Explore a Better Digital Life

2018 Huawei Mobile Services White Paper
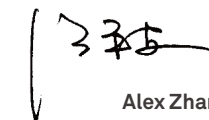
HUAWEI

DIGIX

HUAWEI

Explore the Future of Our Smart World

In 2018, Huawei Mobile Services, along with more than 500 million users and 560,000 registered developers worldwide, witnessed "The Smart Revolution of our Digital Life".

Mobile Internet has developed rapidly in recent years. With the continuous innovation of hardware technology and AI capabilities, driven by the synergy of "Chipset-Device-Cloud", mobile phones is becoming the major portal to every digital experience and full-scenario smart life. The full-scenario smart life experience in the future is not an App itself, but more natural interactions and instant access. Huawei Mobile Services provides Huawei device users a range of full-scenario and high-quality intelligent experience in smart home, health and fitness, mobile office, easy travel, and entertainment.

In today's smart era, it is necessary to give phones the full play of the mobile Internet hub and continuously improve users experience. Huawei Mobile Services opens up its own capabilities, and provides billions of resources to encourage innovation through the "Shining-Star Program", focusing on AI, AR/VR, IoT, and instant access. Through initiatives such as talent training, development support, innovation support, marketing resource assistance, and preferential cloud infrastructure resources, Huawei creates a full-scenario smart mobile services ecosystem. It accelerates the digitization of the physical world and makes the digital world smarter, realizes the perception, interconnection and smartness of everything.

The future of smart life is upon us, and the innovation of mobile Internet technology and experience is becoming the key to users to access to smart life. Adhering to a consumer-centric philosophy, Huawei Mobile Services together with global outstanding partners and developers will innovate and constantly explore the future of our better digital world!

Alex Zhang

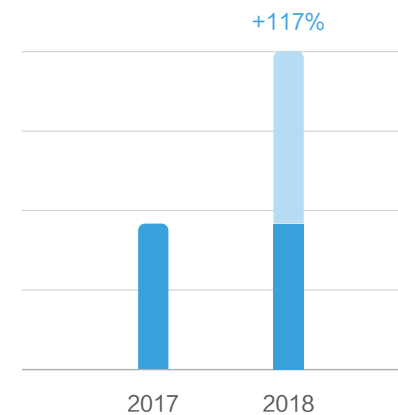President, Cloud Service, Huawei Consumer Business Group
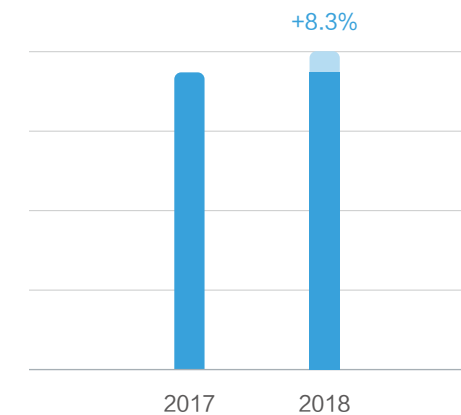
500,000,000

