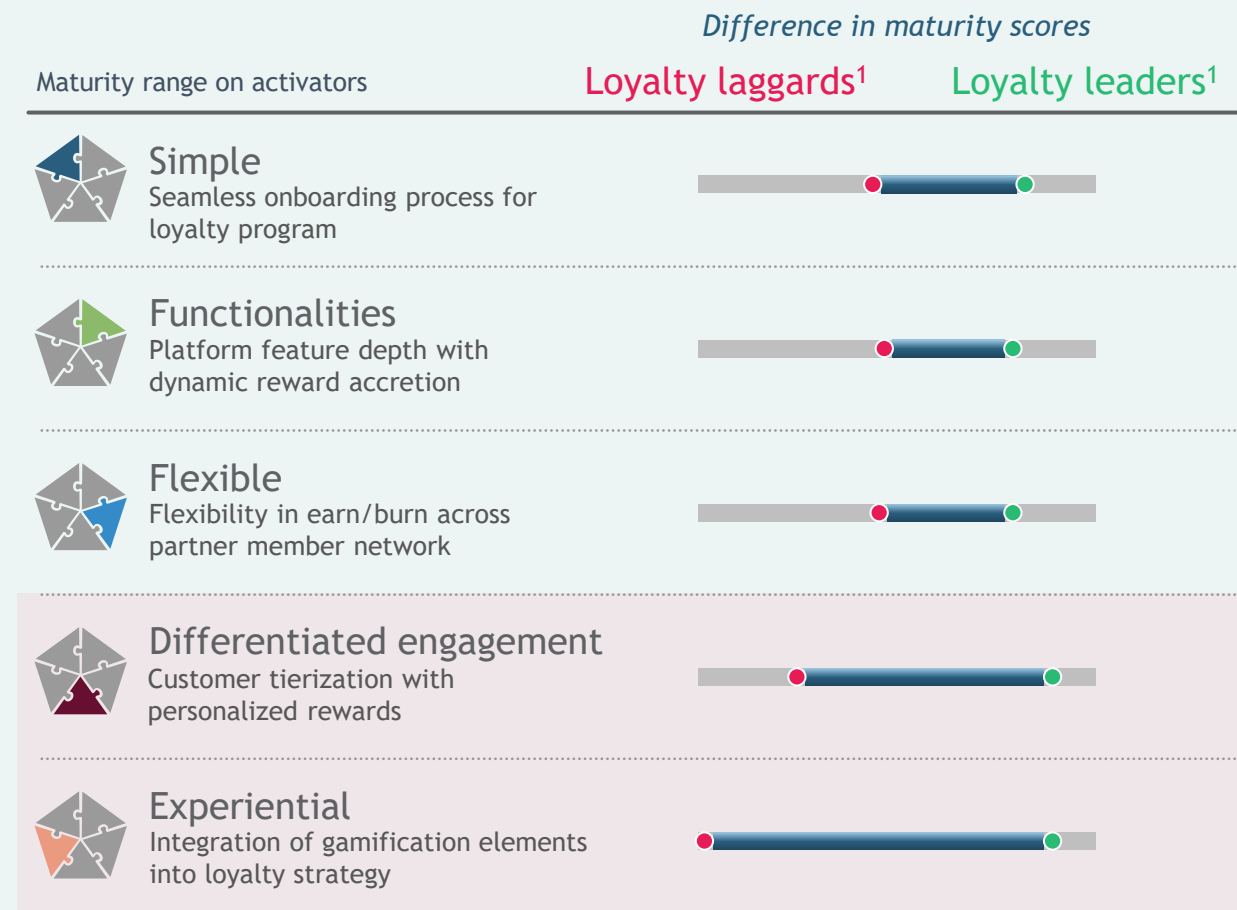
"Decisions for where the dollars go are not **analytically driven**"

- CMO, mid-sized Retail firm, NAMR





**Loyalty is a stage wise journey for the companies - what differentiates the leading programs are elements that build aspiration for customers**



1. Laggards and leaders - Responses with dimension score falling below 10<sup>th</sup> and 90<sup>th</sup> percentile respectively  
Source: SHoP DLCE Maturity Assessment Survey 2021; n= 101 (companies with a loyalty program); BCG Analysis

~**95%** of companies use a multi-channel onboarding approach

with **60%** employing a process which can enroll customers within 5 mins

But only...

**10%** adopt gamification as a core element of their loyalty programs

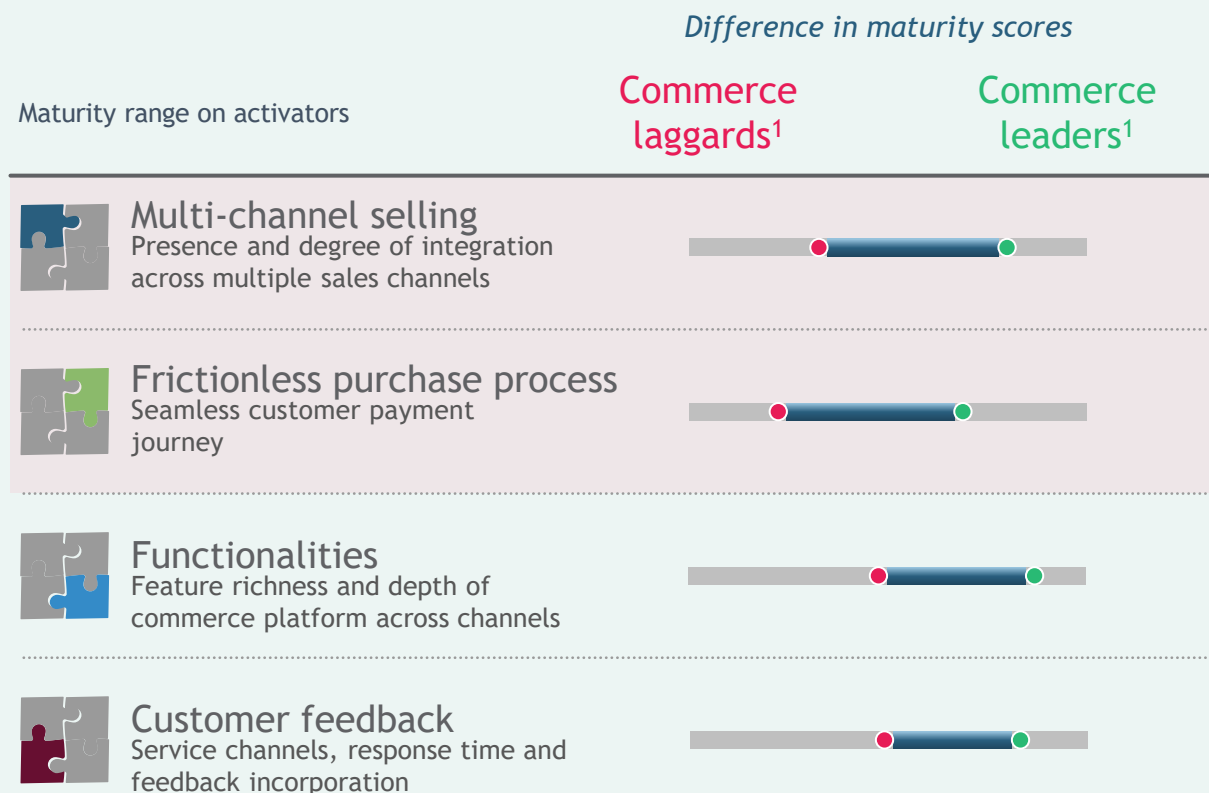
and only ~**12%** dynamically segment customers & map relevant offers

"We would like to **gamify** our apps to keep our members **engaged** and entertained by our services."

- CMO, mid-sized T&L player, India



## Adopting social commerce with a frictionless transaction process is a key characteristic of leading maturity in Commerce



1. Laggards and leaders - Responses with dimension score falling below 10<sup>th</sup> and 90<sup>th</sup> percentile respectively  
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113; BCG Analysis

64% of companies' sales come from conventional channels such as physical store, mobile/web apps, marketplaces

70% collect feedback from customers from more than 1 channel

But only...

<12% sales generated from social commerce channels

<20% of companies operate a process where transactions are completed in <3 steps

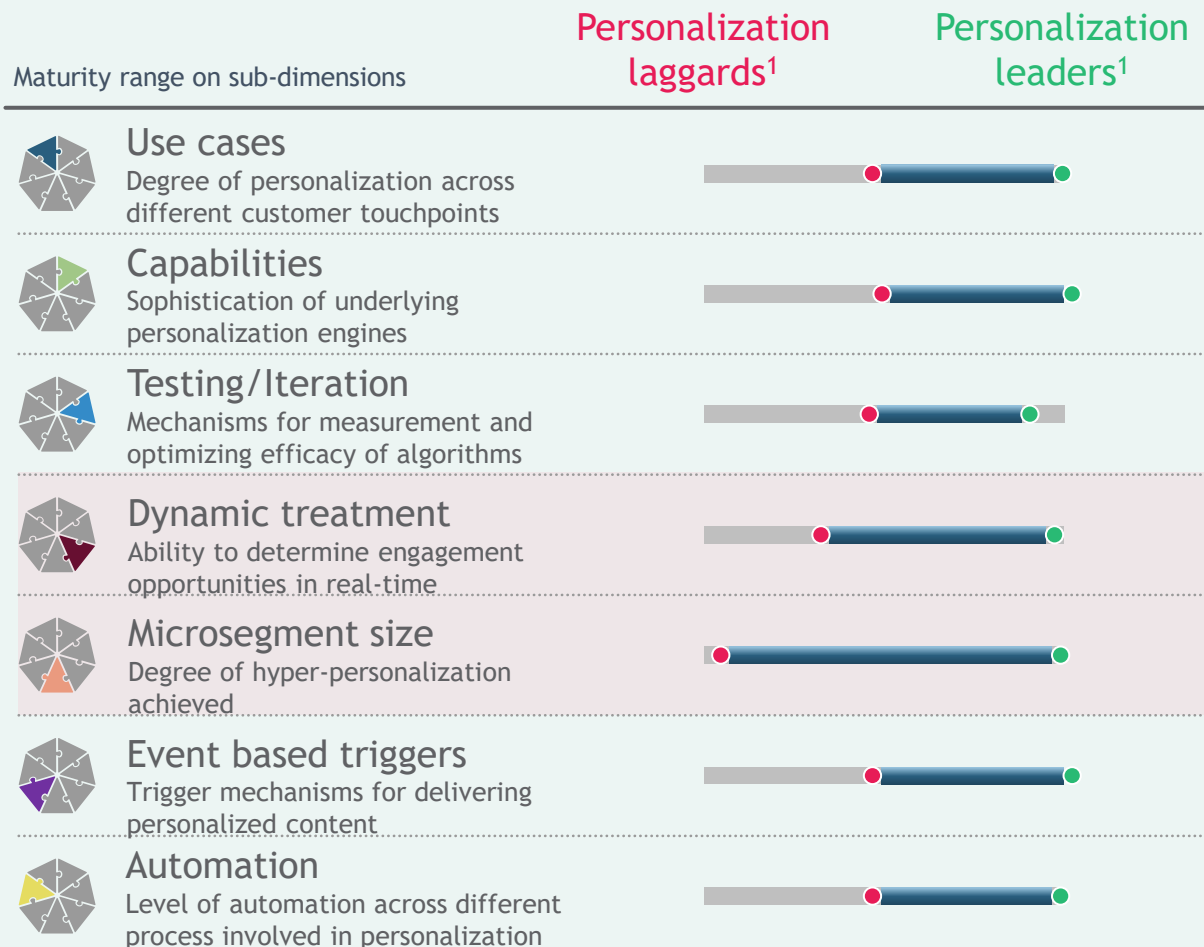
"Consumers expect an easy transaction procedure - we are working hard to move towards a single-click process"

