中国数字经济互联网之中国特色发展模式

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寄语

丁杰
贝恩公司资深全球合伙人

以阿里巴巴、百度为代表的中国特色的平台发展模式凭借“高效的供需资源聚合”、“流动的数据价值”、“本土化创新驱动的技术赋能”和“全价值链的深度运营赋能”四大特点，正在赋能企业致胜数字经济时代。这种独特模式植根于中国消费者、企业方、平台方及政府的积极推动。然而“天下大事必作于细”，平台发展模式繁荣的同时亦带来不容忽视的风险。中国政府近期推出的反垄断政策有助于防范风险、促进平台模式的可持续发展。”

李舒
贝恩公司全球合伙人、大中华区TMT业务联席主席

为了最大化发挥中国特色平台商业模式的独特优势，实现事半功倍的效果，本次白皮书中提出“善借外力”、“双管齐下”、“自建平台”三类参与方式，企业可以结合自身特点和数字化转型的整体规划进行差异化选择。此外，围绕组织、运营机制、人才和数据，调整运营模式，践行“四种应对之道”。展望未来，我们相信，企业方和平台方在政府指引和大力支持下，将会不断加强自我约束，互利共赢，以促进线上经济进一步健康规范发展。

张青春
阿里研究院 数字商业研究中心 主任 新商业学堂 项目主任

2020年新冠疫情爆发以来，中国在控制疫情方面成绩斐然，在消费和经济复苏方面也走在了全球主要经济体前列。成绩的背后，一方面是中国政府日益完善的社会治理和防控体系，另一方面得益于中国企业界强大的数字化生存和数字化发展能力。

本次研究，项目组研究了业绩表现优异的企业，希望发掘背后的“增长密码”。研究发现，中国特色的“平台商业模式”正在发挥不可忽视的作用。优秀的企业往往善于利用平台思维、借助平台的资源和工具，快速提升自身的管理运营能力和业务拓展能力。本报告完整地阐述了中国平台商业模式的Why、What和How，有助于我们更好地理解中国数字商业的特点和发展逻辑。”

温昕煜
百度发展研究中心高级研究员

2020年新冠肺炎疫情肆虐，中国成为全球唯一实现经济正增长的主要经济体。这其中，数字化发展是重要推动因素之一，数字产业化和产业数字化两个进程相互促进。报告对汽车、高科技和媒体、消费品、零售、金融等领域的产业数字化领军企业进行深度剖析之后，发现了中国特色平台模式这一成功“秘诀”，并对平台模式特色、背后原因及参与方式进行了分析解读。未来，在产业数字化发展进程中，平台模式提供的领先技术、供需资源、流动数据和运营能力将扮演越来越重要的作用。”

摘要

2008年至今，基于飞速发展的移动互联技术、政府主导的相关投资、消费者积极拥抱数字化的趋势，中国数字化蓬勃发展、欣欣向荣，数字经济规模不断提升。

中国信息通信研究院数据显示，2008年至2019年，中国数字经济平均年复合增长率高达20%。全球范围内，中国数字经济规模处于世界领先地位，2018年我国数字经济规模为31万亿元，位居世界第二。

在新冠疫情影响下，中国数字化进程持续加快。贝恩最新研究表明，疫情加速了中国数字化进程，催生线上购物、在线教育、远程办公等多场景的数字化应用诞生并且广泛普及。

伴随数字化浪潮风起云涌，行业先行企业在中国呈现出哪些领先全球的亮点？这些亮点是如何做到的？背后的根本原因是什么？广大企业应当采取哪些行动和举措，从而把握中国数字化发展机遇，赢得长足发展？

值此转型变革之际，贝恩公司携手阿里研究院、百度发展研究中心，立足贝恩丰富的行业管理咨询经验，结合阿里巴巴以及百度详尽的企业案例库，分析并总结得到，行业先行企业在数字化进程中，呈现出“三大亮点”：“快”、“准”、“新”。

“见微而知著”，我们进一步研究后，发现行业先行企业之所以能迅速进行数字化转型并打造领先于全球的亮点，与中国特色的平台发展模式息息相关：凭借“高效的供需资源聚合”、“流动的数据价值”、“本土化创新驱动的技术赋能”和“全价值链的深度运营赋能”“四大特色”，助力企业赢得数字化先机。

追本溯源，上述平台发展模式何以在中国如此盛行？“滴水穿石，非一日之功”，颇具中国特色的“四大原因”是形成该模式的源动力。首先，政府积极推动新基建、供需侧改革两手抓，奠定基础、指明方向；其次，中国消费者数字化程度全球领先，且对数字使用态度较为包容，提供了海量的数据与应用场景，云集响应、加速推进；第三，目前，企业端面临着高度分散的供需资源以及技术、运营基础薄弱的双重困境，刚需迫切、亟待赋能；最后，一批有能力亦有意愿的平台适时出现，扮演起“赋能者”的角色，突破瓶颈、满足需求。

为了最大化发挥中国特色平台商业模式的独特优势，实现事半功倍的效果，我们认为，企业需结合自身特点和数字化转型的整体规划进行差异化选择。实践中，我们观察到“三类参与方式”：“善借外力”、“双管齐下”、“自建平台”，每类方式都有成功的案例。无论企业选择哪种参与方式，为了更好的进行转型，都应该围绕组织、运营机制、人才和数据，调整运营模式，践行“四种应对之道”。

展望未来，在新的时代背景下，伴随经济开启内循环、“十四五”即将开启序幕的时代背景下，中国特色平台发展模式将创造更大的价值，同时也对各利益相关方提出更高的要求。具体看，政府行动一马当先。十四五规划中，政府提倡重视科技创新，深化需求侧改革，释放消费需求。通过进一步完善政策监管措施，为该模式的健康发展持续提供坚实的基础设施以及充满活力且有秩序的监管体系。

“与时俱进，顺势而为”，我们建议，企业方与平台方应当在政府的引领下，主动接受监督，并以此为契机， 对自身发展提出更高的要求，将更快、更准、更新推到新的高度，实现良性而可持续的发展。

独特亮点：数字化浪潮中，行业先行企业在中国呈现出的“三大亮点”

从“各自为政”到“反哺上游”，从“千人一面”到“多人多面”，从“传统单一”到“多措并举”，本次研究发现，数字经济时代，众多充满活力的企业在数字化转型过程中呈现出“三大亮点”：“快”、“准”、“新”（图1）。

第一点是“快”。目前，数字经济和消费行业深度融合，而数据作为数字经济时代的“新石油”，为企业注入源源不断的发展动能，跑出“新速度”。

以零食行业为例，该行业具有进入壁垒低、同质化严重的特征，此外，行业产业链较长，面临供应链整合的困境。随着竞争趋于白热化，为了突破过去供应链“各自为政”的痛点，通过与阿里巴巴战略合作，良品铺子聚合松散的供需端资源：在供给端，直联260余家供应商以及多方物流伙伴，发货能力达到日均百万单，促使端到端的供应链响应时间减半，实现了采摘至货架“7日鲜”；在需求端，

图 1: 在中国数字化浪潮中，行业先行企业呈现出“快”、“准”、“新”的亮点，领先全球

“快”	1	快速响应	良品铺子 BESTORE	行业平均**3倍**的新品研发速度、**一半**的端到端供应链响应时间
“准”	2	精准触达	L'ORÉAL PARIS	打造个性化精准营销，广告投放点击率**高于市场平均50–100%**
	3	精准定制	蜻蜓FM	针对**1.3亿**生态月活用户，打造基于场景和用户习惯的“**一人一条音频流**”，提升了付费意愿，**付费会员收入增长3倍**
“新”	4	产品创新	金龙客车 KING LONG	**全球最早实现**L4无人驾驶巴士**量产**，封闭环境内**落地运营2年**，已累计行驶超过**10万公里**，接待人次超过10万，至今保持**安全零事故**
	5	服务出新		全面上线“店内提单”与“咖啡配送”服务，**线上业务销售占比**2020年第三季度达到**26%**
	6	业务革新	NIO	颠覆传统汽车经销模式，立足横跨汽车服务价值链的创新业务模式；2020年一季度**69%**的**新车用户来源于现有用户的推荐购买**

将约七千万条产品数据反哺上游，极大助力产品研发和创新。销售和营销方面，良品铺子则积极布局各类线上渠道，涵盖淘宝直播、优酷视频、新浪微博以及天猫官方旗舰店，目前品牌拥有超过9,700万会员粉丝，流量聚集效应显著。

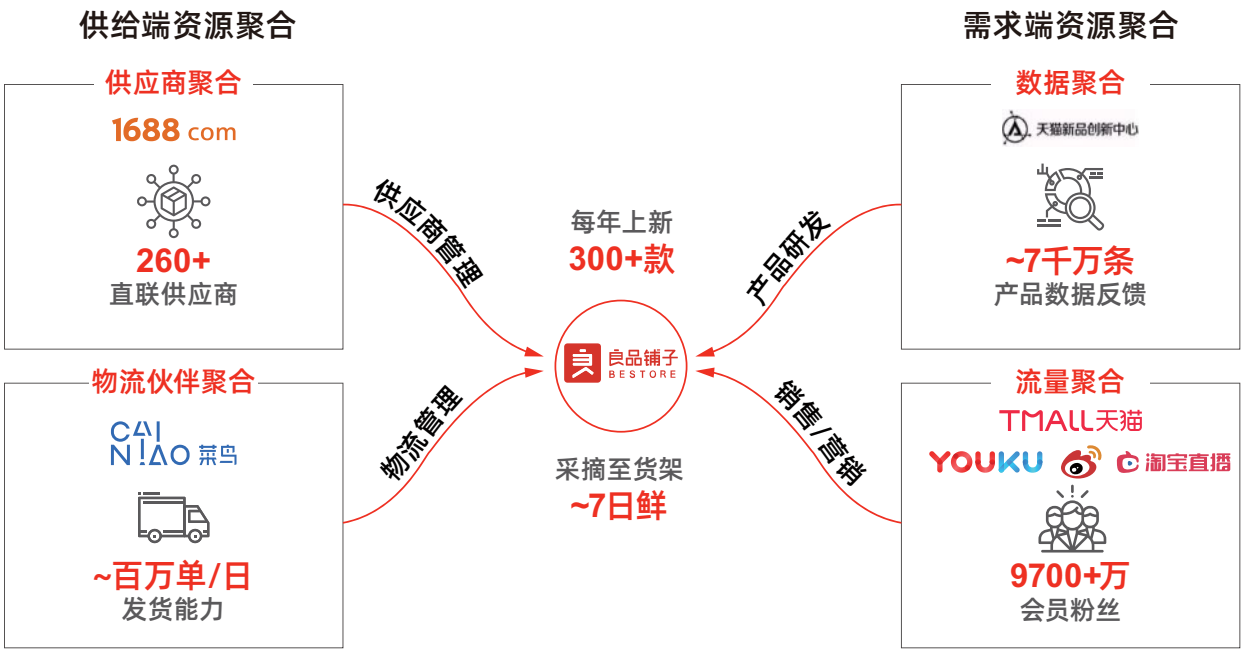
“后方有保障，前方有力量”，得益于阿里巴巴在供给两端的高效资源聚合，良品铺子以行业平均三倍的新品研发速度，每年上新300余款，成为业内高频上新的典范，以“快”取胜（图2）。

第二点是“准”。近年来，我国消费者个性化需求不断增强，企业如何针对不同客群提供客制化、定制化的产品和服务愈发关键。

研究表明，数据和技术既能够帮助企业精准触达各类客群。以美妆巨头欧莱雅为例。首先，欧莱雅将来自阿里巴巴的美妆线上浏览、消费、支付、反馈等信息，与品牌自身的精准用户信息、运营数据，以及每日从三万多网站抓取的品牌反馈大数据，互相结合，夯实洞察基础。其次，分析研究上述消费者的基本属性、兴趣爱好、社交行为、网购行为、线下交易等，获取360度全方位消费者洞察，精准识别“八大客群”。最后，拆解品牌内容元素，定制独特营销体验。

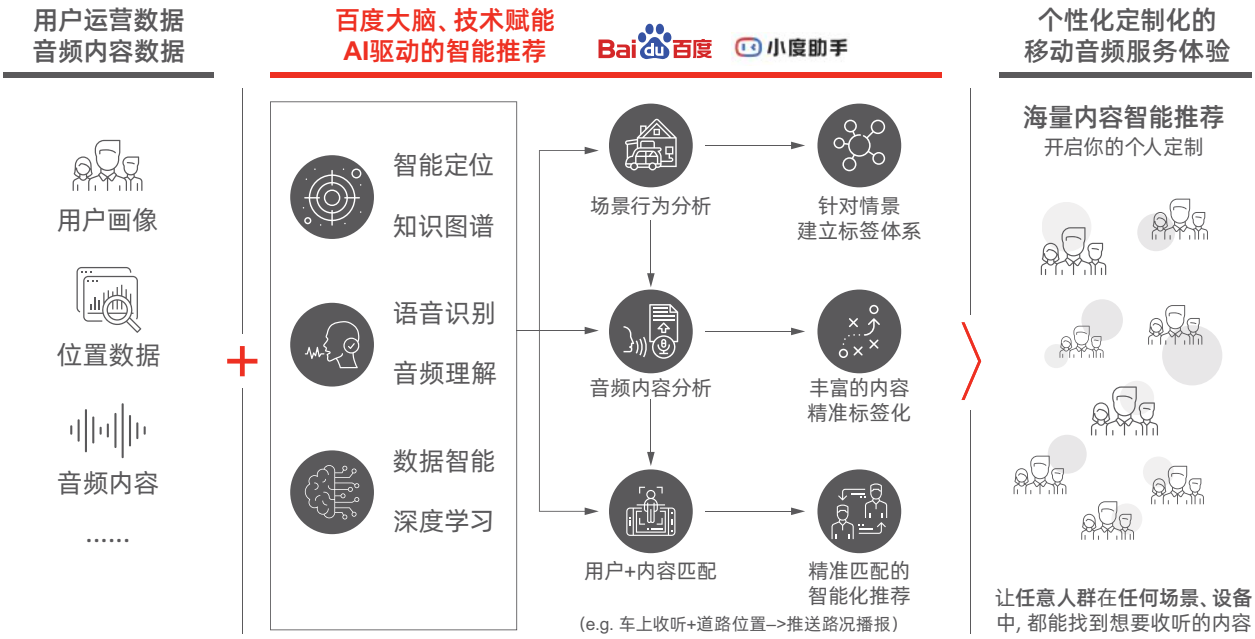
“万人操弓，共射一招，招无不中”，得益于对阿里巴巴积累的流动的数据价值的应用，通过“多人多面”个性化营销，欧莱雅的广告点开率高于市场平均50-100%，销售转化率提高约三倍，以精“准”促销量。

图 2: 良品铺子之所以能够实现高频快速上新，得益于阿里巴巴高效的供需资源聚合



资料来源: 专家访谈；案头研究；贝恩分析

图 3: 蜻蜓FM之所以能够根据场景形成1.3亿生态月活用户 “一人一条音频流” 的移动音频体验，得益于百度在技术端通过 “百度大脑” 技术赋能



资料来源: 专家访谈；案头研究；贝恩分析

同样专注于 “精准” 的还有蜻蜓FM。通过在技术端携手 “百度大脑”，蜻蜓FM在收集用户画像、收听内容、习惯和位置等运营数据之后，采纳百度特有的诸如智能定位、语音识别、音频理解、数据智能、深度学习等AI驱动的智能推荐，针对不同场景，分门别类建立用户标签体系，并且匹配音频内容，实现 “用户+内容” 的双重定制（例如，某用户正在车上收听蜻蜓FM，结合实时道路位置，向其推送所处路段的路况播报）。

“比用户更懂自己”，得益于 “百度大脑” 技术赋能，蜻蜓FM实现1.3亿生态月活用户 “一人一条音频流” 的精 “准” 推送，提升付费意愿，付费会员收入增长三倍（图3）。

第三点是 “新”。对于企业，数字化转型不仅意味着一轮轮技术更迭，更要充分发挥技术的力量重构现有业务，进行产品创 “新”、服务出 “新”、业务革 “新”，获取新的增长点。

数字化浪潮中，传统制造业亦有出彩表现，巧妙以 “新” 致胜。例如金龙客车有效整合自身丰富的造车经验以及百度Apollo自动驾驶技术、AI技术、传感设备和高精度地图，辅以百度工程师团队，分工明确，双管齐下，构建了依托本土技术的产品平台，实现新产品本土创新。未来，双方还将持续迭代探索自动驾驶赛道：一方面，加速完善现有产品功能，支持多种自动化运营方式，包括公交式运营和出租车模式等不同运营场景需求；另一方面，金龙客车利用自身车联网数据和外部平台技术支持，从传统造车企业转型整体应用解决方案提供商，为2B客户提供全方位服务。