China · Outside China

Number of global Huawei Mobile Services users in 2018

In 2018, the number of monthly active users for Huawei Mobile Services reached 262 million. Young adult users activity continuously improves.
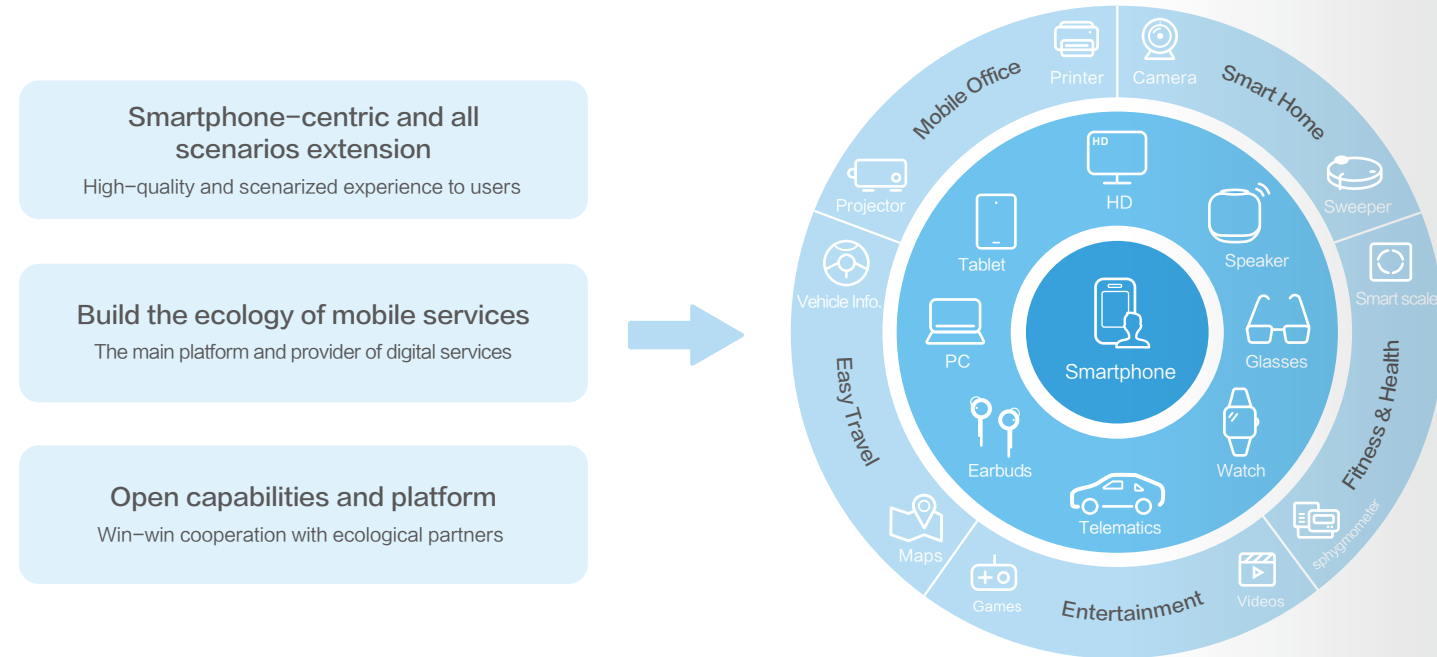
Global monthly active users
increased by **117%**