- CMO, mid-sized Telco player, SEA



While basic personalization is employed across use-cases by most companies, leaders automate personalization with AI/ML e.g., **dynamic micro-segmentation**

*Difference in maturity scores*



1. Laggards and leaders - Responses with dimension score falling below 10<sup>th</sup> and 90<sup>th</sup> percentile respectively  
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113; BCG Analysis

>80% companies send out personalized communication with product/offer recommendations

But only...

14% able to achieve micro segmentation of customers

with ~20% using real time data

while only 37% employ deep learning and AI-based models in the backend

"We face problems in need-based customer segregation and creating personalized messages that stimulate action."

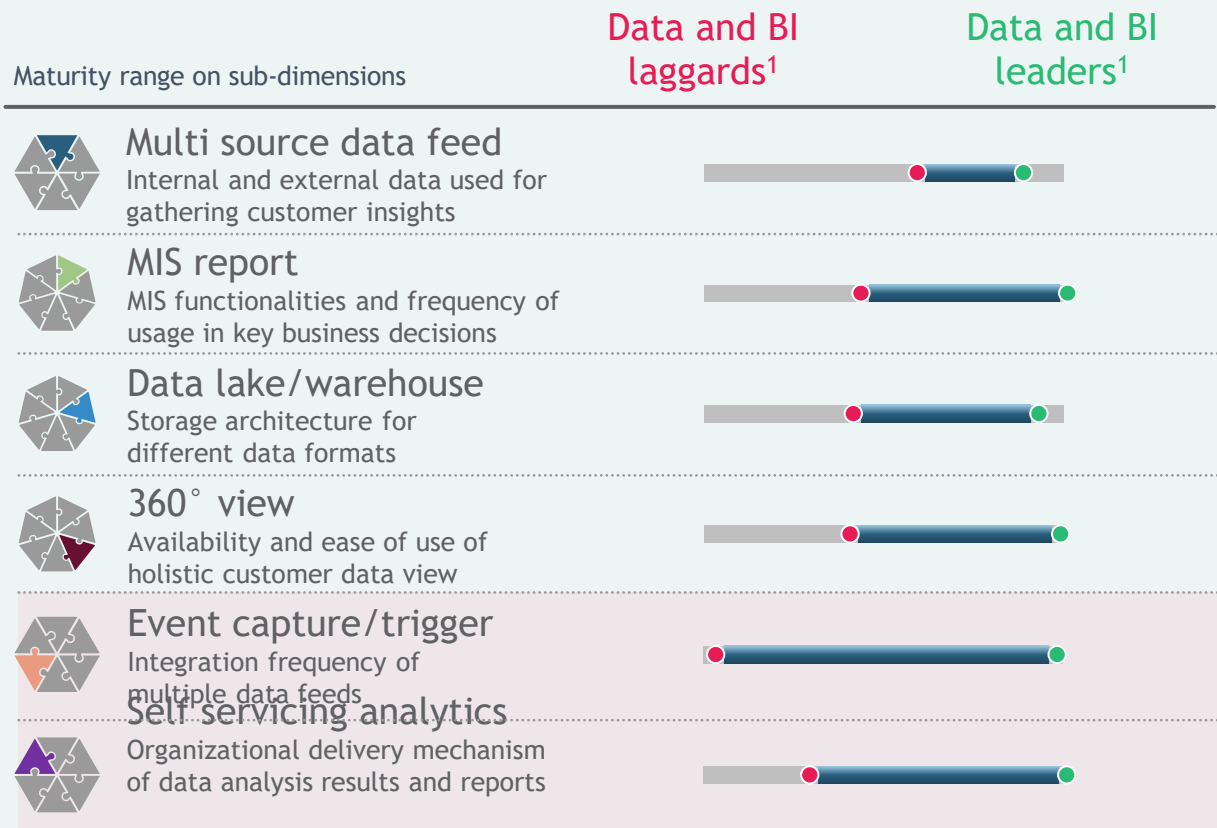
- CDO-1, large T&L player, GRC





While most firms tap into multiple data sources, leaders enable **high-frequency integration and analysis** which drives key business decisions

*Difference in maturity scores*



1. Laggards and leaders - Responses with dimension score falling below 10<sup>th</sup> and 90<sup>th</sup> percentile respectively  
Source: SHoP DLCE Maturity Assessment Survey 2021; n=113; BCG Analysis

**88%** of companies use at least 2 data feeds each from internal and external sources

with **~50%** collecting both structured and unstructured data

But only...

**20%** of firms carry out data integration on a daily basis

and just **40%** have integrated analytics teams across functions

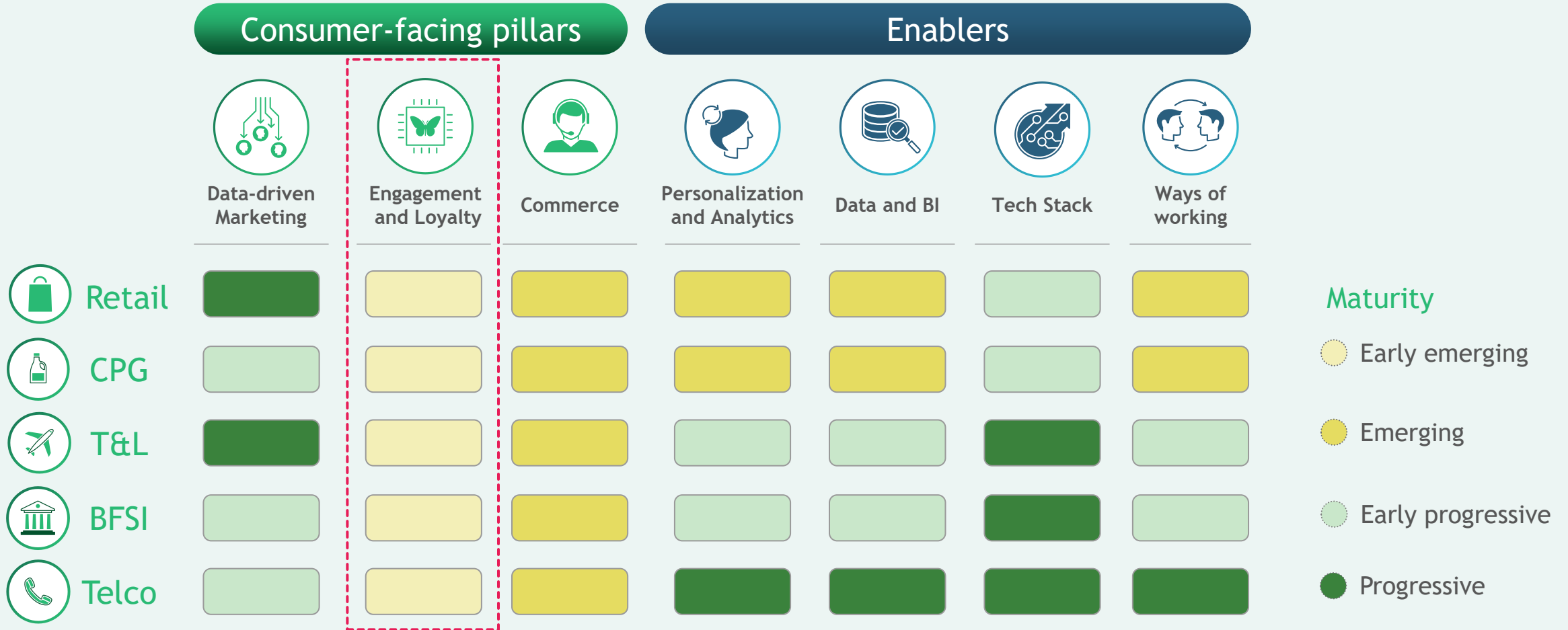
"We have a lot of data points **fragmented across tables**, but no clear customer data strategy or a **Data Science** team in place"

- CDO, small Retail player, SEA



# Deep Dive - Loyalty

Across industries, Loyalty is relatively the least evolved dimension



Loyalty is a key opportunity for CMOs to unlock given low maturity today vis-à-vis other dimensions

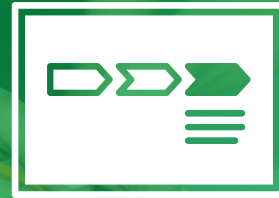
*This whitepaper further examines Loyalty in depth*



# 3 pressing questions before CMOs to unlock loyalty opportunity



What does a successful loyalty program look like?



What is the roadmap to setup/level-up loyalty at my company?