“内外通力合作，一加一大于二”，得益于百度基于本土化需求的无人驾驶技术赋能，金龙客车在全球最早实现L4无人驾驶巴士量产，封闭环境内落地运营两年，已累计行驶超过10万公里，接待人次超过10万，至今保持安全零事故运营。

展现出不同以往的“新面貌”的还有星巴克和蔚来汽车。星巴克中国与阿里巴巴强强联手，通过阿里从引流到服务全方位的深度运营赋能，创新上线外送和店内提单的咖啡零售数字化服务，截至2020年9月底，线上业务在星巴克中国当季销售占比已达26%。在这个过程中，星巴克融入更多应用平台（包括饿了么、口碑、飞猪、高德地图，以及支付宝、淘宝网），创新更多使用场景，拓展消费者触达维度，为顾客带来线上线下融合的星巴克体验（图4）。

深耕中国二十一年，星巴克对咖啡的热爱、对品质与服务的追求始终如一。在数字化进程中持续创新、不断提升顾客体验，携手合作伙伴为中国顾客开启随时随地随心的优质星巴克体验。

为了践行品质如一的承诺，星巴克在2018年9月推出的专星送™外送服务的每一处细节都精益求精：推出外送专属餐单，用心设计外送包装，满足客制化饮品需求，只为提供与门店一致的优质星巴克体验。

星巴克专星送™的配送使用饿了么团队专门研发设计的专属冷/热分离外送箱，确保将这份不变的温度及时送达顾客手中。蜂鸟即配骑手为指定门店提供专属服务，精准门店派单系统会智能分析周边门店运能后派单，并根据实时数据为每个订单优化配送路线，确保饮品尽快配送。

2019年5月推出“在线点、到店取”啡快™线上点单服务，专属暖心取单口令，不仅会点亮一瞬心情，也成为门店伙伴与顾客情感连接的特别瞬间。2020年7月，星巴克中国啡快™服务多平台焕新上线，登陆支付宝、淘宝、口碑、高德多个App平台，不仅进一步丰富了线上点单功能、优化顾客体验，还在星巴克App上新增了预约功能，让提前点单、到店即拿即享的过程更加随时随心，为顾客带来更为完善的星巴克体验。

图 4: 星巴克在外送和店内提单数字化业务大获成功，得益于多平台从线上引流、消费者需求出发的服务创新等环节深度运营赋能，打造融合的品牌体验

资料来源：专家访谈；案头研究；贝恩分析

2019年7月12日，星巴克全球首家啡快™概念店在北京正式揭幕，并相继在深圳、上海、广州、天津、杭州、成都、南京、武汉等城市亮相。这一创新的零售门店业态，将星巴克门店空间与数字化空间体验无缝连接。全新升级的门店布局，集合“在线点，到店取”的啡快™服务、专星送™外送服务和到店顾客体验三大功能，为顾客和专星送™骑手带来“简而不减”的星巴克体验，进一步践行对品质与速度的双重品牌承诺。

截至2020年9月底，专星送™服务已覆盖星巴克中国84%门店，啡快™服务已覆盖98%门店。

有别于传统车企单一触点、单一场景的服务价值链，造车新势力蔚来汽车颠覆传统汽车经销模式，践行“跨价值链”、“跨场景”的“跨领域”生态扩张战略，实现协调全生命周期的用户沟通。蔚来以自有App为核心触点，在其蔚来社区发布宣传信息拉新引流，辅以配套金融服务。再通过 NIO Space 蔚来空间完成试乘试驾和销售，此外，NIO Service蔚来服务中心可以主动提供及时、便捷、无忧的维修服务，实现“服务找人”。最后，经由蔚来App内的线上商城销售多样配件和衍生用品，以及以NIO HOUSE蔚来中心为活动场地与蔚来用户互动，全面提升了客户粘性和用户生命价值，强化全价值链的深度运营能力。

如何做到：中国特色平台发展模式及其“四大特色”

“纵横不出方圆，万变不离其宗”，回顾上述不同行业的标杆企业，我们发现，这些企业之所以能够迅速进行数字化转型，并打造领先于全球的亮点，得益于充分借助并且发挥了中国特色的平台发展模式（图5）。

图 5: 企业之所以能够迅速完成数字化转型并打造领先于全球的亮点，得益于充分借助并且发挥了中国特色的平台发展模式

中国特色的平台发展模式

一种高效聚合供需资源、充分发挥流动的数据价值、技术运营双赋能的平台发展模式

特色1

高效的供需资源聚合

特色2

流动的数据应用价值

特色3

本土化创新驱动的技术赋能

特色4

全价值链的深度运营赋能

- **特色一：高效的供需资源聚合**

在企业生产经营过程中，高效的供需资源匹配是重中之重，聚合供应端资源并且高效匹配需求端资源，有助于提升整体运营能力，创造更多价值。对此，中国特色平台发展模式以开放包容的方式集合和匹配外部分散的供给端和需求端资源，包含技术、产品、服务、流量等多维度资源。

如良品铺子与阿里战略合作，聚合众多供应商和消费者差异化的需求，围绕数据能力强化自身竞争力，构建以端到端为特征的崭新的运营模式，以“快”取胜，响应时间缩短一半，实现行业平均三倍的新品研发速度。

- **特色二：流动的数据价值**

置身数字经济时代，中国特色平台以海量流动的用户数据为基石，打通端到端数据接口，借助迭代的推荐技术，开发多场景应用数据工具，实现双向流动的数据高效运用。

如欧莱雅通过与阿里平台合作，聚焦海量数据，从传统的“千人一面”转型“千人千面”，盘活数据价值，精“准”触达客群。

- **特色三：本土化创新驱动的技术赋能**

在转型和投资数字经济时，中国特色平台基于本土化的市场特性与需求进行技术创新，并将创新的技术成果以平台的形式向外输出赋能，以降低创新门槛。

如百度技术赋能蜻蜓FM，实现针对1.3亿月活用户的个性化音频体验精“准”推送；金龙客车则实现“新”产品L4级巴士全球率先问世，激发本土市场新潜力。

- **特色四：全价值链的深度运营赋能**

中国特色平台超越了单纯的技术输出，而是深度参与企业运营的各环节，提供完整的解决方案并协助企业商业落地，提升运营效率。

如星巴克携手阿里推动零售数字化服务创“新”，全价值链的深度运营赋能，打造线上线下融合的星巴克体验。而蔚来通过自建线上社区平台，实现横跨汽车价值链和场景的创“新”模式。

背后动因：中国特色平台发展模式背后的“四大原因”

复盘各个行业领先企业的数字化变革进程，我们发现，这些企业纷纷根据自身的资源和禀赋、结合外部商业环境，联合彼此属性相互契合的中国特色平台，激发企业的数字价值。

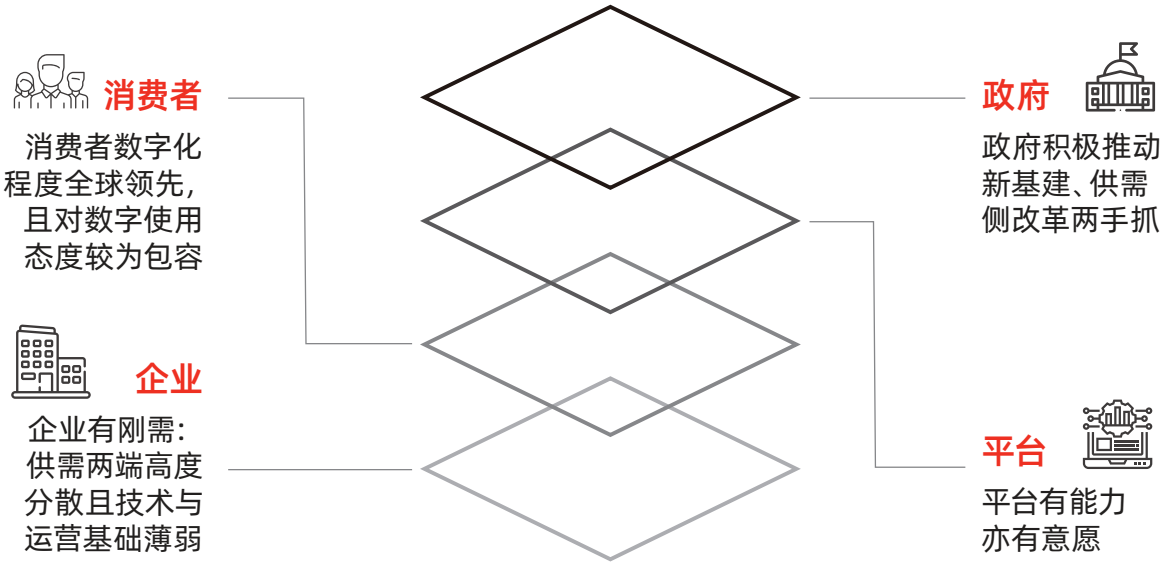
“追本溯源方能行稳致远”，经过一系列深入研究后，我们发现，在颇具中国特色的“四大原因”的协同作用之下，塑造了独具特色的中国特色平台商业模式（图6）。

原因一 | 政府：积极推动新基建、供需侧改革两手抓

“工欲善其事必先利其器”，近年来，我国政府大力支持并主导5G、大数据、人工智能等新基建投资，推动数据成为新的关键生产要素，为“流动的数据价值”与“本土化创新驱动的技术赋能”提供坚实的基础设施保障。

根据国际数据公司（IDC）和本次案头研究结果，2016年至2019年，我国新增5G基站14万个，数据中心机架119万架，人工智能投资规模约3,200亿人民币，光纤占宽带用户渗透率提升约20%（2019年底，光纤占宽带用户渗透率高达约92%）。值得注意的是，作为数字经济发展的战略基石，在政府持续加码投资新基建的背景下，根据预测，2020年或将新增5G基站58万个，数据中心机架93万架，人工智能的投资规模约为1,000亿人民币，光纤占宽带用户渗透率约提升3%，为释放“数字红利”奠定坚实基础。

图 6: 追本溯源，中国特色平台发展模式得益于“四大原因”



此外，政府扭住供给侧结构性改革，同时注重需求侧改革，形成需求牵引供给、供给创造需求的更高水平动态平衡，更加注重“供需资源聚合的效率”。

原因二 | 消费者：中国消费者数字化程度全球领先，且对数字使用态度较为包容

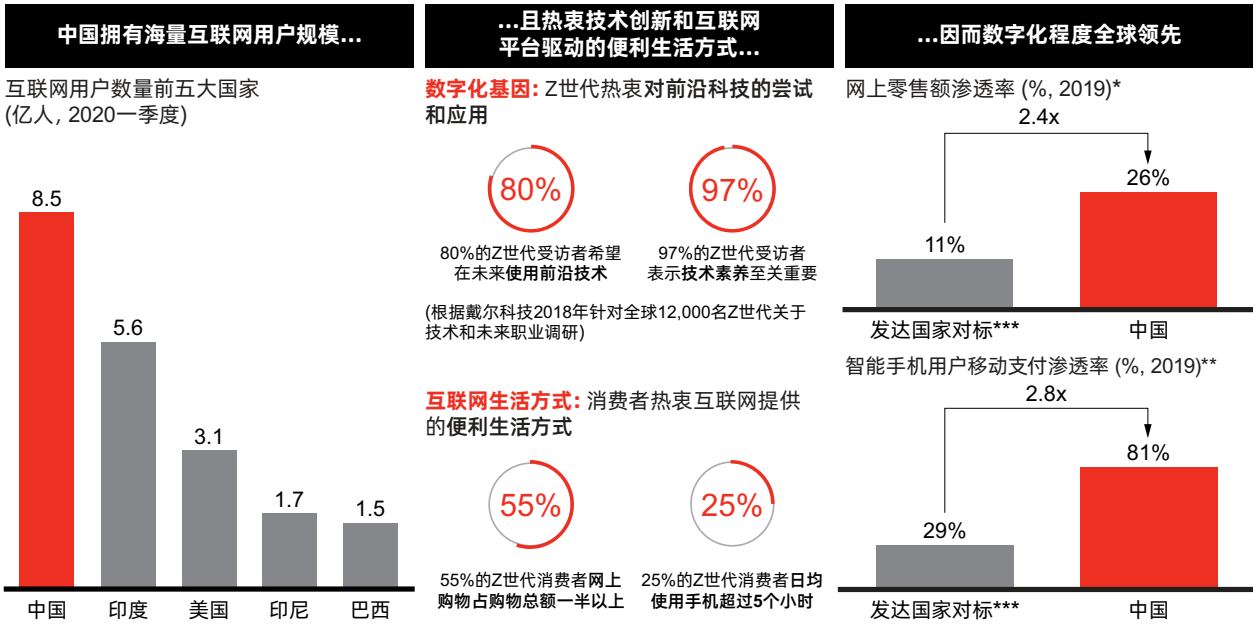
在全球范围内，中国互联网用户基数庞大，创造海量“流动的数据价值”，为发展数字经济提供了得天独厚的条件，且随着政府对于数据管理的规范性要求提升，消费者对于数据的分享和使用更加放心，为平台“全价值链的深度运营赋能”提供丰富的应用场景（图7）。

截至2020年第一季度，中国以8.5亿互联网用户数量位居世界第一，远远超过印度和美国，后者分别为5.6亿和3.1亿。戴尔科技2018年一项针对全球Z世代关于技术和未来职业的调研结果显示，由于技术创新带给消费者新的体验，让这一代互联网用户热衷对前沿科技的尝试和应用，具备深刻的“数字化基因”，高达97%的受访者表示技术素养至关重要，80%的受访者希望在未来使用前沿技术。

日常生活中，新技术的应用提供给消费者更便捷的生活，让消费者拥抱互联网，广泛使用多种互联网产品和服务：55%的受访Z世代消费者网上购物占购物总额一半以上，1/4的受访者日均使用手机超过五个小时。

正是由于对技术创新和互联网平台驱动的便利生活方式的热衷，中国消费者数字化程度全球领先。对标发达国家，2019年，中国的网上零售额渗透率达到26%，是发达国家的2.4倍，而智能手机的用户移动支付渗透率更是发达国家的2.8倍，高达81%。

图 7: 中国互联网用户基础庞大，且热衷技术创新和互联网平台驱动的便利生活方式，因而数字化程度全球领先，创造海量有可用价值的数据...