+117%

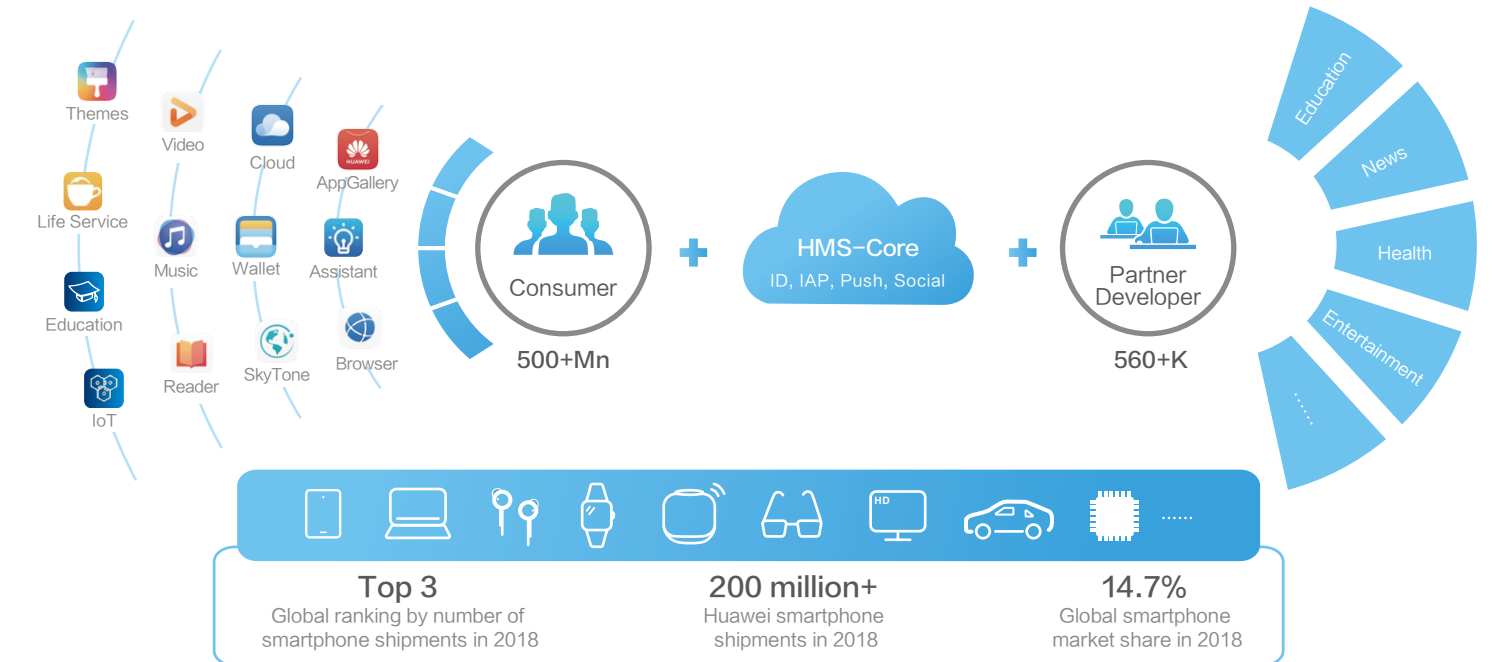2017 · 2018

Young adult (18−34 years old) users
activity increased by **8.3%**

+8.3%

2017 · 2018

The era of a fully-connected intelligent world in all scenarios is coming.

Smartphone-centric and all scenarios extension
High-quality and scenarized experience to users

Build the ecology of mobile services
The main platform and provider of digital services

Open capabilities and platform
Win-win cooperation with ecological partners

Huawei Mobile Services offers high-quality and intelligent digital life experience in all scenarios.

Themes
Video
Cloud
AppGallery
Life Service
Music
Wallet
Assistant
Education
Reader
SkyTone
Browser
IoT

Consumer
500+Mn

HMS-Core
ID, IAP, Push, Social

Partner Developer
560+K

Education
News
Health
Entertainment

Top 3
Global ranking by number of smartphone shipments in 2018

200 million+
Huawei smartphone shipments in 2018

14.7%
Global smartphone market share in 2018

GDPR   vBSIMM   EuroPriSe   CSA STAR   PCI DSS Certified

Huawei Mobile Services established three regional centers and 15 data centers worldwide. Huawei Global Cloud Operations Center (GCOC) reached the international industry standard. By the end of 2018, 21 businesses were launched in the market outside China, of which 139 countries and regions were served by HUAWEI AppGallery, and HUAWEI IAP has supported in 135 countries and regions.

10 Key Findings of the Better Digital Life

1 Huawei Mobile Services users prefer to the same brand when changing a new smartphone.

Users habits, accumulation of digital assets and membership have positive impacts on users stickiness.

2 Safe to use, easy to record and cherish the beauty of life has become users' habits.

The number of users who use HUAWEI Cloud backup to restore data increased by 506%.

3 Users spend more to cultivate their knowledges. "Knowledge payment" has grown from niche to mainstream.

The average duration of daily reading sessions of HUAWEI Reader users increased by 15.3%, and the number of paying users increased by 244.4%. Average payment amounts for the knowledge channel of HUAWEI Video increased by 178.2%.