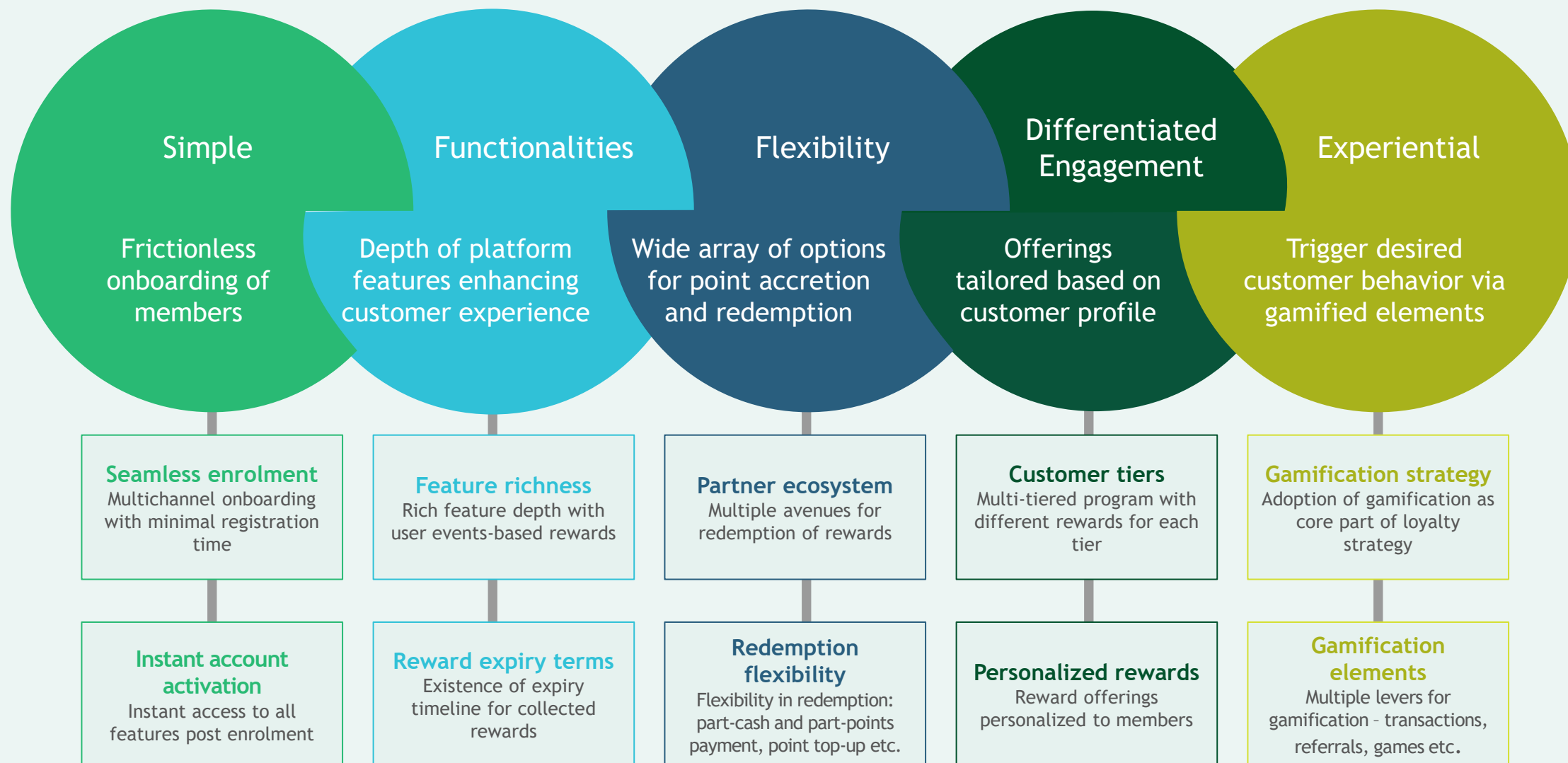
How to measure the financial impact it delivers?



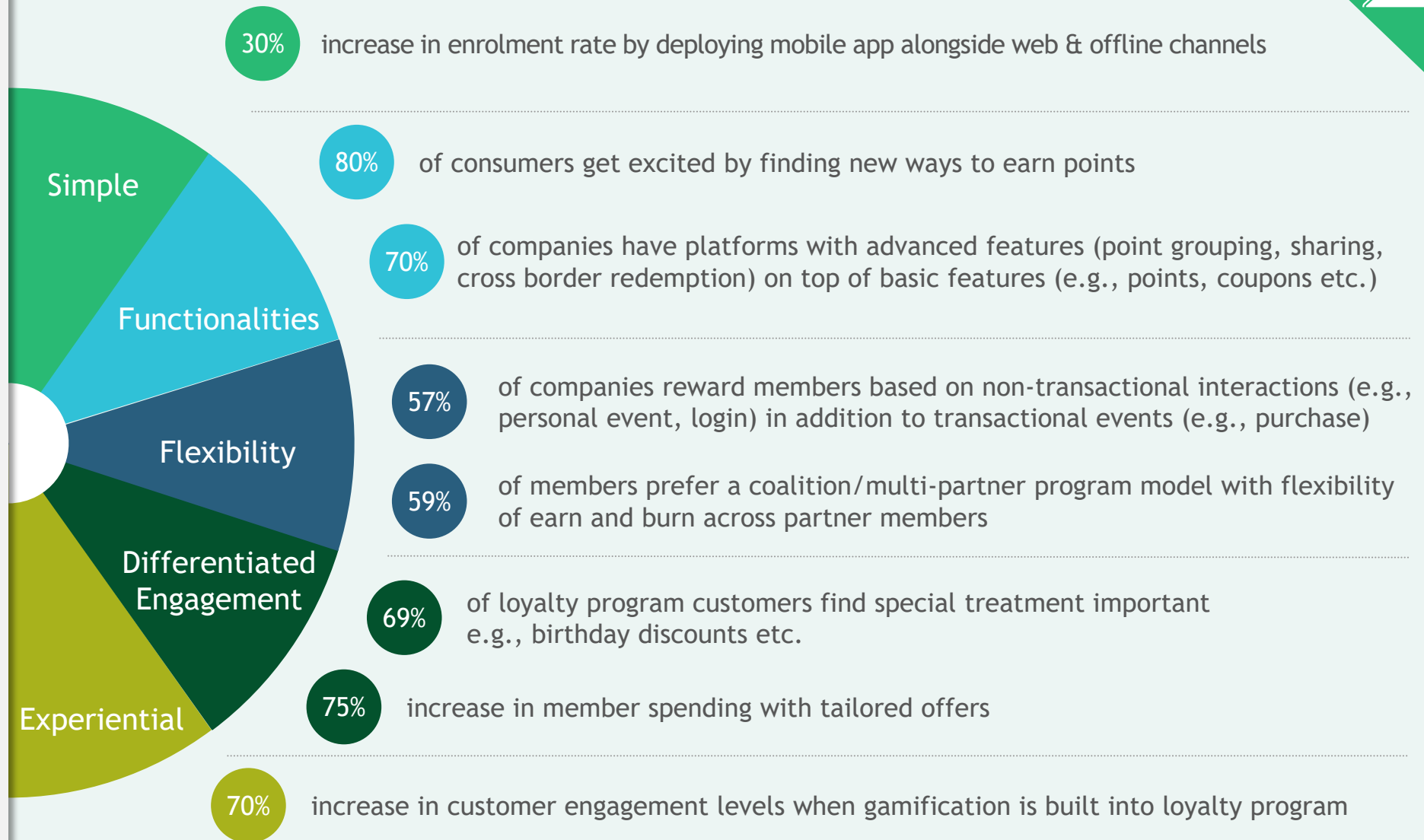


# What does a successful loyalty program look like?

Successful loyalty programs pull levers across five dimensions ...

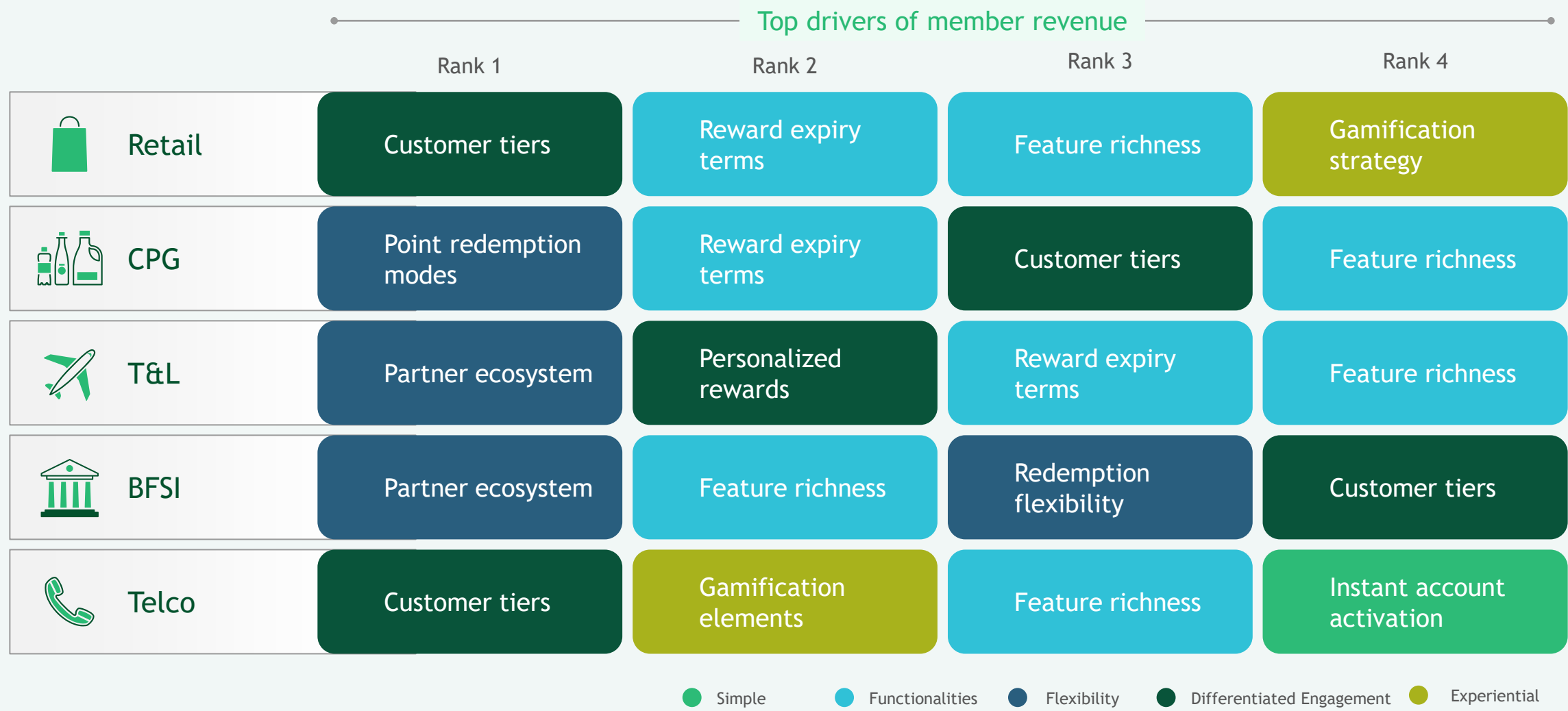


...to drive  
customer  
delight and  
tangible  
impact





# Key factors influencing loyalty-driven revenue vary across industries - CMOs need to adopt a tailored approach while creating loyalty program roadmaps