注释：*网上零售额是指通过公共网络交易平台实现的商品和服务零售额之和，包括实物商品和非实物商品（如虚拟商品、服务类商品等）；
截至2019年10月；*发达国家以美国为例
资料来源：Internet World Stats；国家统计局；eMarketer

并且，随着政府对于数据管理的规范性要求提升，消费者对数据分享和使用态度更加包容放心，有利于平台更加充分的应用“流动的数据价值”。

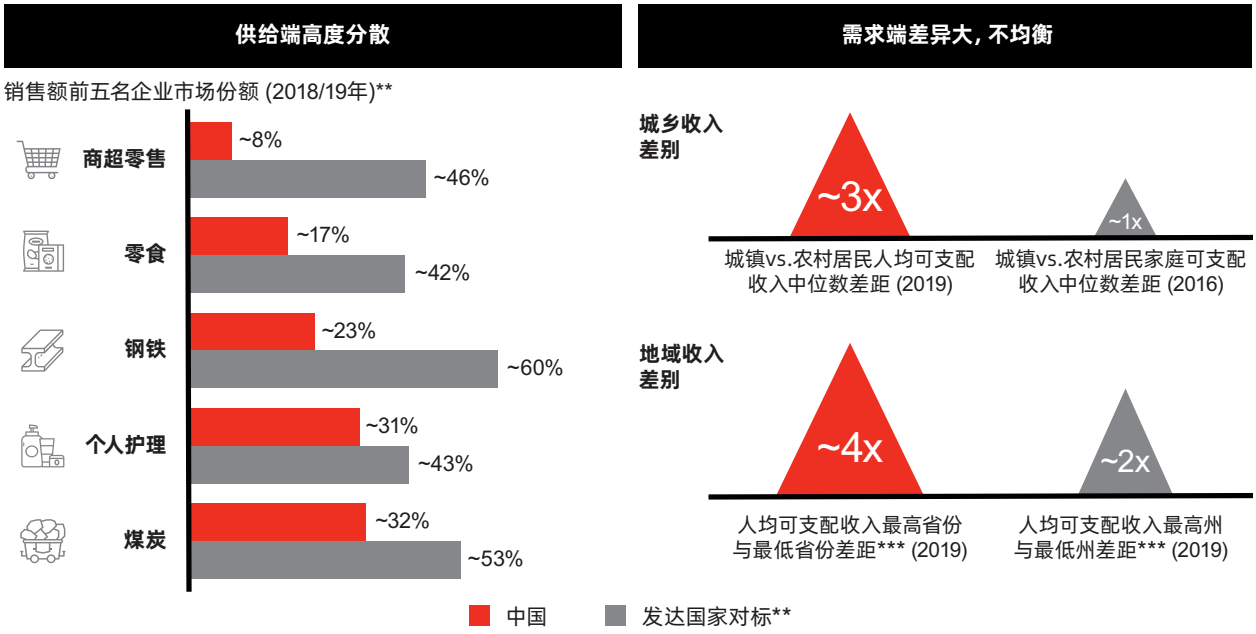
“有法可依，执法必严”，我国政府对于数据管理的规范性要求不断提高。自2016年起，我国先后颁布《中华人民共和国网络安全法》，框架性地构建个人数据保护的法律制度和要求，以及《中华人民共和国数据安全法（草案）》、《中华人民共和国个人信息保护法（草案）》，确立了数据安全保护管理各项基本制度、以“告知-同意”为核心的个人信息处理规则。上述逐渐完善的法律制度为消费者个人数据安全树立信心。

原因三 | 企业：供需两端高度分散且技术与运营基础薄弱，具备刚性需求

面对强有力的政府支持以及潜力巨大的中国市场，在外部商业环境向好的同时，以中小企业为主的中国企业内部却面临着诸多挑战，包括如何攻克供需两端高度分散、技术和运营基础薄弱的难关，亟待寻求外部帮助（图8）。

第一是来自供需聚合的挑战。供给端角度，相较发达国家，在中国，各个行业的企业供给端高度分散，2019年，商超零售、零食、个人护理行业销售前五名企业的市场份额分别约为8%、17%、31%，而在发达国家，三者占比均超过了40%。此外，2018年，我国煤炭和钢铁企业中，前五名的产量在总产量中分别占比32%和23%，而发达国家中，两者比例都超过了50%，钢铁行业的产能更是高度集中，该比例达到了60%。需求端角度，中国的城乡收入和地域收入差别高出发达国家两倍和三倍，不平衡的收入状况导致需求多元化。

图 8: 中国企业面临线下高度分散的供给端，多元化的需求端，企业亟待平台“高效的供需资源聚合”



注释: *以美国为例；**商超零售，零食，个人护理为2019年销售额的市场份额数据，煤炭钢铁为2018年产量数据；***中国人均可支配收入最高省份（含直辖市）为上海市，最低为甘肃省；美国人均可以支配收入最高州（含地区）为哥伦比亚特区，最低为密西西比州
资料来源: Euromonitor；国家统计局；US Census Bureau; 分析师报告；万得；煤炭工业协会；S&P Global; Statista；案头研究

实践表明，传统线下渠道对于如何解决企业供需聚合的难点作用有限，而中国特色平台发展模式则适时的解决了这一难题，一方面，为下游的需求端带来更丰富的选择、更透明的比较，做到“心中有数”；另一方面，提升供给端的规模优势，降低供给端线下扩张带来的资本投入，尽可能地降本增效。在此基础上，平台通过智能算法精准匹配供需，以技术提高效率。

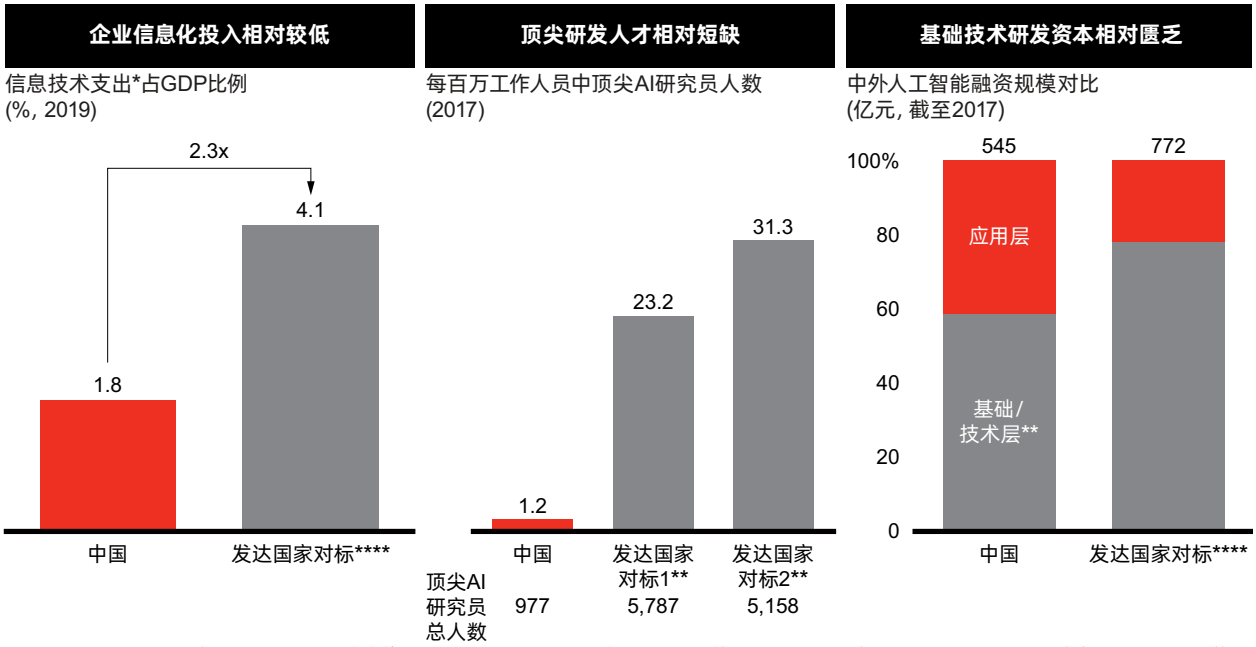
第二是基础技术薄弱。打造数字经济发展高地，“技术赋能”是重中之重。当下，中国企业对提高信息化技术的需求随着数字经济发展而日渐增长，并且与发达国家的企业相比，中国企业的信息化投入较低、研发人才相对短缺、基础技术研发资本相对匮乏，因此，需要通过平台“技术赋能”进一步提高信息化水平（图9）。

2019年，中国企业的信息技术支出在GDP中占比1.8%，低于某发达国家的4.1%，企业信息化投入相对较低。“人才是企业宝贵的无形资产”，然而，2017年，每百万工作人员中，中国顶尖AI研究员仅有1.2人，总人数977人，该比例远远不及欧盟等发达国家，后者分别高达23.2和31.3人。最后，从融资规模角度，以人工智能为例，中国资本相较于外国，更青睐于应用层面的投资，而对基础技术层的投资规模有待进一步提升，中国企业亟待仰仗平台的力量，基于本土化需求深耕基础技术创新。

第三是运营基础薄弱。中国市场仍然以中小企业为主，实力较为薄弱。以工业企业为例，按照主营业务收入超过4亿元则定义为大型企业的标准，2018年，中国仅有2%的企业为大型企业。

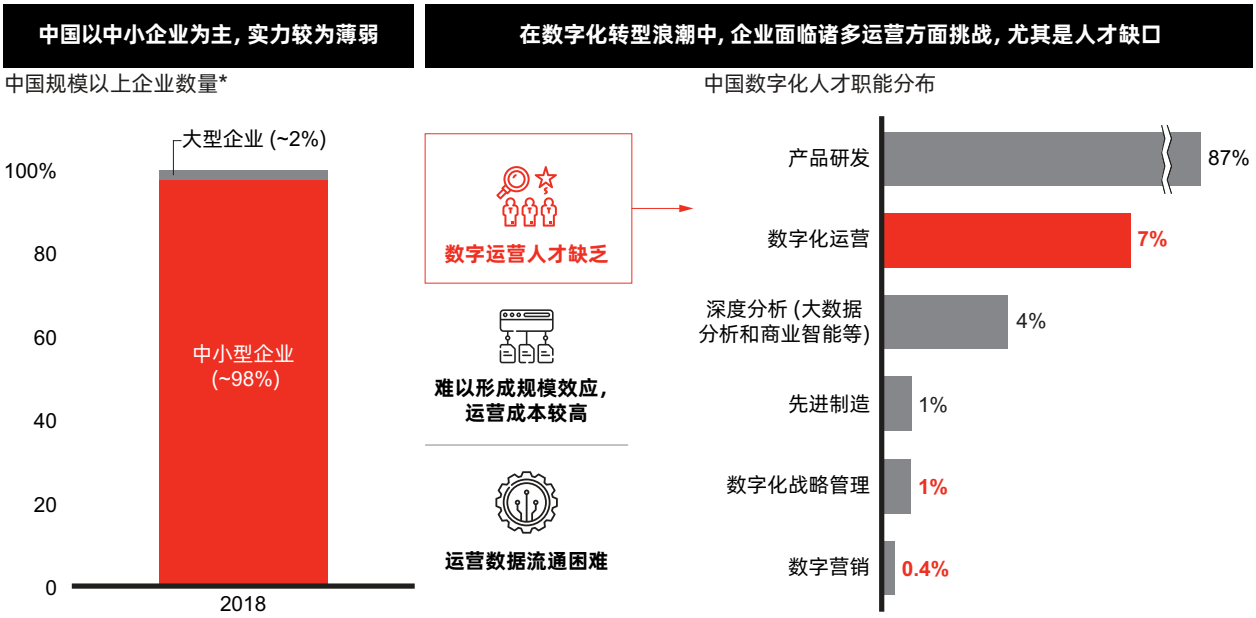
此外在数字化转型浪潮中，企业面临诸多运营方面挑战，以人才缺口尤甚：传统的内部人才培养模式发展缓慢，难以匹配企业迭代速度；外部数字化人才不熟悉企业运作，亟待平台提供“全价值链的运营赋能”（图10）。

图 9: 中国企业进一步提高信息化水平水平面临诸多挑战，因此需要平台“技术赋能”



注释：*信息技术支出包括在硬件、软件与IT服务中的支出； **发达国际对标1为欧盟、对标2为美国；***基础层包含处理器、芯片，技术层包含自然语言处理、计算机视觉与图像、技术平台，应用层包含机器学习应用、智能无人机、智能机器人、自动驾驶辅助驾驶、语音识别；****发达国家以美国为例
资料来源: 国家统计局；IDC; 腾讯研究院; Center for Data Innovation; 案头研究

图 10: 中国中小企业多，运营环节基础薄弱，面临数字化人才匮乏等诸多挑战，亟待平台“全价值链的深度运营赋能”



注释：*以工业企业为例；规模以上企业指年主营业务收入在2000万元及以上的企业，中小型企业指年业务收入2千万-4亿元；大型企业指年营业收入≥4亿元； **信息技术支出包括在硬件、软件与IT服务中的支出；***发达国家以美国为例
资料来源：清华大学经济管理学院；IDC；国家统计局；案头研究

具体看，我国目前的数字化人才集中于产品研发部门，占比达到了87%，而精通数字化运营、数字化战略管理、数字营销的人才稀少，在整体中，仅占比7%、1%、0.4%。

人才缺失让大多数中小企业无法良好运营数据，我们研究发现，中小企业的运营数据采集率较低，难以通过数字化手段高效流动。雪上加霜的是，割裂分散的产业链使得企业在获取上下游外部数据时“难上加难”。最后，企业由于规模较小，难以在各运营环节形成规模效应，因而运营成本居高不下。

原因四 | 平台：有能力亦有意愿

“方法总比问题多”，中国的互联网平台具备规模优势、技术先进、人才优质的特征，具备将服务基础设施化的实力，为企业突破痛点，实现“技术运营双赋能”提供了基础保障能力。

首先是规模层面。我国互联网平台具有明显规模优势，有利于形成规模效应，降低成本。其次是人才层面。互联网企业以品牌响、薪酬高的优势，持续吸引市场近50%数字化人才，以大数据人才为例，互联网企业的薪资最高可达到传统企业的十倍。最后是技术层面。以人工智能专利为例，互联网平台在我国人工智能领域专利申请量和授权量大幅度领先; 2020年，百度以9364件AI专利申请名列第一，腾讯以8450件位列第二，技术专利优势显著。

凭借上述三大特征，我国互联网平台得以提供广覆盖、高效便捷、低成本的基础设施化服务，并贯穿企业营销、支付、物流、供应链/生产各个环节。如百度营销可以为流量方和广告主提供覆盖数亿级网民的流量变现、精准营销的完整便捷的整套数字营销解决方案。而支付宝发挥其使用成本远低

于传统银行POS机的优势，正在向超过10亿的年度活跃用户提供广覆盖与低成本的基础设施化移动支付服务。在物流方面，京东物流旗下的“24小时达”服务范围已经覆盖了92%区县和83%乡镇，整体物流网络几乎覆盖了中国内地所有区县，触达行政村超过55万个。阿里数字供应链专注于提供算法驱动的高效数字供应链优化服务，已接入约5万商家，致力于在数据可视化、人货匹配、库存优化、门店数字化等方面帮助商家建设高效的供应链体系。

“绝知此事要躬行”，本次研究显示，我国互联网平台不仅具备数字化能力，而且正逐渐从消费行业起步，有意愿运用积累的数据价值、运营经验、技术优势，通过“科技与运营双赋能”有序拓展到B端和其他新的增长引擎。

自1995年，我国消费互联网经历了从PC端向移动端转移的发展历程，而产业互联网也随之趋于成熟，我们预计，2C产业互联网将于2030年发展见顶，取而代之的是，体量更大的2B/2G正在兴起，推动互联网巨头纷纷布局2B领域。例如，涌现出如阿里云、腾讯云、百度云、京东云等各类“云服务”，以及阿里巴巴旗下的飞天大数据平台、百度数据智能、腾讯大数据、京东深海大数据平台的企业大数据服务平台，而阿里巴巴的ET BRAIN、百度AI开放平台、腾讯AI、京东人工智能开放平台为加速了企业人工智能应用的落地，钉钉、腾讯会议等则成为企业协作办公的“得力助手”。

上述多方合力汇聚之下，中国特色的平台发展模式应运而生。为了促进平台持续性规范健康发展，包括欧盟在内的发达国家以及中国政府均致力于完善相关政策，提升监管能力。

以欧盟为例，2020年12月，欧盟委员会公布了《数字服务法案》与《数字市场法案》提案，对平台，特别是大平台、守门人性质的平台义务进行了规定。《数字服务法案》旨在建立确保用户安全、平台责任清晰的在线环境：该法案明确了社交媒体具有审查和限制非法内容传播的义务，并建立了清晰的网络平台问责框架等。此外，《数字市场法案》以促进平台公平竞争、良性发展、与维护本土创新为目的，制定一系列市场监管措施，例如要求互联网企业在自有平台的基础上，保障自身与第三方产品的公平竞争、保障竞争对手数据独立与安全等，确保本土企业与互联网巨头公平竞争。

“不以规矩不成方圆”，中国政府同样颁布了一系列相关政策法规。2020年11月，市场监管总局起草了《关于平台经济领域的反垄断指南（征求意见稿）》，以引导平台经济领域经营者依法合规经营，促进线上经济持续健康发展。2019年8月，国务院发布了《关于促进平台经济规范健康发展的指导意见》，充分肯定平台经济的重要作用，创新监管理念和方式的同时，亦为平台经济营造公平的市场环境，旨在进一步促进平台经济规范健康发展。

回顾上述历程，我们发现，各国政府纷纷围绕以下三个底层逻辑完善政策监管措施：第一，明确平台社会义务，科学合理界定平台责任；第二，建立有利于公平公正竞争的监管措施，维护市场竞争秩序以促进本土创新；第三，加强用户权益保护，使用户拥有更加广泛且安全的产品和服务选择范围。

未来启示：企业拥抱此模式的“三类参与方式”与“四个应对之道”

身处中国特色的平台商业模式的浪潮中，如今，企业正面临着的前所未有的巨大数字化转型机遇。“因势利导，顺势而为”，企业需结合自身特点和数字化转型的整体规划进行差异化选择。我们观察到不同属性的企业存在“三类参与方式”（图11），每种方式都有成功的企业案例。而针对选定的参与方式，企业在运营模式上有“四个应对之道”。