4 Users pay more attention to high-quality contents of audio, video, and picture.

High-quality audio sources, such as HUAWEI Music HQ/SQ/HiFi, increase playback volume steadily. The accumulated playback volume of Huawei's high-quality video source (4K+HDR) increased by 80%. The number of paying users in HUAWEI Themes increased by 172%.

5 Users are fond of both fresh and classic contents.

A new round of nostalgia and fresh things were raised among the generation after 1980s and 1990s. Classic publications, films and videos, and classic songs were paid special attention to.

6 Environment-friendly, safe, and convenient self-service travel has become fashionable.

Huawei users can use SkyTone to enjoy mobile Internet data in 80+ countries and regions, and enjoy 4G high-speed in 60+ countries and regions worldwide. Huawei Pay users can travel in 160+ cities nationwide, and consume at 17+ million POS machines.

7 "New lazy lifestyle" has become popular for users to enjoy smart and convenient services.

The number of HUAWEI Life Service users increased by 41.5%, and the HUAWEI Assistant is woken up 2.9 times per user per day.

8 Developers focus on innovation and entrust platform partners with global service capabilities.

HUAWEI Developer Alliance has released 47 open capabilities and services, and the number of registered developers has increased to 560,000. Developer revenue has increased by 100% and 120+ Apps are supported by the Shining-Star program.

9 Partners and developers are more interested in Huawei's open capabilities in AI and AR area.

Developers invoke Huawei's open capabilities, and the number of integrated Apps has increased by 60%. The usage of AI and AR capabilities has also increased significantly.

10 The ecological development of "Quick Apps" gained developers' optimism, and it shows a rapid growth trend.
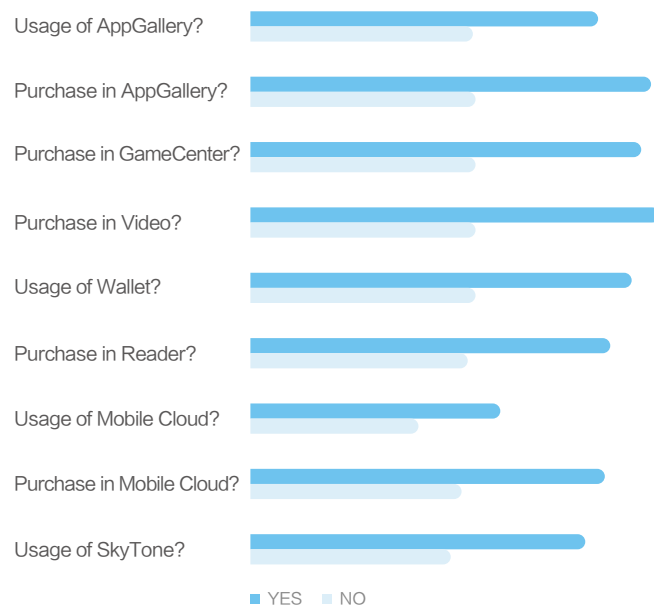
The number of Quick Apps uploaded through HUAWEI Developer Alliance increased by 1500%. 1650+ partners in HUAWEI AppGallery have accessed Quick Apps.
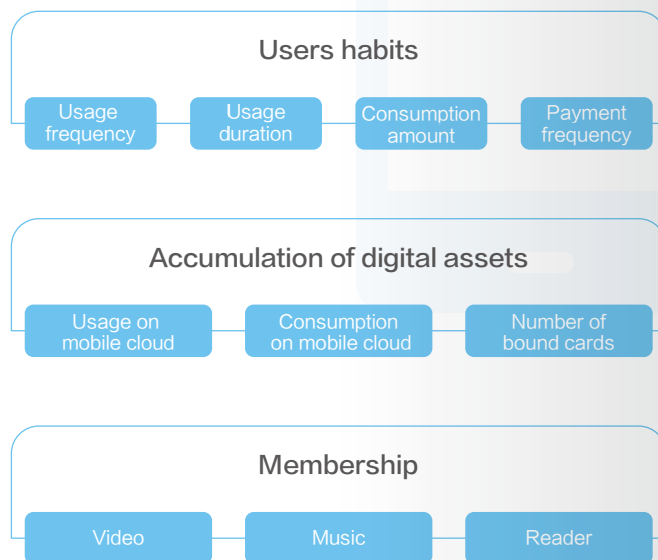
1 Huawei Mobile Services users prefer to the same brand when changing a new smartphone.