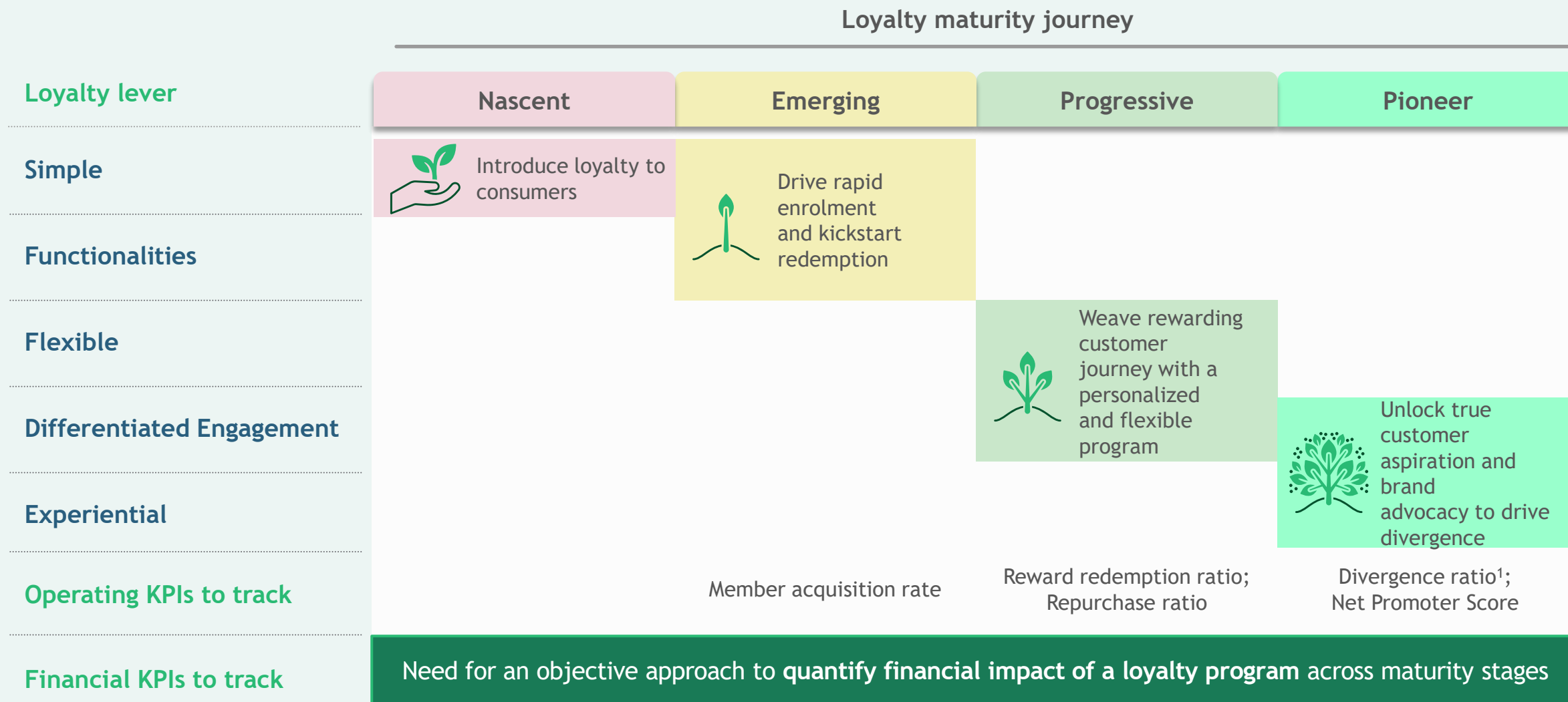


Source: Source: SHoP DLCE Maturity Assessment Survey 2021; n= 101 (companies with a loyalty program); BCG Analysis



# What is the roadmap to setup a loyalty program?

Advancing loyalty maturity is a stage-wise journey requiring intervention at each step



1. Divergence ratio - Factor by which sales multiply for a group of redeemers when compared to a similar non-redeemer set observed over a time period



# How to determine the financial impact delivered by a loyalty program?

Introducing a unique LDS  
approach



## Scientific method to measure true Loyalty Delivered Sales (LDS)



## Study based LDS benchmarks for 7 different elements of loyalty programs



# Scientific method for measuring true loyalty delivered sales

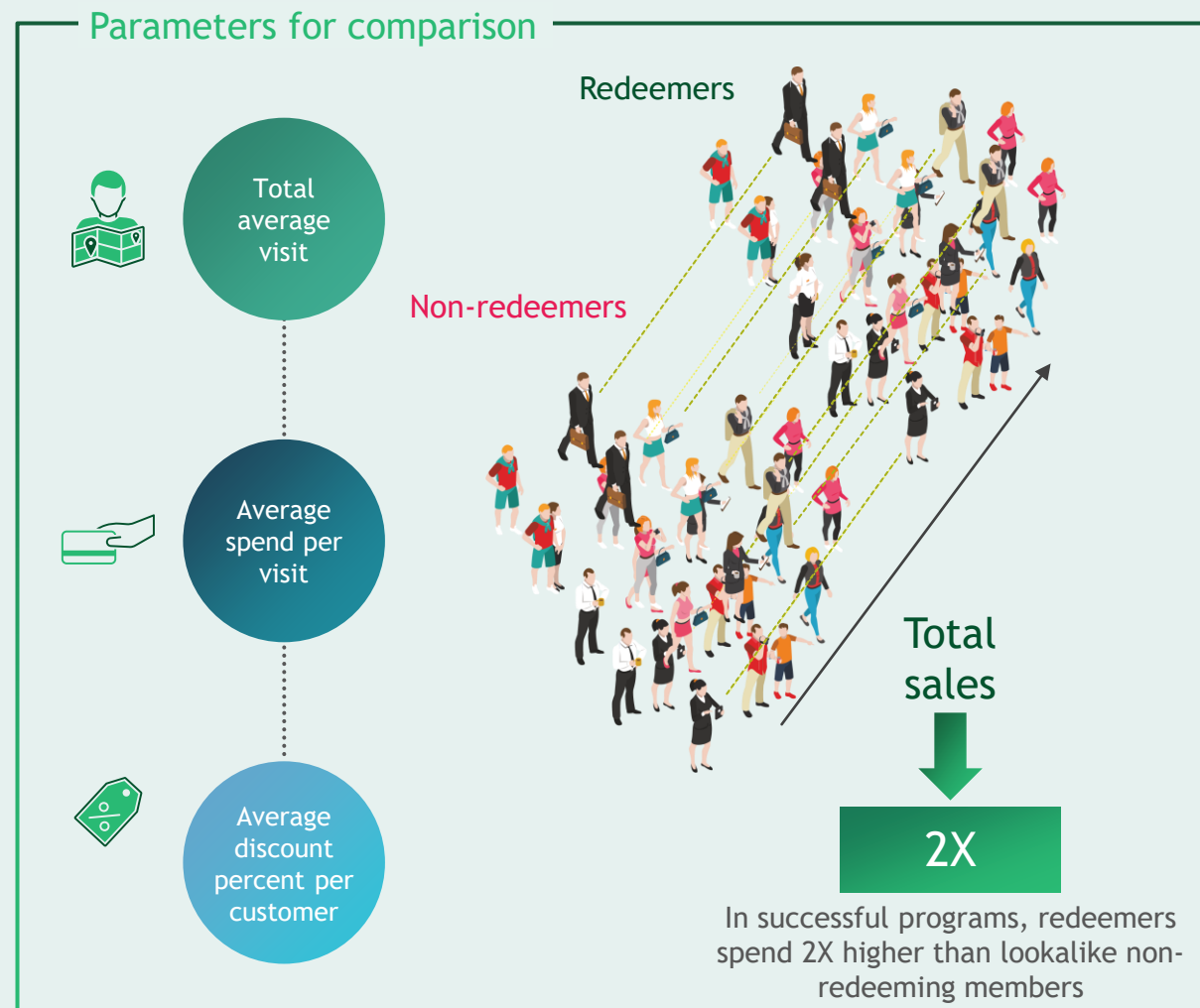
Robust approach designed through an in-depth study of 100+ programs from 5 industries and 20+ countries

## A multivariate statistical method baselines customer behavior

Two statistically similar groups of **redeemers** and **lookalike non-redeemers** (customers who are yet to make their first redemption) were identified from loyalty programs based on similarity of behavioral and purchase patterns.

This was achieved by using *k-nearest neighbor* supervised ML algorithm.

**Loyalty Delivered Sales (LDS)** is the difference in sales between the two groups. When measured as a % of total sales (LDS%), it quantifies the financial impact of loyalty program





# LDS benchmarks for different elements of program established through extensive studies

Elements of Loyalty Programs			LDS% Benchmark
	Base Loyalty	Single-tier program with basic earn burn	1-2%
	Personalized Loyalty	Engaging customers with personalized campaigns and offers	0.5-3%
	Tier Loyalty	Differential benefits based on customer spend capacity	0.5-1%
	Social Loyalty	Listening to customers on social media and engaging with them	0.5-3%
	Digital Loyalty	Creating Omni-Channel experiences for the customers	1-4%
	Dynamic Loyalty	DVS vouchers and lifecycles	1-4%
	Partner Loyalty	Coalition and partner programs	1-3%