- **方式一：善借外力**

“君子善假于物也”，对于资源有限的中小企业，或可资源优势互补的中大型企业，均可以借力外部互联网平台优势，通过平台的流量、技术和数字化基础设施，快速扩张规模，并加快企业的数字化能力建设。如百信银行自身专注于科技与风控平台的建设，充分利用百度等平台提供的智能云基础设施等，形成基于场景、更准的定制化数字普惠金融服务。

选择该参与方式的企业，应当有的放矢，有针对性地聚焦自身价值链的最核心环节，借力平台基础设施。

图 11: 身处中国特色的平台商业模式的浪潮之中，企业数字化转型有三类参与方式

案例1：金瑞麟聚焦无人驾驶商业化落地，借力百度开放式的自动驾驶技术

2018年，专注于人工智能和机器人技术领域的科技公司金瑞麒率先推出智能漫游车，成为我国第一台通过中国汽车工程研究院股份有限公司机动车整车标准的低速载人自动驾驶车。

实践中，首先，金瑞麒立足自主研发的基于视觉和传感融合的低速无人驾驶技术，与双电机差速控制额度全数字化线控底盘，引入百度Apollo自动驾驶平台的低成本自动驾驶技术方案，令硬件成本降低超过70%，是同类产品的三分之一，使规模化量产成为可能。其次，金瑞麒加码布局无人驾驶赛道，丰富产品品类，推出智能漫游车、智能代步车等应用载体。最后，为了持续提升无人驾驶体验，金瑞麒借助百度大脑、智能语音平台赋能人机交互，不断优化产品体验。在商业化场景落地方面，金瑞麒探索了旅游景区漫游、康养代步、海关查验等多元场景，并在多个景区开始投放智能漫游车。

案例2：居然之家聚焦线下门店运营与服务，借力阿里线上引流

从实体连锁店到线上交易平台“同城站”，充分借助阿里线上资源和技术能力，国内家居行业巨头居然之家开启了数字化转型之路。

实践中，居然之家的线上和线下渠道分工明确，线下门店提供包括设计服务支持、体验挑选、购买、供货、上门安装、上门维护等服务。而线上渠道则主攻引流，并且在该基础上，与阿里巴巴共同推出了“躺平设计家”家装家居设计平台，及时连接供需。在精准定位以及智能推荐之下，通过线上交易平台“同城站”使得线下门店线上化，完成在线选购。此外，积极搭建智能家居和家居用品销售平台、装修基材辅料销售平台、智能化家装平台，以及提供可视化的物流配送、后家装到家等一系列服务，打造覆盖设计、选材、家装的一站式平台。“青出于蓝胜于蓝”，对于广大消费者，家具消费是一个重体验感的过程，居然之家深明此道：凭借数字化技术改造实施线性服务，配合卖场平台业务，实现线上线下无缝联动，从而做透家居主业。

- **方式二：双管齐下**

对于规模较大、所处行业较成熟且各价值链分工明确的企业，可以既利用自身行业经验打造自有平台，又与外部平台互通有无，实现内外双循环的相互赋能，快速推动线上销售增长并沉淀用户资源。

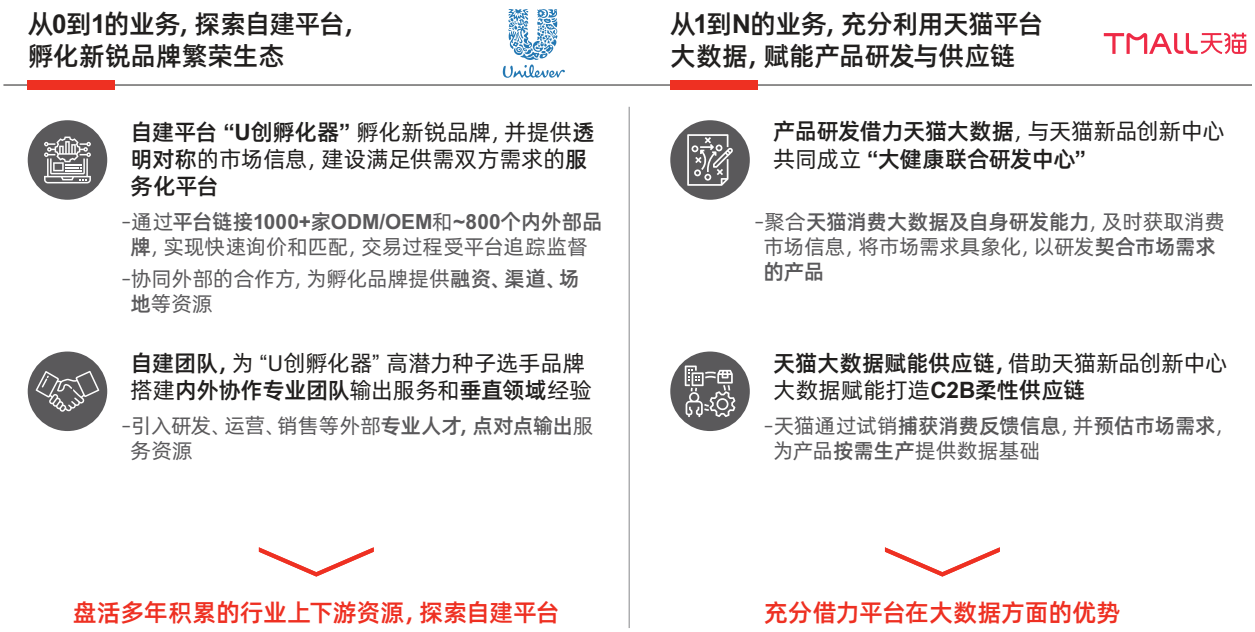
选择该参与方式的企业，针对“从0到1”的业务，企业可考虑盘活供需资源，自建平台；而针对从“1到N”的业务，企业则应善借外力，加速成长（图12）。

案例：联合利华自建创新孵化的平台模式，同时借力外部平台生态和大数据，繁荣自身生态系统

“双管齐下”之“从0到1”的业务。秉承“中国首创，全球支持”的创新模式，快消行业巨头联合利华总部针对中国市场上的新锐品牌，发起了全球首个对外孵化器——U创孵化器。并建立联合利华服务平台，链接1,000余家ODM/OEM和约100个内外部品牌，提供透明对称的市场信息，实现快速询价和匹配，建设满足供需双方需求。此外，通过平台化满足孵化品牌与供应商账款、营销设计、创新企业服务等需求，并协同外部的合作方，为孵化品牌提供融资、渠道、场地等资源。

针对“U创孵化器”高潜力种子选手品牌，利用联合利华内部专业人才，并引入研发、运营、销售等外部专业人才，为品牌搭建内外协作专业团队，点对点输出服务资源和垂直领域经验。

图 12: 联合利华既充分利用平台大数据，赋能产品研发与供应链，又积极探索自建平台



资料来源: 专家访谈；案头研究；贝恩分析

通过自建平台，联合利华盘活多年积累的行业上下游资源，孵化新锐品牌繁荣生态。

“双管齐下” 之 “从1到N” 的业务。针对现有业务，联合利华聚合天猫消费大数据及自身研发能力，2018年，与天猫新品创新中心战略合作，及时获取消费市场信息，具象化市场需求，以研发契合市场需求的产品。为了打造C2B柔性供应链，联合利华通过分析天猫试销捕获的消费反馈信息，预估市场需求，从而为产品按需生产提供数据基础。

- **方式三：自建平台**

对于实力雄厚，资金、技术等资源较为丰富的集团化企业，可以立足自有的资源，整合上下游，得到垂直行业深度洞察，与此同时，拓展边界并获取更为多元的消费者触点，以打造自身专属平台。

选择该参与方式的企业，需要牢牢把握关键的资源和建立核心的能力，构建起自有平台的护城河。

案例：平安集团把握核心垂直技术领域，建立平台护城河

平安集团高度重视核心垂直技术领域的研发，致力于运用人工智能、大数据、云等技术，赋能金融、医疗服务、出行服务、房产服务、基础设施服务。

实践中，平安集团设立人工智能研究院，聚焦开发、落地具有多种应用场景的人工智能技术。大数据方面，平安科技打通底层数据，深挖客户关联场景需求，实现全生命覆盖和 “一站式服务”。云技术方面，2013年起自建平安云，并且自研IaaS/PaaS/SaaS层全套产品线。

依托于在人工智能、大数据和云技术等方面的持续耕耘，平安集团在金融、医疗服务、出行服务、房产服务和基础设施服务方面均取得了令人瞩目的成就。具体而言，其金融科技专利规模位列2020年全国第一，专利应用于旗下平安产险、平安人寿、平安银行。此外，平安夺得2019年AI辅助医疗国际影像竞赛总冠军，科技助力医疗板块旗下的平安好医生、平安万家云诊所和平安医保科技。并以AI赋能汽车之家从内容门户转为汽车服务交易平台，市值增长至平安收购前三倍。在赋能房产服务、智慧城市解决方案方面方面：目前，旗下平安城科、平安好房、招商平安资产服务超过95%的头部品牌公寓，实现城市资产运营，而平安“城市智脑”则落地深圳，并入选信通院智慧城市十大示范案例。

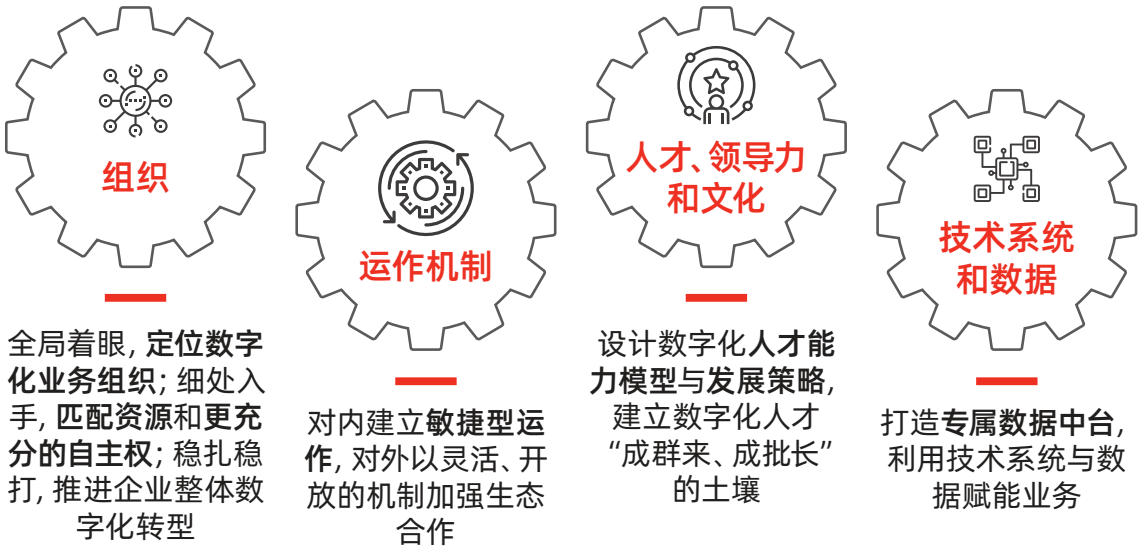
“打铁还需自身硬”，选定契合的参与方式后，企业还须优化运营模式，建好底盘，修炼应对之道（图13）。

对此，我们分别从组织定位、运作机制、人才管理、数据管理四大维度，逐一帮助企业突破瓶颈。

应对之道一 | 组织：明确组织定位，调配“聚合后的资源”

如前文所述，合适的平台能够帮助企业高效聚合外部的供需资源，整合供应链。而企业如何进一步发挥聚合后的资源优势，则取决于组织管理水平，包括定位、架构、权责等。“谋势重在全局”，我们建议，企业从全局着眼，定位数字化业务组织；从细处入手，匹配资源，给予数字化业务充分的独立性和自主权，稳扎稳打，促进整体数字化转型。

图 13: 选定契合的参与方式后，企业还需在运营模式上做好准备，建好底盘，修炼四个应对之道



以星巴克中国为例。为了推动企业整体数字化转型，星巴克中国从全局定位数字化业务组织。2019年6月，星巴克中国将现有全部业务重组为两个业务单元——“星巴克零售”和“数字创新”，值得注意的是，“数字创新”作为单独部门直接向董事长兼首席执行官办公室汇报，并在接下来的发展中对接外部平台生态圈。对此，星巴克国际及渠道发展集团总裁John Culver表示，“新的组织架构可以使我们更灵活地调动与配置资源，实现短期业务需求和长期战略发展之间的平衡”。

实践中，星巴克中国“数字创新”以增量市场增长为发展目标，满足多元场景下的增量需求。开放地拥抱中国的互联网数字生态，与中国顶尖科技巨擘开展战略合作，为加速数字化创新发展提供了强大的助推力。高效地调配聚合后的供需资源，有效满足了多元场景下的增量市场需求：如专星送™服务线上消费客群及拼单客；啡快™服务周边线上消费客群及有效率需求的线下客群；借助淘宝、支付宝、饿了么、高德、口碑等更多流量入口，服务新客群。

应对之道二 | 运作机制：完善运作机制，配合平台“全价值链的深度运营赋能”

数字经济带动各行各业转型升级之际，要求企业对内建设敏捷型的运作机制，对外以灵活、开放的机制加强生态合作，以更有效地配合平台“全价值链的深度运营赋能”，实现各运营环节效率提升。

如金龙客车通过内外部的一系列改革，激发内生动力，加强外部生态合作。实践中，对内虚化组织边界，组建涵盖整车设计、生产制造、场景设计、质量控制、销售营销的跨部门敏捷型组织，并且成立联合创新中心、引入外部优势人才和研发能力，加快创新产品落地。外部合作时，产品创新方面，与百度组成联合无人车开发团队，18-24个月实现产品平台构建到落地量产，后期双方仍持续合作，进行商业落地、运营和产品迭代升级。落地运用方面，与中国联通、大唐移动签订合作协议并实现5G车路协同，此外，借助ABB中国的快速闪充技术打造安全高效的电动公交车，推进电动交通发展。

应对之道三 | 人才、领导力和文化：优化人才机制，配合“本土化创新驱动的技术赋能”

“人才是企业发展的核心竞争力”，为了提升企业软实力，我们建议广大企业着手设计数字化人才能力模型与发展策略，匹配人才机制、领导力与组织文化，从而更有效地配合“本土化创新驱动的技术赋能”和充分利用“流动的数据价值”。

2016年起，沃尔玛开始全力发展全渠道策略，在整体数字化转型之际，沃尔玛从“人才效能和文化”维度，重新设计人才能力模型，制定个性化培训和个人发展方案，全方位升级人才体系。首先，界定数字化人才需求，立足不同岗位，针对门店经理、采购人员分别描绘岗位画像并搭建能力模型：门店经理聚焦于建立数字思维能力和变革推动能力，而采购人员的能力模型从传统的策略（25%）、营运（40%）、行政（35%）转变为更契合数字化未来的策略（60%）、营运（35%）、行政（5%）。数字经济时代，沃尔玛专门建立了人才评估“3A模型”，涵盖才能（Ability）、敏捷度（Agility）、抱负（Aspiration），定位关键人才的短板和潜力，旨在培养思路开阔、有效协作、快速学习、拥有强大内驱力的关键人才。最后，沃尔玛在中国推出“沃课堂”移动学习社区，涵盖领导力、岗位胜任力、数字化技能等模块，配合场景化、多元化、游戏化的移动学习方式，方便员工快速自我提升。此外，沃尔玛始终秉承“创始人精神”的企业文化：通过高管与一线员工面对面分享数字化变革战略，增强员工的主人翁精神；简政放权，给予员工更大空间发挥“创始人精神”，快速响应市场数字化变革，让员工更主动地拥抱数字化，推动企业高效转型。

应对之道四 | 技术系统和数据：打造专属数据中台，利用“流动的数据价值”

数字经济时代，海量数据涌现，越来越多的企业纷纷思考如何打破数据孤岛、处理各个渠道获取的不同数据，进而产生更多的“流动的数据价值”。为了攻克这个难关，数据中台应运而生。作为中国数字经济发展的产物，数据中台对于企业发展的基础设支撑作用日益显著。

如国货美妆企业林清轩全面迁上“阿里云”，打造专属中台，利用技术系统与数据赋能业务，将外部“流动的数据价值”沉淀成自身核心资产，全面提升消费者洞察与供应链透明度。

林清轩打通了由前端到后端的各类数据接口，既包括内部天猫、小红书等电商数据，线下店铺数据、支付数据，也包括外部平台大数据。在后端，林清轩“云迁移”采购订单系统至数据中台，并采取开放式供应商招标模式，后端供应商的信息流透明化，实现降本增效。其次，在管理会员时，林清轩转型采用了线上和线下门店的全链条会员系统，更好地指导精准营销、产品开发。此外，数据中台赋能林清轩提升端到端供应链的可视化水平，得以监测库存、追踪产品生产到配送的全流程。林清轩亦持续优化自身的财务系统，实时跟踪销售、成本等数据，实现财务统计分析。

结语

回顾过去，中国特色平台发展模式的成功离不开政府、企业和平台各利益相关方的共同努力，而以阿里巴巴、百度为代表的独特平台发展模式标志着欣欣向荣、蓬勃发展的中国数字经济时代已经汹涌来临。

身处数字经济的浪潮之巅，我们观察发现，那些敢为人先、拥抱变化的企业已经做出积极探索，并收获了不菲的回报；尚在观望或仍未做出类似规划的企业，如果讷于行动、拒绝变化，则会错失数字化转型升级的最佳机遇。

值此承上启下的关键阶段，我们建议，企业方和平台方都应当在政府的引领下，“有所为，有所不为”，共同促进中国特色平台模式的良性和可持续发展。通过对自身发展提出更高要求，防范潜在风险，践行“四个专注”：专注于以资源聚合促进匹配效率；专注于挖掘并运用流动数据价值；专注于基于本土需求的科技创新；专注于提升运营端的各环节效率，从而更好地为中国数字经济的蓬勃发展贡献力量。

“积跬步以至千里”，为了将“更快、更准、更新”推向新高度，企业须清醒识别未来的“变与不变”并进一步深耕细作：

- 资源聚焦，持续做强长板，建立能够与平台携手共赢的核心能力
- 长袖善舞，充分借力平台资源聚合、数据价值、技术与运营双赋能，实现数字化转型跨越式发展
- 合纵连横，以灵活、开放的心态和机制，广泛连接资源与合作伙伴，构成和打造独具特点的专属生态

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致谢

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China Internet Report

How the platform business model is powering China's digital economy.