The following usage habits have a significant impact on users' choice when changing a new smartphone.

Usage of AppGallery?
Purchase in AppGallery?
Purchase in GameCenter?
Purchase in Video?
Usage of Wallet?
Purchase in Reader?
Usage of Mobile Cloud?
Purchase in Mobile Cloud?
Usage of SkyTone?

■ YES ■ NO

Users habits, accumulation of digital assets and membership have positive impacts on their stickiness.

Users habits

| Usage frequency | Usage duration | Consumption amount | Payment frequency |

Accumulation of digital assets

| Usage on mobile cloud | Consumption on mobile cloud | Number of bound cards |

Membership

| Video | Music | Reader |

2 Safe to use, easy to record and cherish the beauty of life has become users' habits.

Total storage capacity of HUAWEI Cloud Gallery for video and image increased by **107%**

+107%

2017   2018
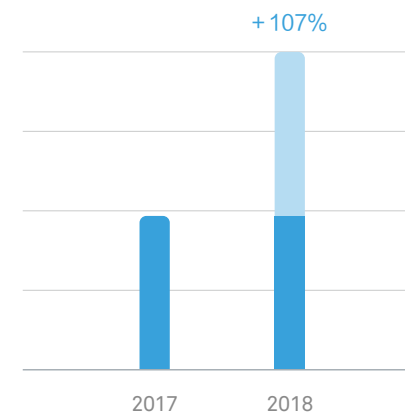
In HUAWEI Cloud Gallery, video storage accounts for **43%**, and image storage accounts for **57%**

Video 43%

Image 57%
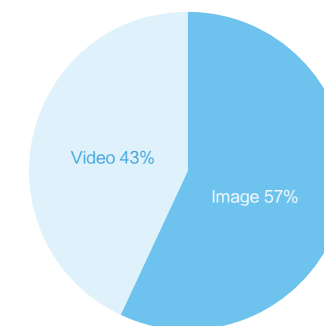
Number of users using HUAWEI Cloud Backup to restore data increased by **506%**

+506%

2017   2018
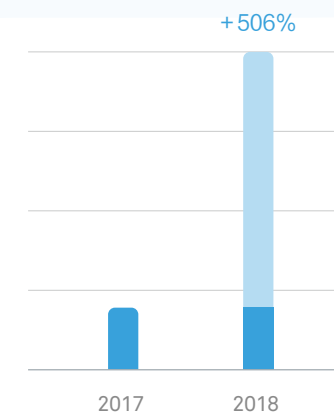
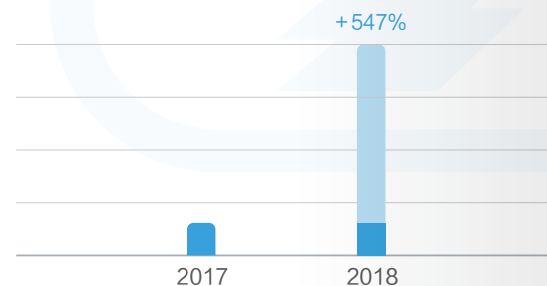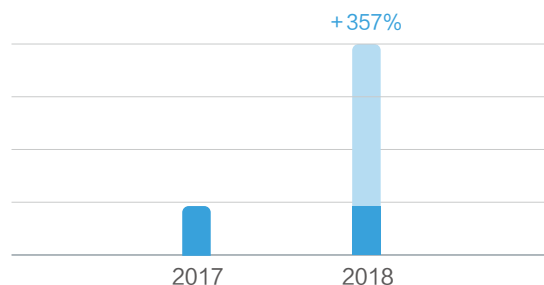## More users realize the importance of choosing safe and reliable mobile cloud services.