Loyalty Conversion

Generosity

Promotion%

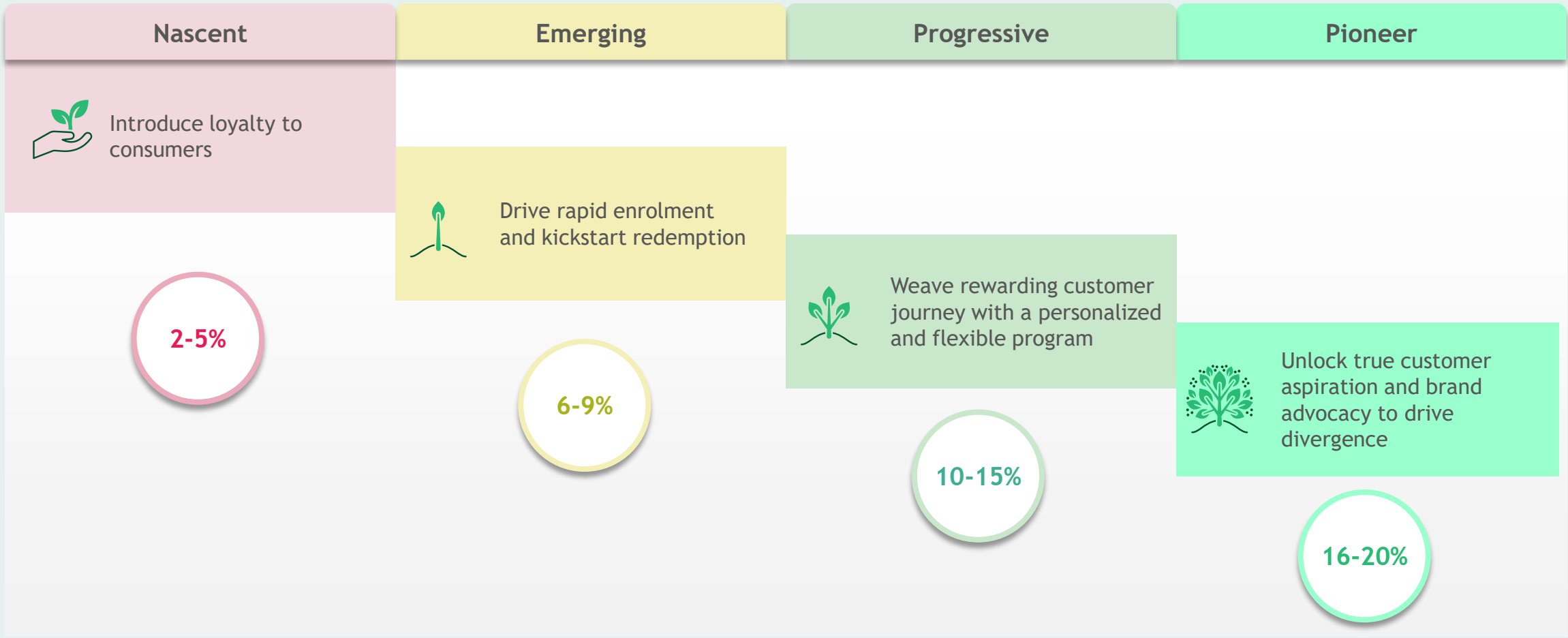
People

Budget



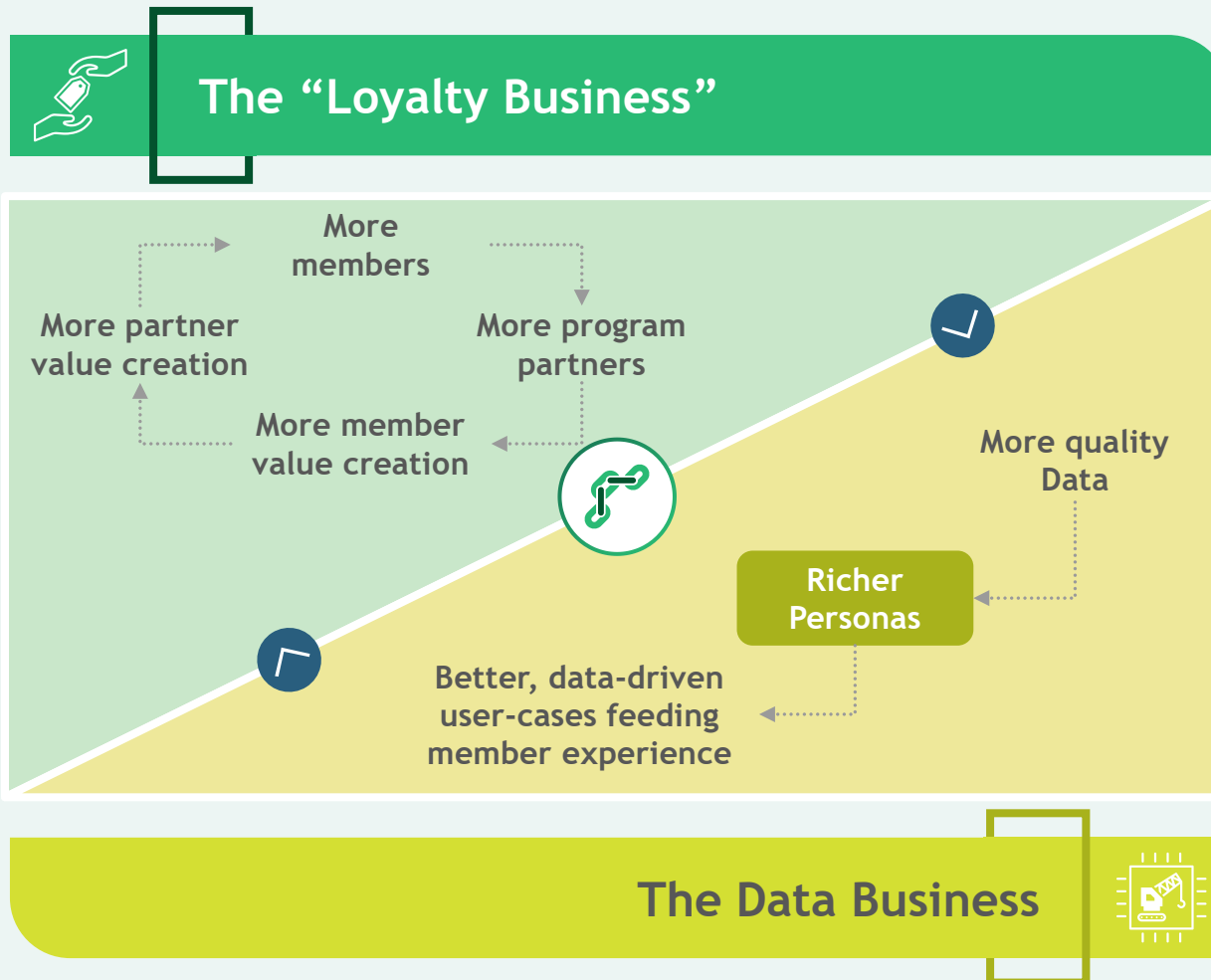
# 2-20% topline potential for organizations by advancing loyalty maturity

Driven by customer behavioral and transactional divergence

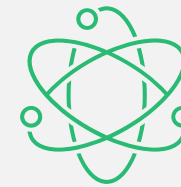




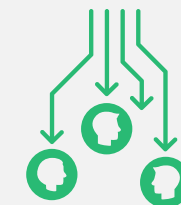
Loyalty is not just about rewarding customers, it's a strategic imperative for any data-oriented company



Truly identify high potential customers that need to be nurtured



Up-to-date personas basis consumer behavior can enable real-time intervention and personalization



Additional data can act as fuel for creating new use-cases or go-to-market initiatives

# 5. SUMMARY



Significant top line potential for leaders in driving **Data Led Customer Engagement (DLCE)**. Advancing maturity will typically lead to **15%+ topline impact** for consumer facing companies.



Most companies have started their DLCE maturity journey. However, **>50% companies** stuck in **Emerging** maturity tier with only **2% Pioneers**



**Telco** is most advanced on DLCE maturity with **~70% companies Progressive and above**. **Retail** and **CPG** showcase wide variation driven by the size of the company.



Out of the SHoP dimensions, **Data-driven Marketing** emerges as the most evolved dimension - loyalty relatively the least evolved for companies



**While 90%** of firms have already adopted loyalty programs, majority still in early maturity stages with **~80% in either Nascent or Emerging**



**Driving success in Loyalty** requires a **stage wise approach** for companies - and each stage targets different levers and drives different KPIs for the business



Done right, **customer behavioral and transactional divergence** driven by loyalty programs can result in a **topline potential of up to 20%**



## FOR FURTHER READING

Boston Consulting Group publishes reports, articles and books on related topics that may be of interest to senior executives. Recent examples include those listed here.

### **The Next Level of Personalization in Retail**

A report by Boston Consulting Group in association with Google, June 2019

### **Mastering Digital Marketing Maturity**

A report by Boston Consulting Group in association with Google, Feb 2018

Capillary Technologies publishes guides, reports on the latest insights on customer loyalty and engagement. Recent examples include those listed here.

### **Customer loyalty 2020 and beyond**

A whitepaper by Capillary Technologies, Jun 2020

### **Acing the CEM experiment**

A handbook on 40 Customer Engagement Management (CEM) learnings from leading brands by Capillary Technologies, Dec 2018

## NOTE TO THE READERS

### ABOUT THE AUTHORS

**Shiv Choudhury** is a Managing Director and Partner in the Singapore office of the Boston Consulting Group. **Vikash Jain** is a Managing Director and Partner in the New Delhi office of the Boston Consulting Group. **Shaleen Sinha** is the Director, India Growth Tech, based out of the Mumbai office of the Boston Consulting Group.

**Aneesh Reddy** is the Co-founder and Chief Executive Officer at Capillary Technologies.

### FOR FURTHER DETAILS, CONTACT



**Shiv Choudhury**

Managing Director and Partner  
BCG  
choudhury.shiv@bcg.com



**Aneesh Reddy**

Co-founder and CEO  
Capillary Technologies  
aneesh@capillarytech.com



**Vikash Jain**

Managing Director and Partner  
BCG  
jain.vikash@bcg.com



**Shaleen Sinha**

Director - India Growth Tech  
BCG  
sinha.shaleen@bcg.com

### ACKNOWLEDGEMENTS

This study was undertaken by Boston Consulting Group (BCG) in collaboration with Capillary Technologies.

We would like to thank **JungKiu Choi**, MD and Partner, BCG Singapore; **Sandeep Bhalla**, Senior Advisor, BCG Singapore; and **Santosh Reddy**, VP Marketing and Sales, Capillary Technologies for their support and guidance while developing this report.

We would also like to thank **Abhinav Duggal**, **Arnab Banerjee**, **Ujwal Kalra**, **Naveen Chakravarthy** and **Pranay Boobna** for their assistance in writing this report.

We are thankful to **Vanita Vasudevan**, **Gitanjali Mittal**, **Maha Dhurairaj**, **Micky Chittora** and **Yan Yu Chua** for managing the marketing process as well as **Saroj Singh** and **Abbasali Asamdi** for their contribution to the editing, design and production of this report

**If you are interested in finding out  
your organization's DLCE maturity,  
reach out to**

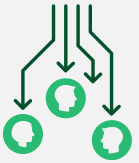
[dlce@capillarytech.com](mailto:dlce@capillarytech.com)



The background of the slide is a dark green to black gradient, overlaid with a complex, glowing network of white and light green lines and dots, resembling a molecular or digital structure.