AliResearch 阿里研究院

Baidu 百度 发展研究中心

BAIN & COMPANY

Author remarks

Shu Li, Bain & Company

Partner, coleader of Greater China Technology, Media, and Telecommunications practices

To fully and efficiently maximize the advantages of the unique platform business model in China, in this report we propose three models of participation for enterprises: partnership, hybrid, and self-build. Leading enterprises make choices based on their own characteristics and their holistic digital transformation strategy, and also refine their path to digitalization with four key changes in the operating model regarding the organization, operating mechanisms, talent, and data. Looking forward, we believe that companies and platforms, supported by government, will continuously strengthen their self-discipline while enhancing collaboration to derive mutual benefits and further contribute to the healthy and sustainable growth of the digital economy.

Jason Ding, Bain & Company

Senior partner, President of Greater China Digital Research Institute

The unique platform business model in China has empowered companies to win in the digital era with its four attributes, namely resource aggregation, maximizing data value, technology enablement, and operational enablement. The development of the unique platform business model is essentially driven by the active participation of Chinese consumers, government, companies, and platforms. However, the platform business model also brought potential risks that cannot be ignored. To address this, the anti-monopoly policy recently implemented by the Chinese government improves the odds that risks can be prevented to support sustainable development.

Qingchun Zhang, AliResearch

Director of Digital Business Research Center, Project Director of New Business School

Since the outbreak of Covid-19 in 2020, China has worked to contain the pandemic and lead consumption and economic recovery. On top of the strengthening governance and disease prevention system of the government, Chinese companies have also played their role with digital capabilities to survive and thrive.

In our search for the "secret code" of growth powering the outperformers in China, our research has found that the unique platform business model in China is playing an instrumental role. Winners are those who emulate platform thinking and harness resources and tools of platforms to build their operation muscle and grow their own business. This report has provided a panoramic view by answering the why, what, and how of the unique business model in China to decipher the characteristics and logic behind the China digital economy.

Linli Huang, Baidu Development Research Center

Director

Against the devastating Covid-19 pandemic, China was the only major economy that recorded positive economic growth last year. One of the key drivers is digital development, consisting of two mutually reinforcing trends: industrialization of the digital industry and digitalization of industries. This report has looked deep into the digital bellwethers in various industries—including auto, technology and media, consumer goods, retail, and financial services—to identify the secret ingredient of the unique platform business model in China, with deep insights into its distinctive attributes, fundamental drivers, and participation models. In the future development of digitalization across industries, the platform model is expected to play an increasing role by providing advanced technologies; aggregating resources; maximizing the value of data; and boosting operational efficiency.

Contents

Executive summary

Since 2008, China's digital economy has experienced years of booming development driven by the rapid evolution of mobile Internet technology, government-led investments, and digital-savvy consumers.

According to the China Academy of Information and Communications Technology (CAICT), China's digital economy grew at a compound annual growth rate of 20% from 2008 to 2019. This digital economy has become one of the largest in the world, hitting RMB 31 trillion and ranking second in the world in 2018.

Covid-19 caused digitalization to be taken up a notch in China. Bain's latest study shows that Covid-19 has accelerated digitalization in China by driving the creation and adoption of digital applications in areas such as online shopping, online education, and remote working.

Covid-19 caused digitalization to be taken up a notch in China. Bain's latest study shows that Covid-19 has accelerated digitalization in China by driving the creation and adoption of digital applications.

Facing such a shifting digital landscape, what key success factors (KSFs) have digital champions in China demonstrated? What else has shaped them? Why has China, specifically, experienced such significant growth? How should Chinese companies use the platform business model to ride this digital wave in China?

At this critical transformational juncture, Bain & Company, AliResearch, and Baidu Development Research Center worked together—using Bain & Company's deep management consulting expertise across industries and the vast case libraries of Alibaba and Baidu—to identify three common KSFs that digital champions in China have demonstrated: speed, personalization, and innovation.

We have gone a step further to identify the unique platform business model in China as the secret behind the digital transformation driven by the above KSFs. This unique platform business model is defined by four attributes that help companies lead in digitalization: resource aggregation, maximizing data value, technology enablement, and operational enablement.

That led us to a fundamental question: Why is the unique platform business model so prevalent in China? Our research points to four major reasons. First, the government has laid a foundation with investment in digital infrastructure and structural reforms on both the supply and demand sides. Second, China has a digital-savvy consumer base that is relatively more tolerant of data sharing and

utilization, which has helped create large databases and use cases that accelerate digitalization. Third, companies distressed by highly fragmented supply and demand resources or less-developed technology and operational capabilities have sought external support to solve those challenges. Lastly, platform players (mainly Internet giants) with the willingness and capabilities have emerged as enablers to help companies break through bottlenecks.

To get the most out of the unique platform business model in China, we advise companies to make the right choice based on their characteristics and overall digital transformation planning. In practice, we have observed three participation models: partnership, hybrid, and self-build, each with successful examples. After picking the right participation model, leading companies refine their path to digitalization by kicking off changes to four key areas of their operating model: their organization; operating mechanisms; talent, leadership and culture; and tech systems and data.

Looking ahead, the changing business environment has brought more opportunities for the unique platform business model in China as well as stretch goals for all stakeholders.

Looking ahead, the changing business environment has brought more opportunities for the unique platform business model in China as well as stretch goals for all stakeholders.

Looking ahead, the changing business environment has brought more opportunities for the unique platform business model in China as well as stretch goals for all stakeholders. Meanwhile, the Chinese government is also focusing more robustly on the development of platforms. China's 14th Five-Year Plan emphasizes technology innovation while advocating demand-side reform to unleash consumer demand. In addition, China is refining policies and regulations to equip the platform business model with supervision, aiming to uphold both vigor and order.

Now is the time for companies and platforms to seize their opportunity in this growing digital economy. Those that emerge as winners in this next era will set stretch goals for becoming even faster, more personalized, and more innovative to achieve healthy and sustainable development.

Three key success factors of digital champions in China

From fragmentation to supply aggregation, from homogenization to micro-segmentation, from a single- to a multi-pronged approach, our study has found that digital leaders in China share three key success factors (KSFs) in the wave of digitalization: speed, personalization, and innovation *(see Figure 1)*.

Speed

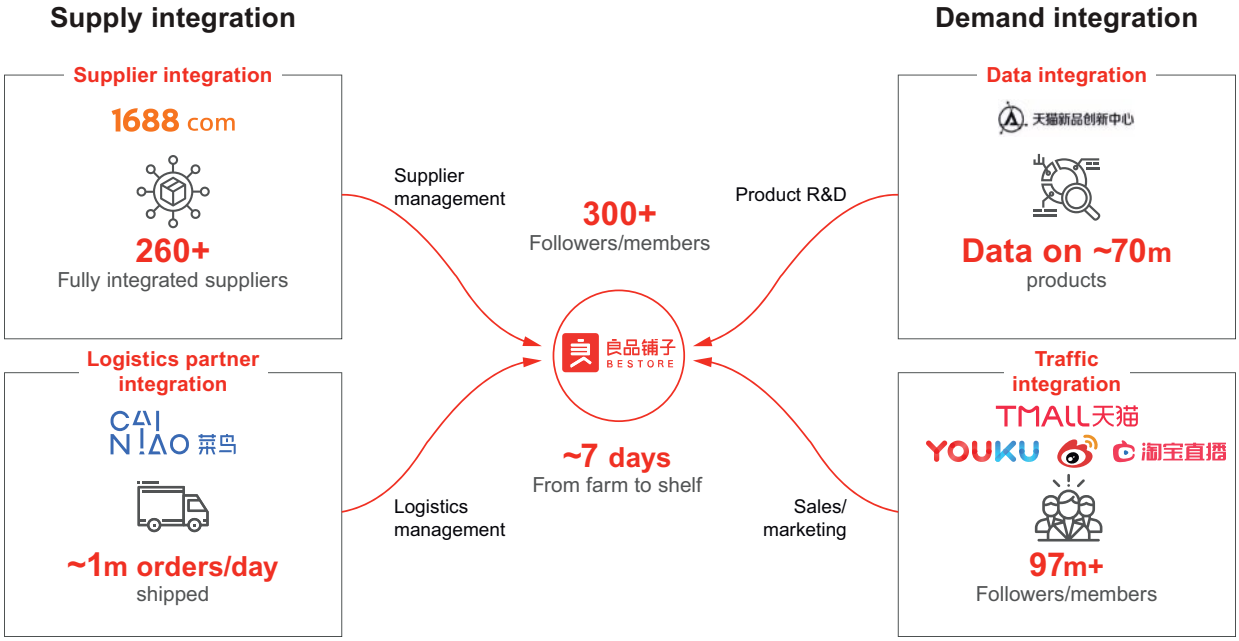
The digital economy and the consumer products industry are intertwined. As the so-called "new oil" in the digital era, data creates momentum for companies to achieve record growth.

Take the snack food industry. On top of its low barriers to entry and high level of homogeneity, it also faces challenges in supply chain integration given the extended value chain. As competition heats up, in order to overcome supply chain fragmentation, Bestore has built a strategic partnership with Alibaba to aggregate its fragmented supplier and customer bases. More than 260 suppliers, along with a handful of logistics partners, are now fully integrated to handle more than 1 million orders per day, reducing end-to-end supply chain response time by 50% and delivering from farm to shelf within about seven days. On the demand side, about 70 million product data points are fed upstream to guide product R&D and innovation. In terms of sales and marketing, Bestore focuses its efforts on online channels

Figure 1: China's digital leaders possess three KSFs: speed, personalization, and innovation

Fast	1 Fast response	良品铺子 BESTORE	Shortened product development cycle to one-third the length of industry average and cut end-to-end supply chain response time in half
Personalized	2 Personalized marketing	L'ORÉAL PARIS	Marketing to micro-segments of customers helped achieve a click-through rate 50%-100% above industry average
	3 Personalized offering	蜻蜓FM	Personalized audio streaming features helped increase revenue from paying members by 300%
Innovative	4 Innovative product	金龙客车 KING LONG	First company to mass produce level 4 driverless buses, which have had no accidents in two years of operating in a closed environment
	5 Innovative service		Soon after launching mobile ordering and delivery services, online business reached 26% of total sales in China
	6 Innovative business model	NIO	NIO acquired 69% of its new customers via customer referral in Q1 2020, thanks to its car dealership model aimed at engaging users across the product life cycle

Figure 2: Alibaba's aggregation of highly fragmented supply and demand enables Bestore to achieve faster product development



Sources: Expert interviews; Bain analysis

including Taobao Live, Youku, Sina Weibo, and Tmall's flagship store. The brand now counts more than 97 million followers or members thanks to traffic aggregation.

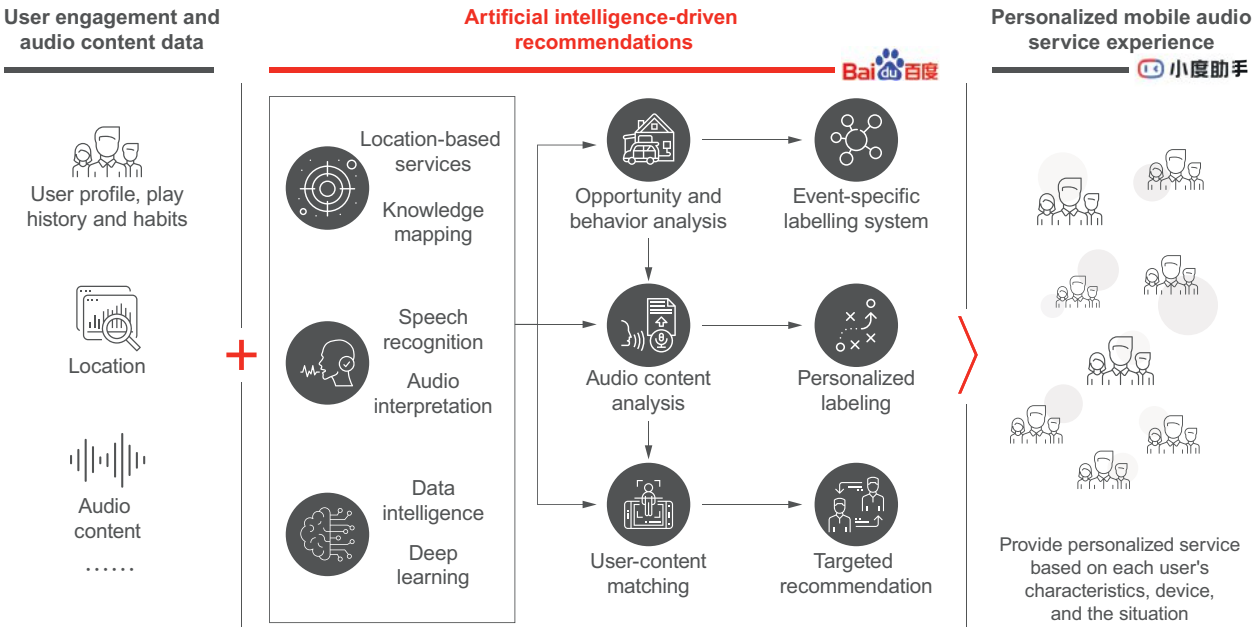
A powerful front end would not be possible without robust support from the back end. With the help of Alibaba's tools, Bestore aggregated its fragmented supply and demand bases. As a result, Bestore shortened its product development cycle to one-third of the industry average. It now launches more than 300 products per year *(see Figure 2)*.

Personalization

As consumer demand has become increasingly personalized in recent years, companies are facing the imperative to provide individualized products and services for different customer segments.

Research shows that data and technology help companies achieve precision marketing across different customer segments. Consider beauty giant L'Oréal, for example. First, it combines Alibaba's online browsing, consumption, payment, and feedback data on beauty products with L'Oréal's target consumer and operations data, as well as information derived from more than 30,000 websites every day. Then, the company generates insights about consumers to identify eight customer segments based on characteristics such as demographics, interests, social behaviors, online shopping behaviors, and offline transactions. Finally, L'Oréal splits content into elements useful for individualized marketing.

Figure 3: Technology from partners such as Baidu helps Qingting FM offer individualized audio streaming to users



Sources: Expert interviews; Bain analysis

Micro-segmentation helps companies better target consumers. Supported by the data accumulated in the Alibaba ecosystem, L'Oréal deploys individualized marketing to micro-segments of customers. This helped the company achieve a click-through rate that is 50% to 100% higher than the industry average, boosting sales through conversion rates that are about three times higher than before.