Users who use 5GB HUAWEI Mobile
Cloud increased by **44%**

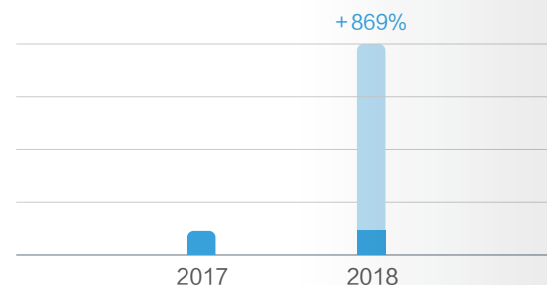+44%

2017   2018
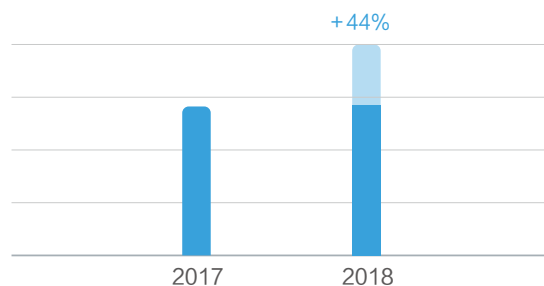
Users who use 50GB HUAWEI Mobile
Cloud increased by **547%**

+547%

2017   2018

Users who use 200GB HUAWEI Mobile
Cloud increased by **357%**

+357%

2017   2018

Users who use 2TB HUAWEI Mobile
Cloud increased by **869%**

+869%

2017   2018

HUAWEI AppGallery established "Age restrictions" in order to both safeguard minors and provide them with age-suitable Apps.

HUAWEI AppGallery features a five-level "Age restrictions" that recommends specific Apps for each age group. Since the feature was launched, it has received the attention of many parents and the number of AppGallery Education Center downloads has increased by 22.2%.
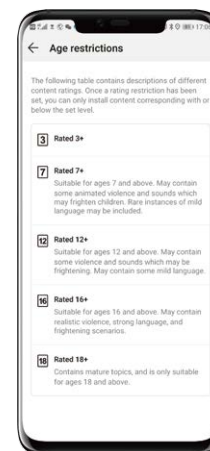
Age-based Apps   Age restrictions
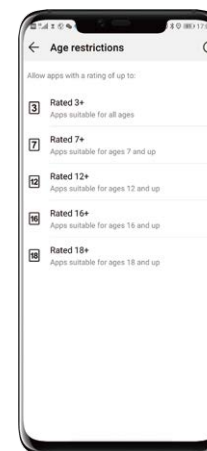
The most popular boutique Apps among parents in 2018 (In China)
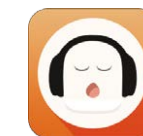
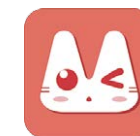Qingting FM | Youdao dictionary | Babybus-early education | XiaoBan Long | LAIX

LRTS | Read Comics | 17K free fiction | Zhuishu shenqi | Star beauty salon
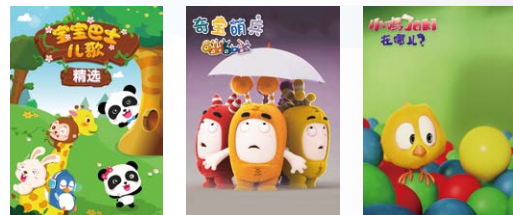
HUAWEI Video features a "Ressurance mode" for parents to help safeguard children' s device usage.