# Appendix

SHoP dimensions and activators

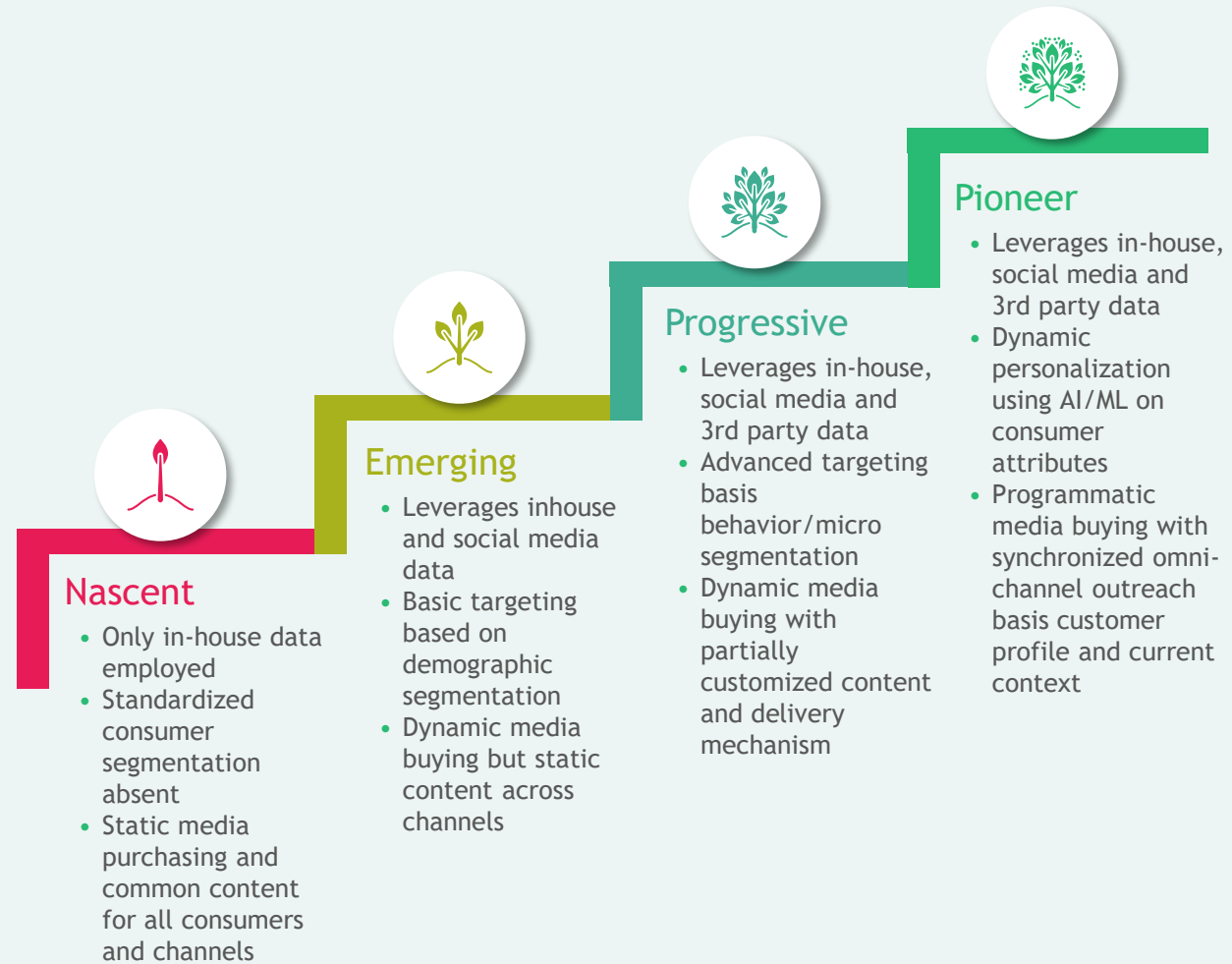


# Data-driven Marketing

Optimizing brand communication using insights on customer's motivations, preferences and behavior

## Activators

- 1 **Holistic data** - Capturing 1st, 2nd and 3rd party data for creating comprehensive customer view
- 2 **Audience definition** - Sophisticated techniques for defining customer segments
- 3 **Targeting techniques** - Channel selection and media purchase strategy for precise targeting
- 4 **Content dev. and delivery** - Personalized message tailoring and delivery mechanism
- 5 **Testing and feedback mechanisms** - Media effectiveness and testing procedures for optimizing marketing activities





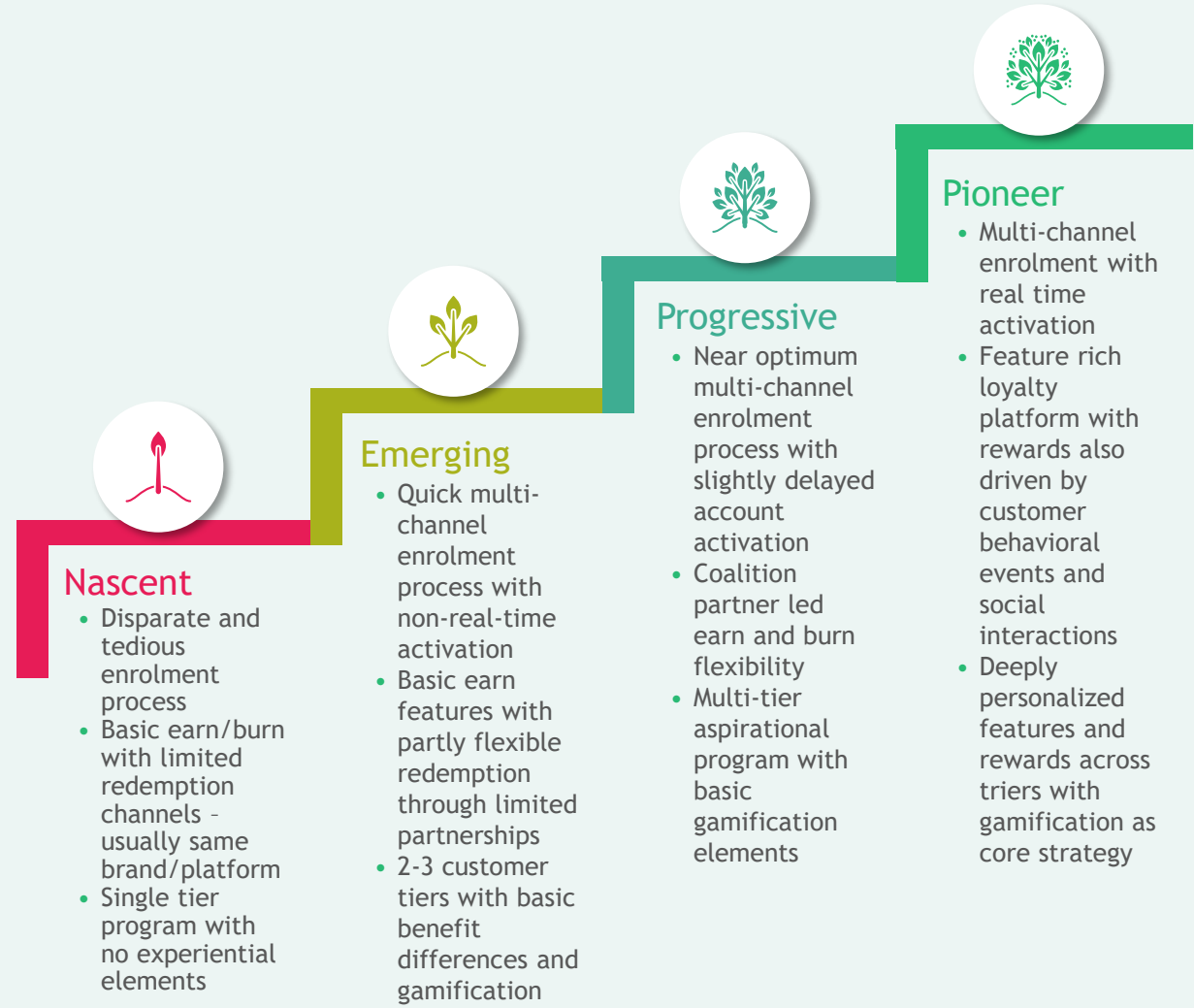


# Engagement and Loyalty

Boosting customer retention and aspiration through well-designed loyalty programs

## Activators

- 1 **Simple** - Seamless onboarding process for loyalty program
- 2 **Functionalities** - Platform feature depth with dynamic reward accretion
- 3 **Flexible** - Flexibility in earn/burn across partner member network
- 4 **Differentiated engagement** - Customer tierization with personalized rewards
- 5 **Experiential** - Integration of gamification elements into loyalty strategy