Internet radio company Qingting FM is also committed to individualized product offerings. For example, Qingting FM uses Baidu Development Research Center's technology to help it collect user engagement data (e.g., user profile, play history, habits, and location). It has also used Baidu Development Research Center's artificial intelligence (AI)-driven intelligent recommendation technologies, such as speech recognition and knowledge mapping, to establish an occasion-specific labeling system and match users with relevant content. For example, if a user is listening to Qingting FM in the car, the company will push broadcasts of road condition information based on the car's real-time location.

The idea is to know your customers even better than they know themselves. Qingting FM offers individualized audio streaming to 130 million monthly active users, boosting users' willingness to pay and increasing revenue from paid members by 300% over the last two years *(see Figure 3)*.

Innovation

Digital transformation means more than just technological iterations for companies. More important, technology can play a role in reshaping existing businesses with innovative products, services, and business models to create new growth opportunities.

In this wave of digitalization, traditional manufacturers are among those winning with innovation. For example, King Long built a product platform powered by local technologies. It has coupled its automotive manufacturing experience with Baidu Development Research Center's Apollo autonomous driving and AI technology, sensors, and HD maps, as well as support from Baidu Development Research Center's engineering team. Moving forward, both parties will continue their exploration and iterations of autonomous driving. On the one hand, King Long aims to speed up iteration of existing product features to support multiple operating models, including buses and taxis, to address different scenarios. On the other hand, the company plans to combine internal telematics data with external technology capabilities to transform from a traditional car maker into an integrated solution provider offering a variety of services to business customers.

Digital transformation means more than just technological iterations for companies. More important, technology can play a role in reshaping existing businesses with innovative products, services, and business models to create new growth opportunities.

With the help of Baidu Development Research Center's autonomous driving technology, King Long has become the first in the world to mass-produce level-4 driverless buses. In two years, its fleet has logged 100,000 kilometers driving in a closed environment and carried 100,000 passengers with zero accidents so far.

We have also seen NIO and Starbucks demonstrate innovation. Starbucks China joined forces with Alibaba to enhance Starbucks Delivers mobile delivery and Starbucks Now mobile order and pay services, leveraging the latter's capabilities across the value chain from traffic generation to service enhancement. Mobile ordering sales soared to 26% of Starbucks China's business for the quarter ending September 2020. During this process, Starbucks connected to new platforms (including Ele.me, Koubei, Fliggy, Amap, Alipay, and Taobao), created new ordering options for customers, and expanded customer touchpoints, while delivering a more seamless online-to-offline experience for its customers.

In its 21-year journey in China, Starbucks has upheld its passion for coffee and commitment to quality and service. The company has worked with strategic partners to drive continuous innovation and elevation of the customer experience.

Its commitment to quality is reflected in the creation of Starbucks Delivers, an online delivery service launched in September 2018. The company designed a delivery-specific menu, customization options, and packaging to bring the same in-store coffee quality and consistency to Starbucks delivery customers. Ele.me created a hot-and-cold delivery system to maintain optimal beverage temperature during

delivery. To minimize delivery time, Ele.me provides designated riders to Starbucks stores and uses its smart dispatching system to optimize routing for each order based on real-time data and analytics.

In May 2019, Starbucks launched its Starbucks Now service, allowing customers to place orders online and pick them up at a Starbucks store. An uplifting message is given for each order as a "secret code" for collection, a touch that often brightens customers' day and adds a moment of connection with Starbucks employees. In July 2020, the Starbucks Now service expanded from the Starbucks app to multiple platforms including Alipay, Taobao, Koubei, and Amap in an effort to offer customers greater convenience. In addition, a new function allowed customers to order ahead and set a specific time for picking up their orders.

In July 2019, the first Starbucks Now store opened in Beijing, offering a new retail format that integrates the chain's physical and digital touchpoints. Combining the traditional Starbucks café environment with Starbucks Now and Starbucks Delivers, the streamlined experience aims to bring more convenience to customers and delivery riders. The concept subsequently rolled out to more cities including Shenzhen, Shanghai, Guangzhou, Tianjin, Hangzhou, Chengdu, Nanjing, and Wuhan.

By the end of September 2020, Starbucks Delivers was available in 84% of Starbucks stores on the Chinese mainland and Starbucks Now services were available in 98%.

Unlike the traditional car dealership model that relies on a single touchpoint, NIO's approach spans the car services value chain in an effort to enhance user engagement across the product life cycle. The NIO app is used as the hub to engage with users while the NIO community releases brand-related information to attract new users and generate traffic, all while offering financial service products to enhance the user experience. NIO Space, the company's physical showrooms, give consumers the opportunity to test-drive and purchase vehicles. In addition, the NIO Service Center program enables customers to purchase vehicle repair and battery-charging services on demand through the company's app, and NIO field technicians go to customers' locations to perform the work. Meanwhile, a variety of auto parts and derivatives are available in NIO's in-app shopping mall. Lastly, NIO House hosts events to engage with NIO customers, increasing user stickiness and lifetime value and enhancing operational enablement across the end-to-end value chain.

The secret ingredient: The unique platform business model in China and its four attributes

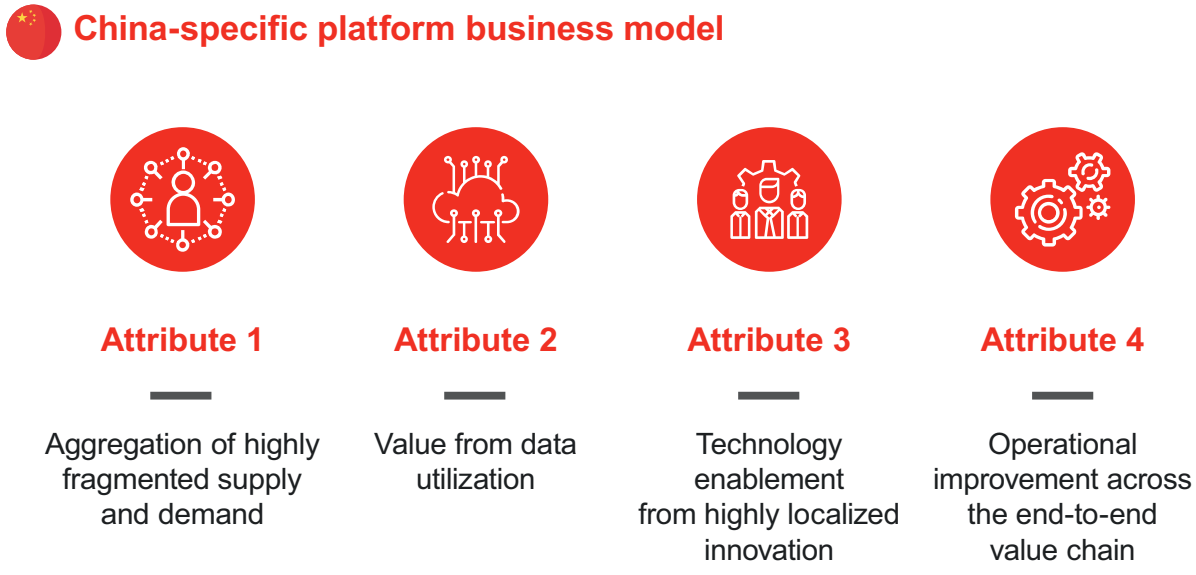
By delving into various examples across sectors, we have identified the unique platform business model in China as the secret behind the nation's fast digital transformation. The platform business model has four attributes *(see Figure 4)*.

Resource aggregation

Efficient supply and demand resource aggregation and matching has always been a priority for businesses. By pooling supply resources and matching with demand resources, companies can enhance overall operational capability and create more value. Therefore, the unique platform manages to pool and match scattered external resources of supply and demand in an open and inclusive way, including technology, products, services, and traffic.

For example, Bestore has partnered with Alibaba to help it aggregate a large number of suppliers and differentiated consumer demand to reinforce Bestore's competitiveness in data. Bestore has built a new end-to-end operating model that halves its response time and triples its speed of new product development.

Figure 4: The unique platform business model in China has four main attributes



Source: Bain & Company

Maximize data value

In the digital era, the unique platforms leverage user data to build end-to-end data interfaces and iterate technology to develop data tools that apply to multiple scenarios and maximize data value of two-way data flow.

L'Oréal is one example. Using Alibaba's platform to help aggregate large amounts of data, L'Oréal changed from a dovetailed approach to micro-segmentation to maximize data value and reach target customers with individualized marketing.

Technology enablement

In their efforts to transform and invest in the digital economy, the unique platforms have developed technology tailored to the local market while exporting these new technologies in forms that can lower barriers to innovation.

For example, Baidu Development Research Center's technology has helped Qingting FM offer individualized audio streaming to its 130 million monthly active users. Meanwhile, King Long has developed the world's first mass-produced level-4 driverless bus.

Operational efficiency

The unique platforms engage in end-to-end operations, on top of technology sharing, to offer integrated solutions and support execution.

For example, Starbucks' digital retail innovation initiatives include creating an integrated online and offline experience supported by Alibaba's capabilities across the value chain. NIO has built its own online community to embed innovation across the automotive value chain and scenarios.

Why in China: Four major reasons behind the success

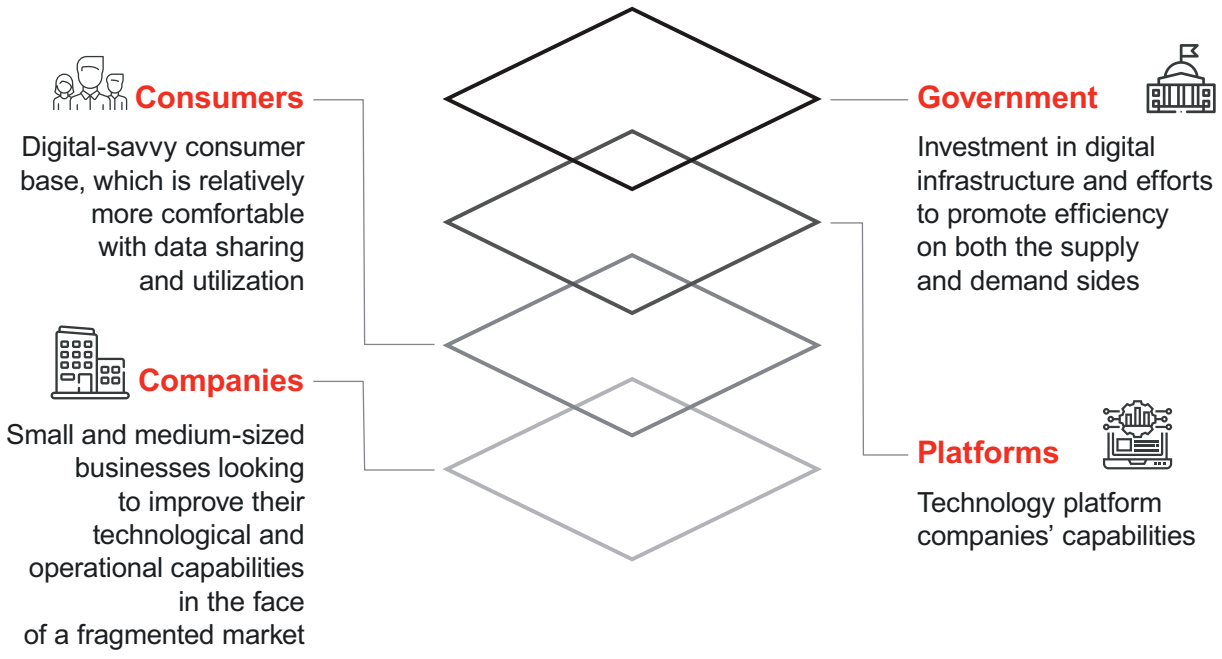
As we reviewed the digital transformation journey of digital champions across industries, we found that these companies derived value by combining their own resources with those of the external business environment and by forming partnerships with complementary unique platforms.

Our research has further zoomed in on the unique platform business model in China to identify four major reasons that shape it *(see Figure 5)*.

The government has invested in digital infrastructure and promoted efforts to boost efficiency on both the supply and demand sides. Sustainable growth needs a solid foundation. In recent years, the Chinese government has directed investment into digital infrastructure—including 5G, big data, and AI—to drive value creation from data utilization and technology enablement from highly localized innovation.

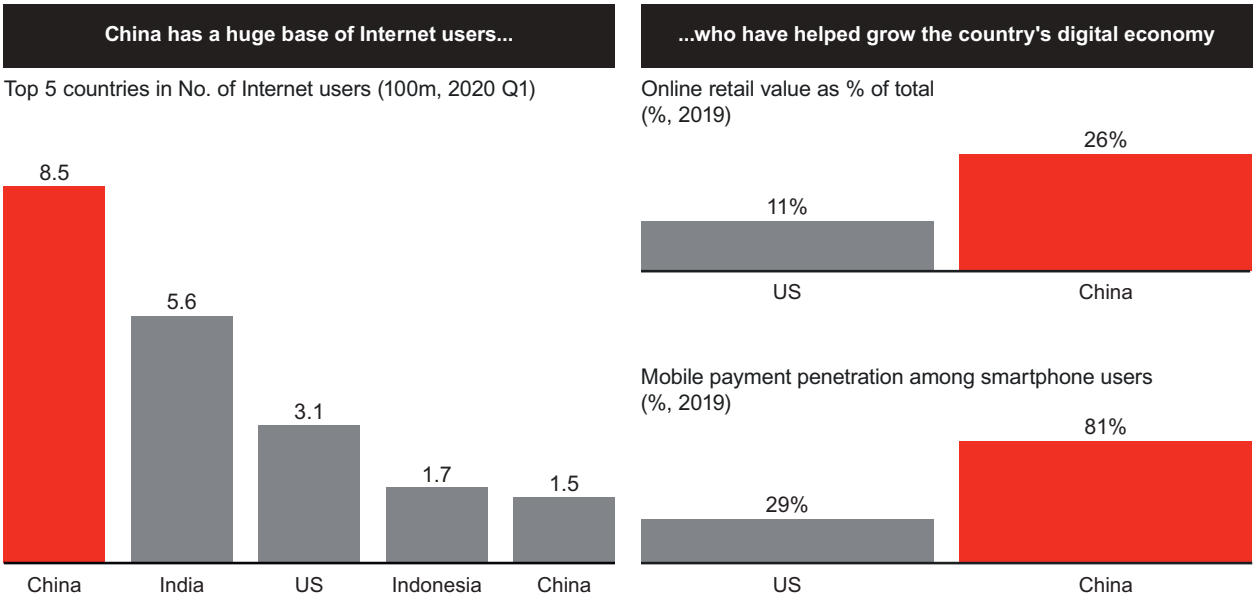
According to International Data Corporation (IDC) and our literature research, from 2016 to 2019 China built 140,000 5G base stations, deployed 1.19 million data center racks, and invested around RMB 320 billion in AI technology; it also achieved approximately 92% optical fiber penetration among broadband subscribers by the end of 2019. Notably, the Chinese government is doubling down on its investment in new infrastructure as a strategic priority for driving the digital economy. According to estimates, in 2020 China built 580,000 5G base stations, deployed 930,000 data center

Figure 5: Four major reasons shape the unique platform business model in China



Source: Bain & Company

Figure 6: China's digital-savvy consumer base creates opportunities for technology companies



Notes: Online retail value refers to the total retail value of products and services on public online transaction platforms, including tangible and intangible offerings (e.g., virtual product, service offering, etc.); as of October 2019; based on US data
Sources: Internet World Stats; National Bureau of Statistics of China; eMarketer

racks, invested about RMB 100 billion in AI technology, and achieved approximately 95% optical fiber penetration among broadband subscribers.

Meanwhile, the government has implemented structural reforms on both supply and demand to facilitate efficient resource aggregation.

China's digital-savvy consumer base is relatively more tolerant of data sharing. China has the world's largest Internet-user base, which creates value from data utilization and provides favorable conditions for the digital economy. Moreover, the government is taking steps to tighten regulation on data protection, which could help consumers feel more comfortable about data utilization and create new use cases for operational enablement across the end-to-end value chain *(see Figure 6)*.