HUAWEI Video features an age-based content rating system: under 6 years of age, 6 to 18 years old, and over 18 years old. In 2018, Children' s Zone reached 1.1 billion video views.
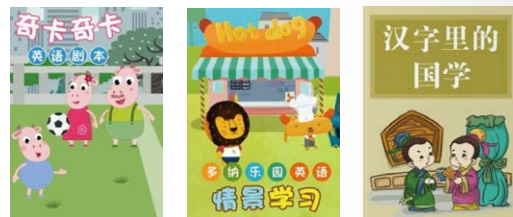
HUAWEI Video "Age rating" settings
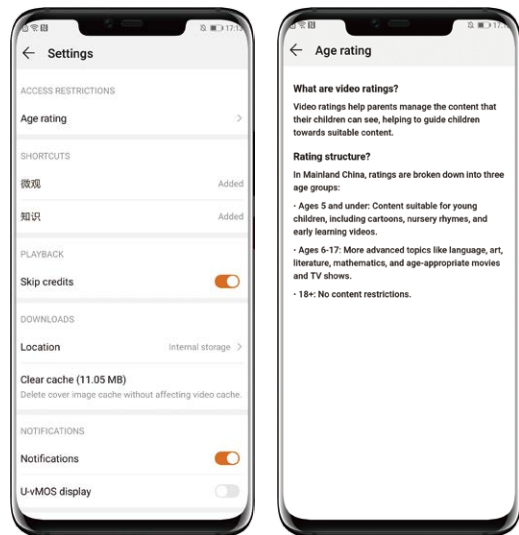
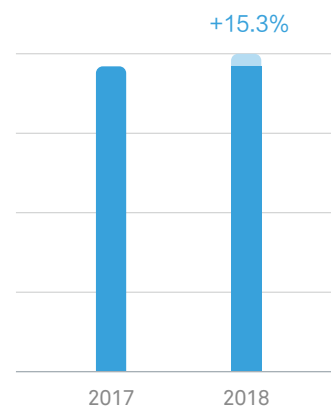**Top 3** popular cartoons among children under 6 (In China)

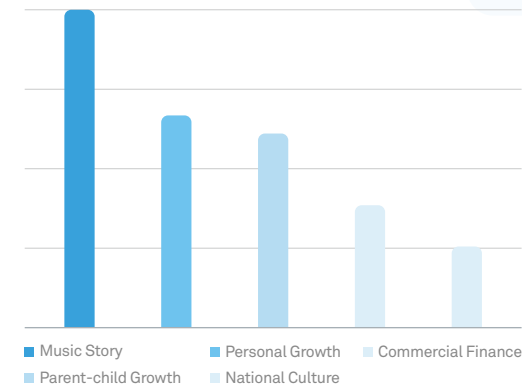**Top 3** popular video contents among the 6 to 18 years old (In China)

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3 Users are willing to spend more to cultivate their knowledges.

The average duration of daily reading sessions of HUAWEI Reader users increased by **15.3**%

+15.3%

2017   2018

The most popular radio channels in HUAWEI Music (In China)

■ Music Story   ■ Personal Growth   ■ Commercial Finance
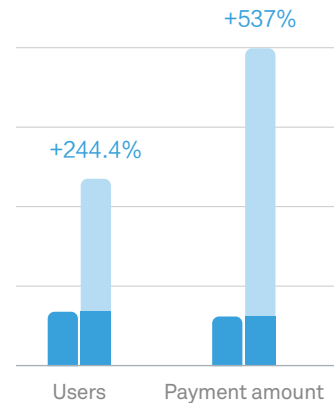■ Parent-child Growth   ■ National Culture