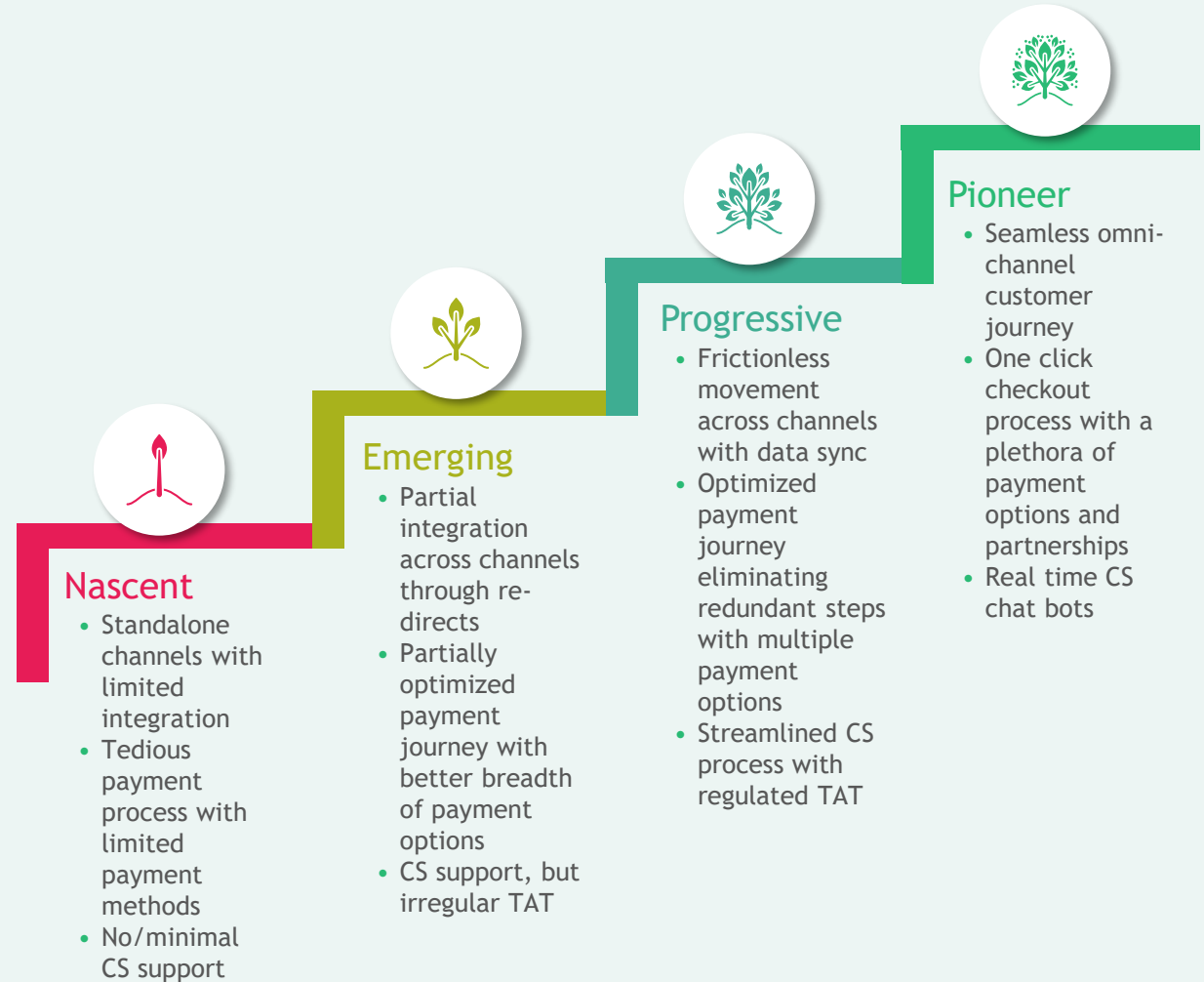


# Commerce

Enabling a seamless cross-channel purchase journey through an enhanced commerce stack

## Activators

- 1 **Multi-channel selling** - Presence and degree of integration across multiple sales channels
- 2 **Frictionless purchase process** - Seamless customer payment journey
- 3 **Functionalities** - Feature richness & depth of commerce platform across channels
- 4 **Customer feedback** - Service channels, response time & feedback incorporation



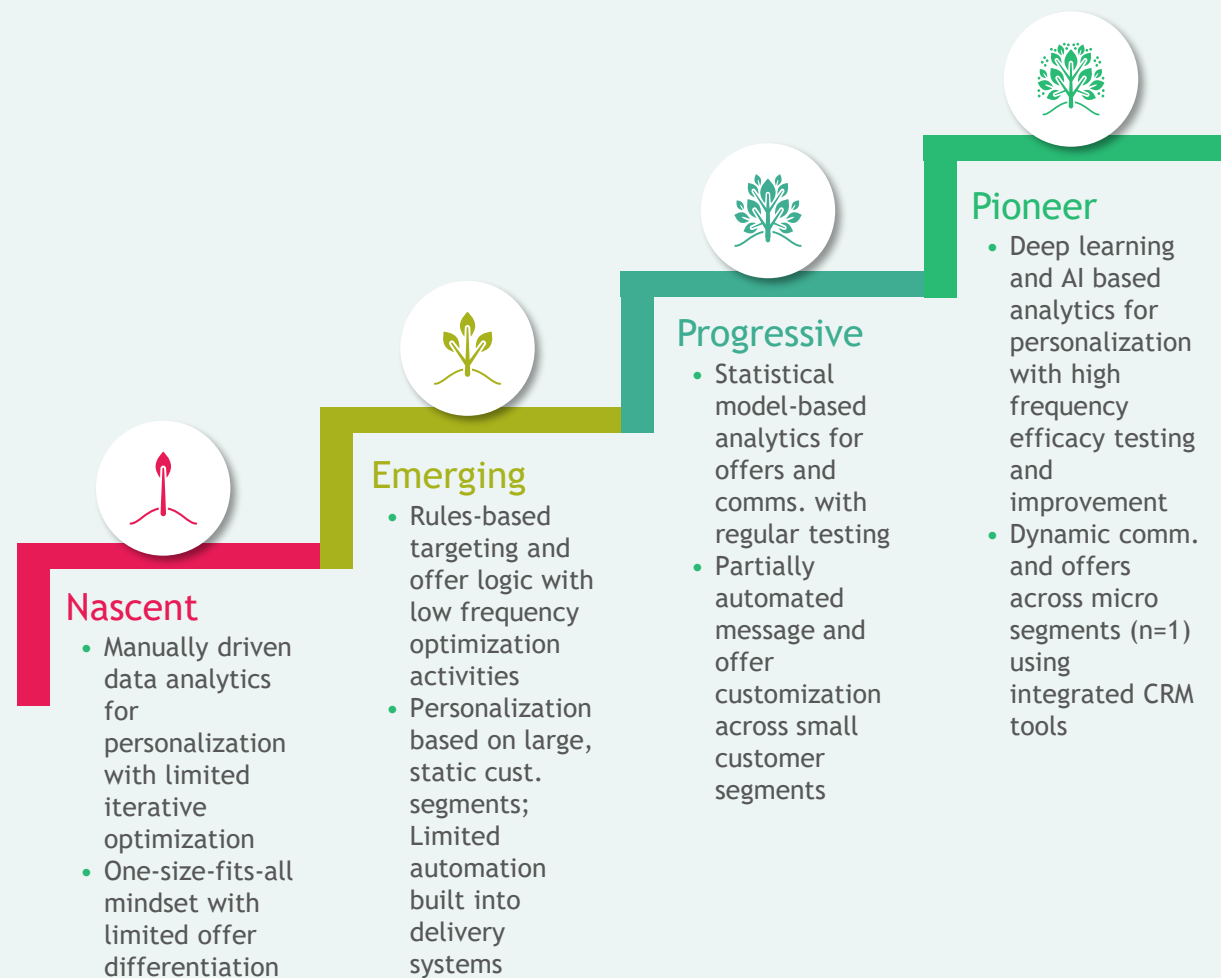


# Personalization and Analytics

Delivering the right experience to the right customer at the right time

## Activators

- 1 **Use cases** - Degree of personalization across different customer touchpoints
- 2 **Capabilities** - Sophistication of underlying personalization engines
- 3 **Test/Iterate** - Mechanisms for measurement and optimizing efficacy of algorithms
- 4 **Dynamic treatment** - Ability to determine engagement opportunities in real-time
- 5 **Micro segment size** - Degree of hyper-personalization achieved
- 6 **Event based trigger** - Trigger mechanisms for delivering personalized content
- 7 **Level of automation** - Level of automation across different process involved in personalization









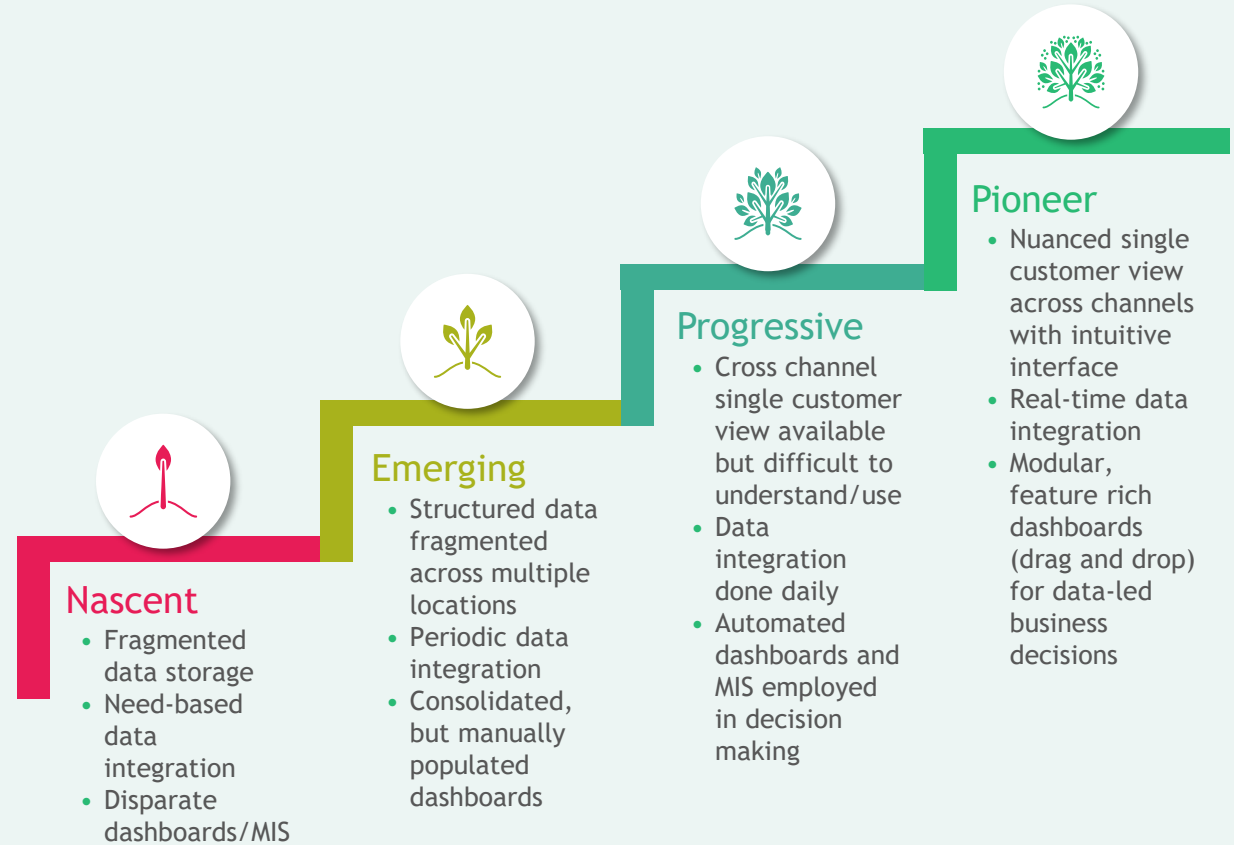


# Data and BI

Capturing and analyzing relevant customer data to unearth customer engagement opportunities