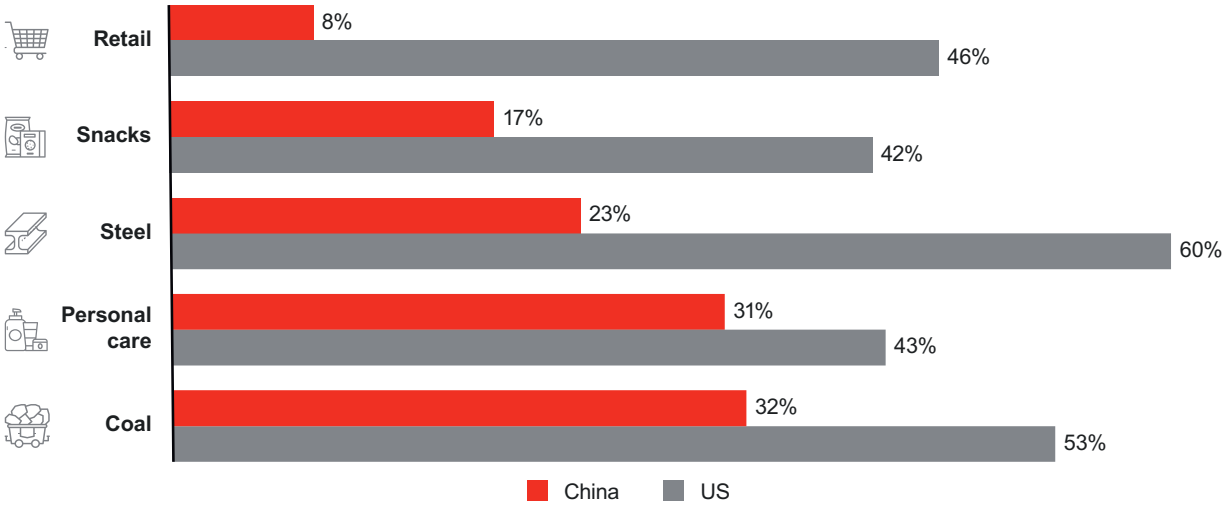
As of the first quarter of 2020, the number of Internet users in China hit 850 million; for comparison, India has 560 million Internet users and the US, 310 million. Another sign of Chinese consumers' digital-savviness is their pursuit of a convenient lifestyle made possible by innovative technology and Internet platforms. In 2019, China's rate of online retail sales was 2.4 times that of developed nations, while smartphone users in China used mobile payments 2.8 times more often than those in the developed world, according to the National Bureau of Statistics of China and eMarketer.

What's more, the government is getting more stringent about data management. Since 2016, China has promulgated a number of laws, such as the China Cybersecurity Law, which concerns the frame-

Figure 7: A fragmented supply chain and uneven demand present challenges to many Chinese companies

Fragmented supply

MS of Top 5 companies in sales (2018–19)



Notes: Market share in retail, snack and personal care sectors is based on 2019 sales, and market share for coal and iron sectors is based on 2018 production volume; in China, Shanghai has the highest disposable income and Gansu has the lowest
Sources: Euromonitor; NBS; analyst report; Wind; Coal China; S&P Global; Statista

work of the legal system and requirements for private data protection; the China Data Security Law (Draft), which concerns the fundamental rules of data security protection; and the Personal Information Protection Law of the PRC (Draft), which concerns personal information handling based on prior notification and consent. These ongoing efforts to improve the legal system could contribute to stronger consumer confidence in data utilization.

China's base of small and medium-sized businesses want to improve their technological and operational capabilities in the face of a fragmented market. While government support and potential market size growth in China have created a favorable external environment, Chinese companies—predominantly small and medium-sized businesses (SMEs)—still face daunting challenges. Most notably, many lack fundamental technology and operational capabilities and are struggling with highly fragmented supply and demand bases. Increasingly, these companies are turning to technology platforms to help them overcome these challenges.

- **Challenge 1: Aggregation of supply and demand.** On the supply side, Chinese companies, regardless of sector, have a more fragmented supply base than developed nations. In 2019, the combined market share of the top five companies by sales revenue in retail, snack, and personal care in China was lower than that of all three industries in developed nations *(see Figure 7)*. On the demand side, China's

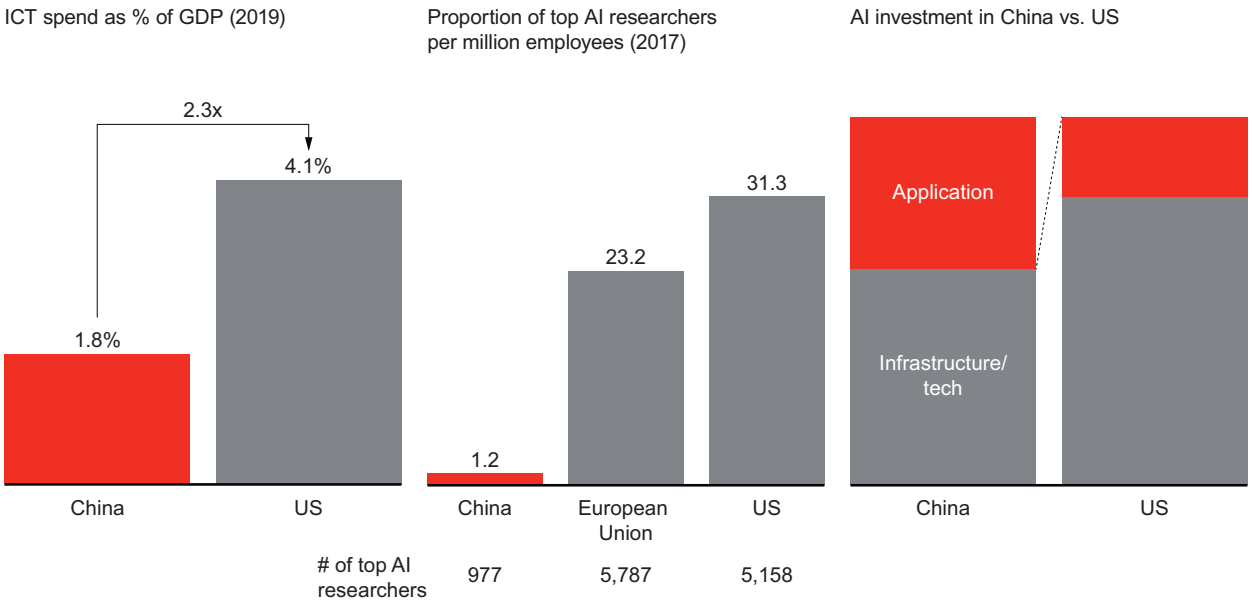
urban-rural income and regional income gaps are, respectively, two and three times wider than those of developed nations. Such an uneven income distribution has led to diversified demand.

Historically, offline channels have struggled to aggregate supply and demand. However, the unique platform business model in China could help solve these long-standing challenges. On the one hand, it provides companies with more options and better transparency to see the "big picture." On the other hand, it helps suppliers build scale and minimize investment in offline expansion for better cost and efficiency. On top of that, platforms can leverage intelligent algorithms to drive precise matching between supply and demand to boost efficiency.

- **Challenge 2: Technology capability gap.** Technology enablement is instrumental to building a digital economy. Chinese companies are increasingly looking for ways to improve their digital capabilities as the digital economy grows. In addition, compared with developed nations, companies in China are more dependent on technology enablement by external platforms due to limited information technology (IT) spending, an R&D talent shortage, and insufficient funding for fundamental technology development *(see Figure 8)*.

  Chinese companies invest less in IT; for example, they spent 1.8% of GDP on information and communication technology (ICT) in 2019 compared with 4.1% in developed nations. Talent is a precious, intangible asset for companies. However, in 2017 China had only 1.2 top AI researchers for every 1 million employees, far behind the level in developed nations. In terms of financing,

Figure 8: Many Chinese companies are suffering from gaps on IT capabilities



Notes: IT spending includes spending on hardware, software and IT services; infrastructure layer includes CPU and chip; tech layer includes natural language processing, computer vision and graphics and tech platforms; application layer includes machine learning application, intelligent drone, intelligent robot, ADAS, speech recognition; China vs US AI investment values are based on 2017 data
Sources: NBS; IDC; Tencent Research Institute; Center for Data Innovation

Chinese investors tend to prefer investment in the application technology to infrastructure technology. Therefore, many Chinese companies rely on platforms for fundamental technology innovation tailored to the local market.

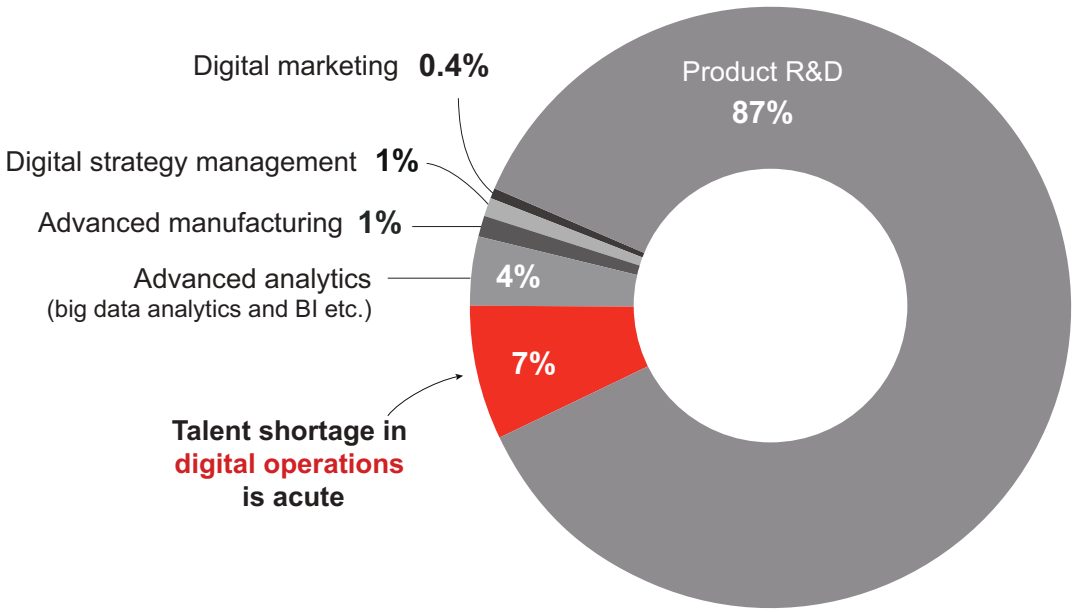
- **Challenge 3: Operational capability gap.** The majority of businesses in China are small and medium-sized. Take industrial companies, for example. In 2018, only 2% of industrial companies in China were large corporations generating more than RMB 400 million in annual operating revenue, according to the National Bureau of Statistics in China.

  Small and medium-sized companies face multiple challenges in their digital transformation, especially a talent shortage. The traditional talent development model is too slow to keep up with changes in companies, while externally hired digital employees are less familiar with companies' internal operations. Companies also face such challenges as high operational costs and poor transparency on operating data, resulting in an operations gap. This creates an opportunity for platforms to support operational enablement across the end-to-end value chain *(see Figure 9)*.

  Specifically, digital talent in China is mainly devoted to product R&D, which accounts for 87% of the total digital workforce. This leaves few in digital operations or digital strategy management, which account for 7% and 1%, respectively.

  This talent gap results in poor data operations within most small and medium-sized businesses. As we found in our study, these companies collect too little operational data to boost productivity

Figure 9: The majority of Chinese companies are SMEs with gaps on operating capability



Note: Large corporates refers to those with 400 million-plus RMB annual revenue
Sources: Tsinghua University School of Economics and Management; NBS; lit. research

with digital tactics. Furthermore, the fragmented value chain makes it even harder for companies to access external data from upstream and downstream.

Finally, subscale companies find it hard to achieve economies of scale in operation, which leads to higher operating costs.

Strong platform players are pushing the platform business model. Technology platform players (mainly Internet giants) have an important role in advancing China's digital ecosystem. Their scale, technology, and talent allow them to provide services to address companies' pain points in technology and operations.

Technology platform players (mainly Internet giants) have an important role in advancing China's digital ecosystem. Their scale, technology, and talent allow them to provide services to address companies' pain points in technology and operations.

First, platform players in China generally are large in scale, which helps partners and customers improve operational efficiency and reduce cost. Second, platforms in China have a solid talent pool. Internet platform companies have attracted nearly 50% of the market's digital talent with strong branding and compensation, according to the Tsinghua SEM Center for Internet Development and Governance. Third, Internet platform companies in China have an established track record of developing new technologies. Take AI patents as an example: In 2020, Baidu Development Research Center had the largest number of AI applications in China with 9,364 filings; Tencent ranked second with 8,450 filings.

Drawing on those three advantages, platforms in China can provide companies and consumers with digital services across the value chain, covering marketing, payments, logistics, and supply chain or production. For instance, Baidu Development Research Center provides companies with end-to-end digital marketing solutions such as traffic monetization and precision marketing with access to approximately 900 million Internet users. Alipay's mobile payment services have more than 1 billion annual active users. JD Logistics established a network that reaches more than 550,000 Chinese villages, with 92% of districts and counties and 83% of townships in mainland China receiving its 24-hour delivery service. Alibaba's algorithm-driven, digital supply chain optimization services help merchants increase the efficiency of their supply chains through data visualization, customer-product matching, inventory optimization, and store digitization.

On top of their digital capabilities, platforms in China are well positioned to take the data value, operational experience, and advanced technology they have accumulated while serving consumers and apply those assets to the enterprise business world and other new growth engines.

Since 2000, the consumer Internet has gradually moved from PCs to mobile devices, and the industrial Internet has also been growing. We expect that, as consumer-facing business plateaus, opportunities to serve enterprise and government customers will emerge with even bigger potential. Internet giants are scrambling to build a stronger presence with their business offerings through the introduction of cloud platforms (e.g., Alibaba Cloud, Tencent Cloud, Baidu Cloud, and JD Cloud) and big data platforms (e.g., Alibaba-backed MaxCompute, Baidu DI, Tencent Big Data, and JD Big Data). AI platforms, like Alibaba's ET BRAIN, Baidu AI Open Platform, Tencent AI, or JD AI Open Platform, accelerate adoption of AI use cases, while DingTalk and Tencent Meeting play a role in facilitating office collaboration.

Governments such as the EU and China are responding to the growth of platforms with new policies and regulations. Their approaches seem to indicate three overarching goals: define platforms' social responsibilities and legal obligations; develop regulatory measures aimed at promoting fair competition to maintain market order and foster local innovation; and work to protect user rights and access to safe products and services.

The Digital Market Act is aimed at fostering fair competition, healthy technology development, and local innovation.

In December, the European Commission released proposals for the Digital Services Act and Digital Market Act to impose obligations on gatekeeper online platforms. The Digital Services Act aims to protect user security and clarify platforms' obligations in the digital environment. It also defines the obligation of social media platforms to review and restrict illegal content, and it would create an accountability framework for Internet platforms. The Digital Market Act is aimed at fostering fair competition, healthy technology development, and local innovation. For example, the act would require platform companies to ensure fair competition between their own products and third-party products available on their platforms, and to safeguard the independence and security of competitor data to ensure fair competition between local companies and Internet giants.

The Chinese government is also making a regulatory push in this area. In August 2019, the State Council announced the Guiding Opinions on Promoting the Healthy Development of the Platform Economy, which highlighted the importance of the platform economy and signaled an intention to create a more level playing field that would promote disciplined and healthy platform development. In November 2020, China's State Administration for Market Regulation (SAMR) released the draft Anti-monopoly Guidelines for the Platform Economy Sector to guide the compliance of platform companies and try to strengthen the health and sustainability of the online economy.