## Activators

- 1 Multi source data feeds** - Internal and external data used for gathering customer insights 
- 2 MIS report** - MIS functionalities and frequency of usage in key business decisions 
- 3 Data lake/warehouse** - Storage architecture for different data formats 
- 4 Single 360 view** - Availability and ease of use of holistic customer data view 
- 5 Event capture/trigger** - Integration frequency of multiple data feeds 
- 6 Self service analytics** - Organizational delivery mechanism of data analysis and reports 



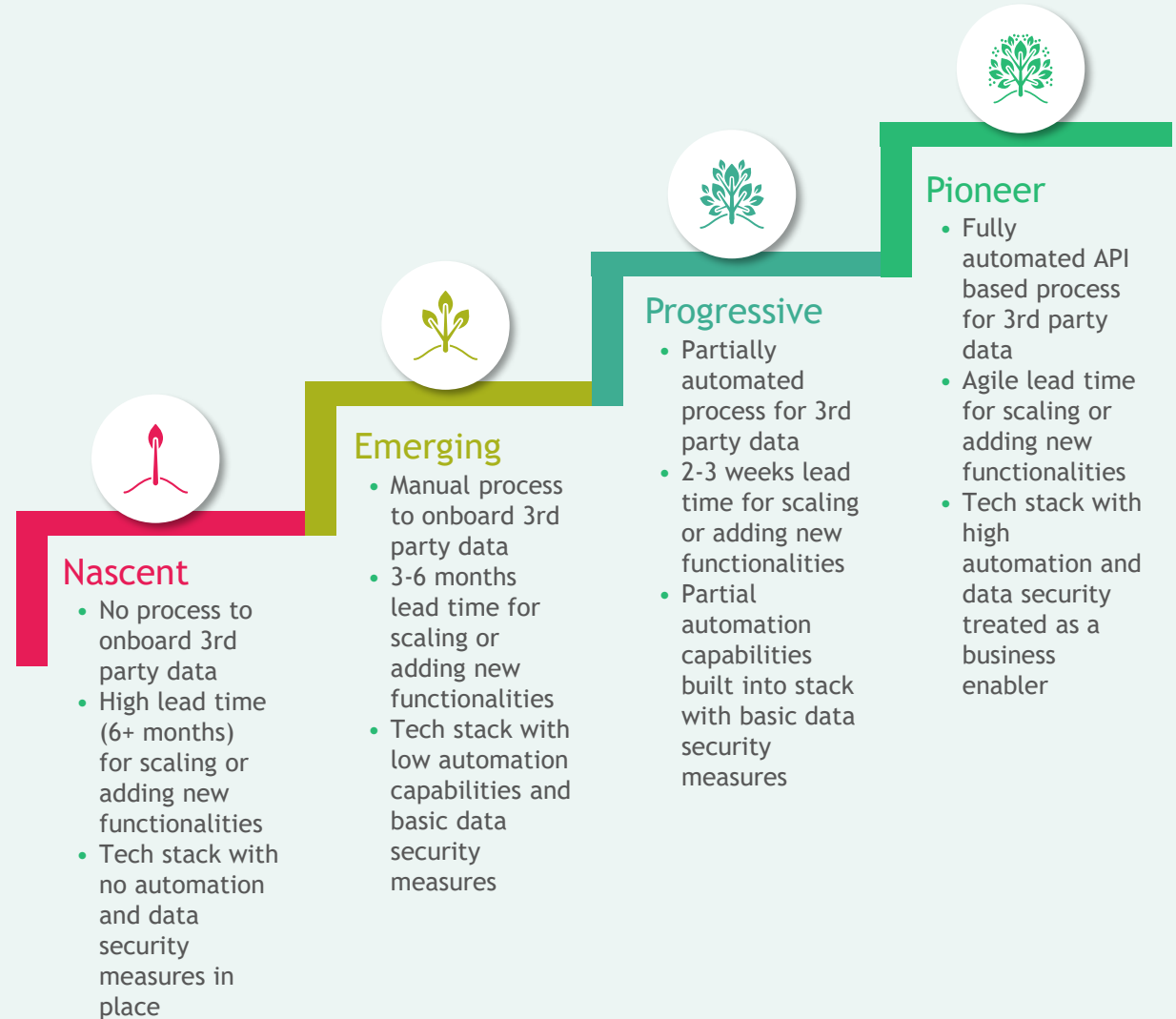


# Tech Stack

Robust underlying technology for supporting advanced digital engagement initiatives

## Activators

- 1 **Open architecture** - Architecture of tech stack driving capabilities such as flexibility, scalability etc.
- 2 **Automation tools** - Degree of automation built into tech stack
- 3 **Customization** - Adoption of technology customized for nuanced business requirements
- 4 **Security** - Data management practices and security measures in places





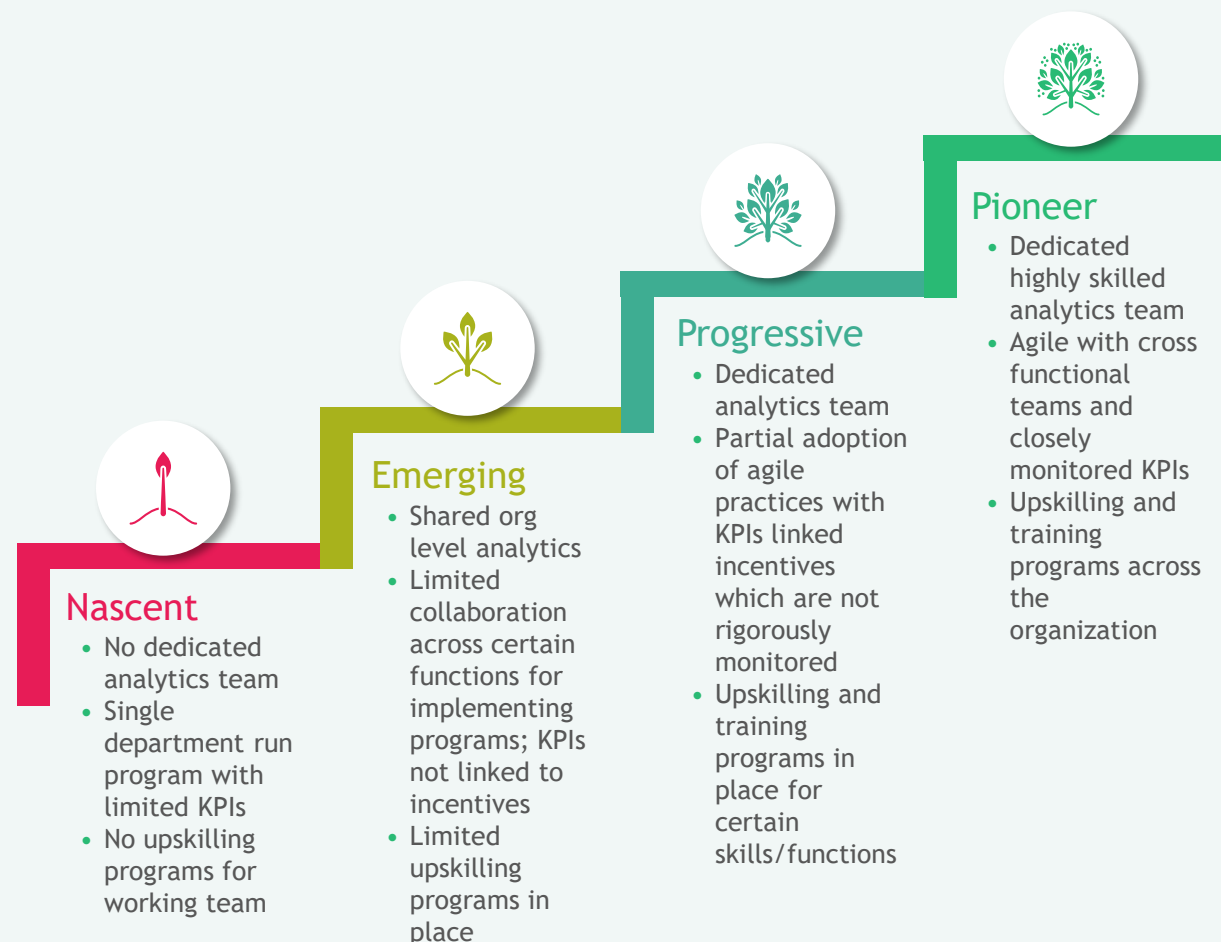


# Ways of working

Organizational practices determining overall engagement strategy and successful implementation

## Activators

- 1 **Org structure** - Distribution of key talent across functions
- 2 **Cross-functional** - Level of collaboration across different org. units
- 3 **Agile and flexible** - Degree of adoption of agile practices
- 4 **Training and certification** - Upskilling programs and practices in place
- 5 **Governance and control** - Involvement of leadership in key business decisions
- 6 **Turnaround Time** - Average time required for launching key initiatives
- 7 **Data in decision-making** - Degree of data usage in aiding business decisions



© Boston Consulting Group, Inc. 2021. All rights reserved.

© Capillary Technologies. 2021. All rights reserved.

This document has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Neither party guarantees or warrants the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose. Readers are responsible for assessing the relevance and accuracy of the content of this publication. While this report talks of various companies and industries, neither BCG or Capillary Technologies will be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this publication. This report is based on a primary qualitative and quantitative research executed by BCG. Insights from the primary research have then been combined with BCG's and Capillary Technologies' industry intelligence. Unless otherwise specified, neither party takes any responsibility of the data cited in the report. This report does not purport to represent the views of the companies mentioned in the report. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the BCG, Capillary Technologies or any agency thereof or its contractors or subcontractors.

Apart from any use as permitted under the Copyright Act 1957, no part may be reproduced in any form without written permission from BCG and Capillary Technologies.

The subject matter in this report may have been revisited or may have been wholly or partially superseded in subsequent work funded by either parties.

For information or permission to reprint, please contact BCG at:

E-mail: [bcg-info@bcg.com](mailto:bcg-info@bcg.com)

Fax: +91 22 6749 7001, attention BCG/Permissions

Mail: BCG / Permissions Boston Consulting Group (India) Private Limited.

Nariman Bhavan, 14th Floor

227, Nariman Point

Mumbai 400 021

India

To find the latest BCG content and register to receive e-alerts on this topic or others, please visit [bcg.com](http://bcg.com).

Follow Boston Consulting Group on Facebook and Twitter.



BCG



capillary