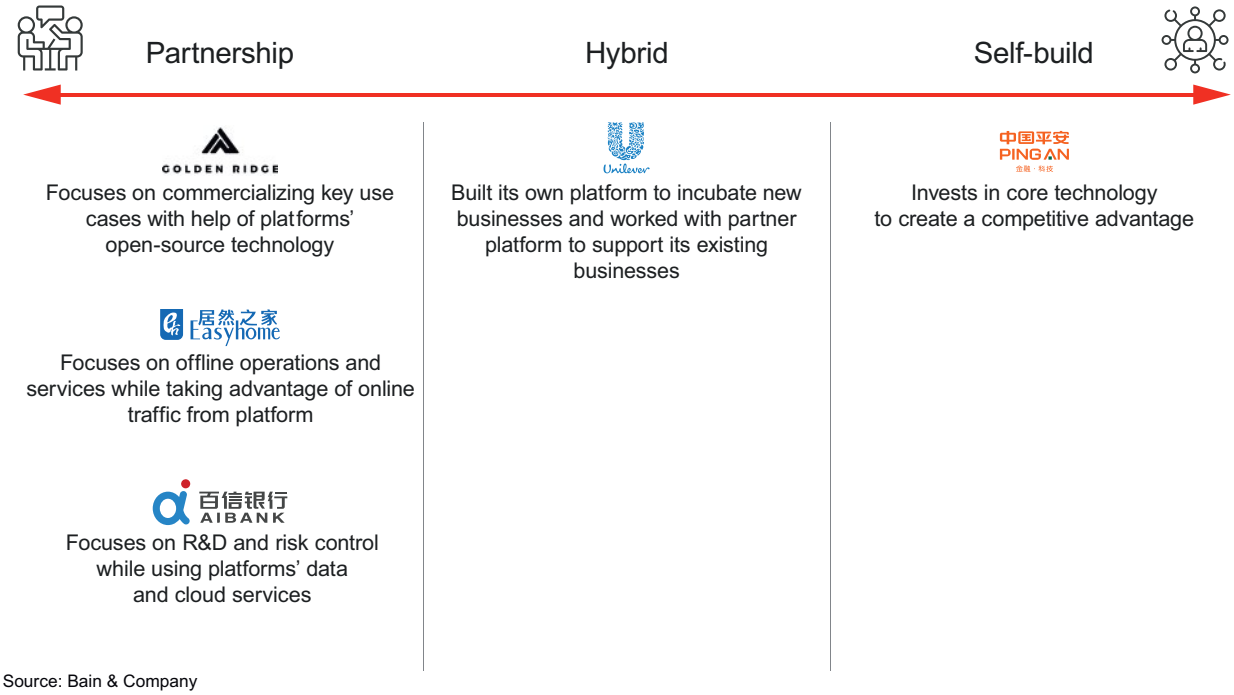
Implications: Three participation models and four key changes for enterprises to embrace

As the unique platform business model in China becomes more prevalent, it opens up new digital transformation opportunities for enterprises. We have seen that leading enterprises make differentiated choices based on their own characteristics and their overall digital transformation plans. In practice, we observed three participation models: partnership, hybrid, and self-build, each with successful examples *(see Figure 10)*. After picking the right participation model, companies can refine their path to digitalization by kicking off changes to four key areas of their operating model: their organization; operating mechanisms; talent, leadership and culture; and tech systems and data.

Participation model 1: Partnership

Small and medium-sized businesses with limited resources—or even larger enterprises with resources that complement platforms—can leverage external platforms' traffic, technology, and digital infrastructure to expand quickly and accelerate development of their digital capabilities. For example, CITIC aiBank focuses on R&D and risk control while leveraging platforms' data and cloud services to offer customized digital financial services based on use cases.

Figure 10: Leading companies choose the right platform participation model based on their own characteristics and digital transformation plans



Source: Bain & Company

For enterprises that follow this model, two key pieces of the strategy are focusing on the core elements of their value chain and leveraging the infrastructure that technology platforms deliver.

- **Case 1: Golden Ridge focuses on commercialization while using Baidu Development Research Center's open-source autonomous technology.** In 2018, the AI and robotics-focused company Golden Ridge took the lead in launching an autonomous sightseeing vehicle for tourists. It was the first low-speed, manned, autonomous vehicle in China to meet the vehicle standards of the China Automotive Engineering Research Institute.

  First, Golden Ridge developed a vision-centered multi-sensor that fused low-speed autonomous driving technology, chassis-by-wire, with a dual-electric engine and differential speed control, and Baidu Apollo's autonomous driving-technology solution. This approach reduced hardware costs by more than 70% and kept the cost-per-vehicle about 33% below competitors' costs, enabling Golden Ridge to achieve mass production. Finally, Golden Ridge used tools such as Baidu Brain and a smart voice platform to enhance human-computer interaction and continuously improve the product experience. In terms of commercialization, Golden Ridge has explored multiple-use cases such as the tourist sightseeing vehicle, scooters for healthcare centers, and customs inspection. It has begun to deploy the autonomous tourist sightseeing vehicle in a number of scenic spots.

- **Case 2: Easyhome focuses on offline store operations and services and uses Ali to drive online traffic.** Easyhome, the domestic giant of home furnishing, has expanded beyond offline chain stores into the online trading platform Tongchengzhan. The company pursued this digital transformation with the help of Alibaba's consumer traffic, data, and technology enablement capabilities.

  In practice, Easyhome clearly delineated the roles of its online and offline channels. Offline stores provide services such as design support, in-person product testing and selection, in-store purchasing, product shipping, and door-to-door home installation and maintenance. Online channels focus on attracting traffic. Based on this, Easyhome and Alibaba jointly launched Shejijia, a design platform for home decoration and furnishing, to connect supply and demand in a timelier manner. With precise location information and intelligent recommendations, offline stores are now synced as city stations through the online Tongchengzhan platform for more convenient online and offline purchases.

  In addition, Easyhome built a sales platform for smart home and household products, a sales platform for basic and supplementary decoration materials, and a platform for smart home decoration. It also provides services, including visible logistics and delivery and a door-to-door post-decoration service, to create a platform covering design, selection, and home decoration. The in-person experience is crucial for many consumers when purchasing furniture. Recognizing this, Easyhome leverages platforms' online resources and digital technologies to drive online-to-offline integration and make the end-to-end core home furnishing business more digital.

Participation model 2: Hybrid

Among large-scale enterprises that compete in relatively mature industries and have clear roles and responsibilities across the value chain, leading companies develop a refined digital strategy of building their own platforms. At the same time, many leaders also engage external platforms in order to realize mutual enablement, accelerate online sales growth, and accumulate user resources.

Regarding companies adopting this hybrid model, for startup businesses, enterprises could build their own platforms by aggregating supply and demand resources; for mature businesses, companies could work with external partners to accelerate growth.

- **Case: Consumer goods giant Unilever built its own platform for incubating innovation while using external platforms and big data to enrich its own ecosystem.** The two models are:

  Startup businesses under the hybrid model. Unilever launched an external incubator in China, Unilever Excubator, to incubate new China-focused brands that entrepreneurs outside the company developed. Unilever also built a service platform that connects more than 1,000 original device and equipment manufacturers and 100 internal and external brands. This platform provides transparent, symmetrical market information for faster price inquiry and product matching. The platform also provides incubated brands with services in finance, marketing, and innovation.

  For brands with high potential in Unilever Excubator, the company built a professional team with both internal and external experts in R&D, operations, and marketing, dedicated to providing point-to-point services and industry expertise for those brands.

  Through this self-built platform, Unilever deploys the supply and demand resources it has accumulated over the years to incubate new brands and enrich the company's ecosystem.

  Mature businesses under the hybrid model. To support its existing businesses, Unilever struck a strategic partnership with Tmall Innovation Center. The partnership deploys Unilever's in-house R&D capabilities with Tmall's consumer data to quickly assess market demand and develop products that meet it. Unilever also built a flexible supply chain with support from Tmall. The consumer feedback Tmall collected, along with estimated market demand from Tmall's trial sales, provide insights for Unilever to create and manufacture products on a "make-to-demand" basis.

Participation model 3: Self-build

It might make more sense for a conglomerate with solid funding and technology to establish its own platforms that leverage its industry insights and vertical integration capabilities. At the same time, leading companies push their own boundaries and access more diverse customer touchpoints to enhance their own platforms.

The leaders that choose this approach tend to double down on key resources and capabilities to build their own platform as a moat against the competition.

- **Case: Ping An Group digs into its core technology to build a moat.** Ping An Group emphasizes research and development in core technology fields and works to create financial, medical, travel, real estate, and infrastructure services powered by AI, big data, cloud computing, and other technologies.

  For example, Ping An Group set up an AI Institute to focus on the development and implementation of AI technologies that can be employed in multiple-use cases. In terms of big data, Ping An Technology built a platform that integrates underlying data-to-surface customer scenarios for life-cycle management with "one-stop" services. In terms of cloud technology, the company introduced Ping An Cloud in 2013 and launched a portfolio of infrastructure-, platform-, and software-as-a-service offerings to enable technology applications and vertical solutions.

  As Ping An Group invested in core technology verticals—including AI, big data, and cloud technologies—it has notched achievements in financial, medical, travel, real estate, and infrastructure services. Specifically, it ranks first in China with the most fintech patents in 2020. The company's patents are applied in its subsidiaries, including Ping An Property & Casualty Insurance, Ping An Life Insurance, and Ping An Bank. In the medical sector, Ping An won three championships at the International Symposium on Biomedical Imaging (ISBI) for AI-assisted medical imaging technology in 2019. This technology supports subsidiaries including Ping An Good Doctor, Ping An Wanjia Clinic, and Ping An HealthKonnect. The company transformed the AI-enabled Autohome from a content portal into an auto-service trading platform, and its market value has tripled since Ping An Group's acquisition. The company's core technology has also powered its real estate and infrastructure service solutions. Currently, its subsidiaries, including Ping An UCT, Ping An Fang, and China Merchants Ping An AMC, serve more than 95% of top-branded residences, enabling urban asset operations with tech. The company also launched Ping An Brain in Shenzhen, which CAICT selected as one of the Top 10 Smart City cases.

After picking the appropriate participation model, leading companies hone their operating model. They build a foundation and break through bottlenecks by making the following changes across these four dimensions: organizational positioning, operating mechanisms, talent management, and data management *(see Figure 11)*.

Organization: Empower digital teams with resources, autonomy, and decision rights to realize efficient resource allocation across supply and demand.

As mentioned above, a suitable platform can help an enterprise aggregate external supply and demand resources and improve supply chain efficiency. How an enterprise further brings into play the advantages of aggregated resources depends on organization management, which involves defining organizational positions, structure, powers, and responsibilities. Leading enterprises focus on the big picture by defining the blueprint for digital organization and, in practice, fully empowering digital businesses with resources and autonomy. This helps build a solid foundation for promoting the overall digital transformation.

Figure 11: Having picked their platform approach, leading companies sharpen their operating model with key changes across four dimensions

Source: Bain & Company

Take the example of Starbucks China. The company took a holistic approach in driving its digital transformation, building digital into the context of its overall organizational structure. In June 2019, Starbucks China transitioned to a new business structure with two distinct business units, Starbucks Retail and Digital Ventures, with the latter reporting directly to the Office of the Chairman and CEO; Digital Ventures was also tasked with engaging external platforms for future development. According to John Culver, group president of international, channel development, and global coffee and tea, this structure enables a more agile organization and helps balance the short-term needs of the business with Starbucks' long-term strategic priorities in China.

Digital Ventures focuses on driving incremental revenue by creating new customer demand and touchpoints. It has accelerated its digital innovation by embracing China's Internet ecosystem and partnering with some of China's leading technology giants to more effectively connect its products and services to meet emerging customer demand across various touchpoints.

For example, Starbucks Delivers serves online and group-buying customers, while Starbucks Now serves the needs of nearby online customers as well as offline customers looking for greater speed and convenience. Integration with external platforms—including Taobao, Alipay, Ele.me, Amap, and Koubei—enable access to acquire and serve new customer segments.

Operating mechanisms: Improving operating mechanisms with the help of platforms can result in operational enablement across the end-to-end value chain.

As the digital economy drives the transformation and upgrading of various industries, it requires enterprises to become more agile internally while also making external ecosystem partnerships nimbler and more open. This often involves collaboration with platforms to achieve operational enablement and boost efficiency across the end-to-end value chain.

As the digital economy drives the transformation and upgrading of various industries, it requires enterprises to become more agile internally while also making external ecosystem partnerships nimbler and more open.

For instance, King Long adopted a series of reforms to stimulate internal motivation and strengthen external ecosystem cooperation. Internally, in practice, King Long aims to break down functional silos by building cross-functional, nimble teams that cover vehicle design, manufacturing, use case design, quality control, and sales and marketing. King Long also set up a joint innovation center to attract external talent and build R&D capabilities to shorten its product launch time. Externally, for product development, King Long and Baidu Development Research Center formed a joint R&D team to develop a driverless car, taking less than two years from design to launch. This partnership continued with commercial, operations, and product iteration. For commercialization, King Long signed cooperation agreements with China Unicom and DTmobile to achieve 5G-enabled vehicle communications. In addition, King Long leverages ABB's fast-charging system for its electric buses, promoting the development of electric transportation.

Talent, leadership, and culture: Strengthen the talent development strategy to foster innovation.

Executives are well aware that talent is critical to any enterprise's success. To strengthen their workforces, leading enterprises redesign their digital talent skills and talent development strategy to match the company's talent mechanisms, leadership, and organizational culture. The goal is to better leverage tech enablement from localized innovation and maximize value from platforms' data.

Beginning in 2016, Walmart doubled down on its omnichannel strategy and accelerated digitalization, which led the company to invest in its talent and culture. Walmart redesigned its talent evaluation model based on the needs of its digital transformation and personalized training and development plans. First, it defined role-specific competency requirements. The company redesigned the role profile and competency model based on different positions, such as store managers and procurement officers. For store managers, the focus was on building their digital thinking capabilities and capacity to promote

innovations. The company also restructured the competency model for procurement officers from 25% for strategy, 40% for operation, and 35% for administration to 60% for strategy, 35% for operation, and 5% for administration.

In the era of the digital economy, Walmart also established a "3A model" specifically for talent assessment and identification, covering evaluation of employees' ability, agility, and aspiration. This model identifies employees' weaknesses and potential, aiming to cultivate open-minded thinking, effective collaboration, fast learning, and strong internal drive. Finally, Walmart launched its first mobile learning community, Woketang, in China, which covers modules such as leadership, role competency, and digital skills. The company also adopted diversified, gamified, and scenario-based mobile learning methods to facilitate employees' self-development. In addition, Walmart has sought to create a culture that emphasizes the Founder's Mentality®. For example, company leaders organize face-to-face sharing of the digital transformation strategy with frontline staff to enhance their sense of ownership, and leaders delegate more tasks to create opportunities for employees to practice the Founder's Mentality and respond to digital changes in the market. In this way, Walmart has quickly responded to the market's digital innovations, allowed employees to embrace digitalization, and promoted the efficient transformation of the enterprise.

Tech systems and data: Create an exclusive data middle platform and utilize valuable external data.

With the emergence of massive amounts of data, more and more enterprises are contemplating how to break down data silos and process different data obtained through various channels to generate more value. The data middle platform was developed to help overcome this obstacle. As a product born from the advancement of China's digital economy, the data middle platform has played an increasingly useful role in the growth of enterprises.

For example, Forest Cabin, a domestic cosmetics company, fully moved its IT systems to Alibaba Cloud and built an exclusive middle platform. Leveraging technical systems and data to empower its business, the company translated external data into its own core asset, deepened consumer insights, and enhanced supply chain transparency.

Forest Cabin has connected data from the front office to the back office, including internal data from brand-owned e-commerce accounts such as Tmall flagship stores and Xiaohongshu accounts, offline store data, payment data, and external platform data. In the back office, Forest Cabin migrated the procurement order system to the data middle platform in the cloud and adopted an open tender process to make supplier information flow more transparently. This has decreased costs and increased efficiency. For membership management, Forest Cabin built a membership system integrating online (Tmall) and offline (stores) data to better guide individualized marketing and product development. In addition, the data middle platform visualizes the end-to-end supply chain to help monitor inventory levels and track products from creation to delivery. Forest Cabin also works to continuously improve its finance and accounting system by tracking real-time sales and cost data for analysis.

Conclusion

Looking back, the joint efforts of government, enterprises, and platforms have driven the success of the unique platform business model in China. The advancement of this platform business model plays a role in the growth of China's digital economy.

We discovered that companies bold enough to embrace changes in this particular era of the digital economy have already undertaken active exploration with positive results. Those that hesitate or fail to make a plan risk missing the window for digital transformation.

The companies that lead the way will succeed by defining what to change and what to keep, and by taking a more sophisticated approach to become faster, more personalized, and more innovative.

At this critical stage, we recommend that enterprises and platforms pay attention to potential pitfalls, set ground rules, and establish guardrails to contribute to the healthy, sustainable development of the unique platform business model in China. In practice, leaders set higher goals for development and work to prevent or minimize potential risks. They also focus on four areas: aggregating supply and demand; utilizing data to create value; tailoring technology innovation to the local market; and improving operational efficiency.

The companies that lead the way will succeed by defining what to change and what to keep, and by taking a more sophisticated approach to become faster, more personalized, and more innovative.

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Acknowledgments

This report is a joint effort of AliResearch, Baidu Development Research Center, and Bain & Company. The authors extend gratitude to all who contributed to it, including Ken Lin, Cheng Peng, Xingyu Hao, Zhou Zhang, Liang Zhang, Sui Meng, Lizhi Zhang, Yi Zhu, Chengli Lou, Yiyang Chang, Ziqian Lin, Olivia Wang, Jessica Sun, Pinky He, Jasmine Zhao, Rachel Qiu, Hunter Zhu, Rena Gu, Cathy Li, Huimin Song, and Jenny Zhang.

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