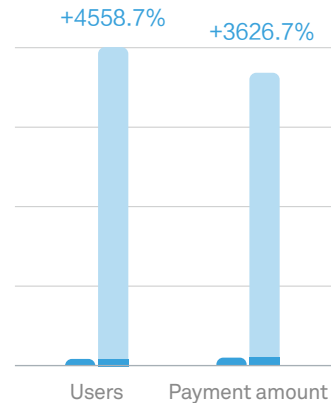The most popular documentaries in HUAWEI Video in 2018 (In China)

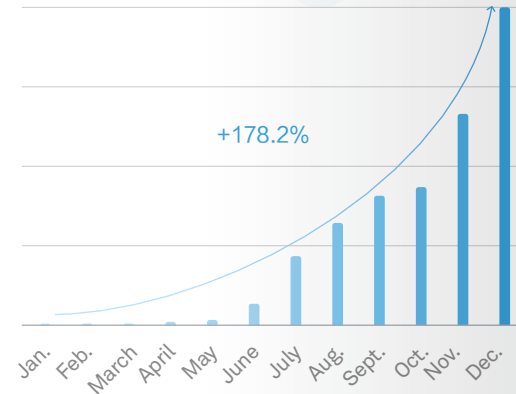# "Knowledge payment" has grown from niche to mainstream.

Numbers of users paying for HUAWEI Reader increased by **244.4%**. Payment amount increased by **537%**

Numbers of users paying for boutique courses in HUAWEI Reader increased by **4558.7%**. Payment amount increased by **3626.7%**

Payment amount of "Knowledge" area in HUAWEI Video increased with monthly average growth of **178.2%**
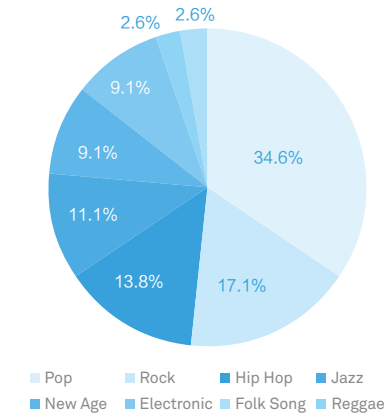
+537%

+244.4%

Users | Payment amount

+4558.7%

+3626.7%

Users | Payment amount

+178.2%

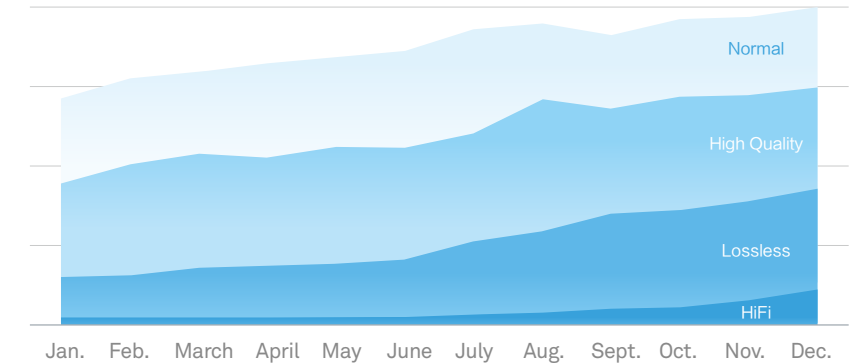Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec.

Users pay more attention to diversified music genres, and the demand of high-quality music keeps increasing.

Playing of Hip-Hop, Electronic, Reggae and other niche genres exceeds **50%**

Enthusiasts of HUAWEI Music stay tuned for high-quality music, including HQ, SQ and HiFi music. The playback volume of high-quality music has steadily increased.

2.6% 2.6%
9.1%
9.1%
11.1%
13.8%
34.6%
17.1%

■ Pop ■ Rock ■ Hip Hop ■ Jazz
■ New Age ■ Electronic ■ Folk Song ■ Reggae

Normal
High Quality
Lossless
HiFi

Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec.

HUAWEI Video users show increased demands of high-quality videos，and watching short videos has become their preferred choice in the leisure time.

Total high-quality video (4K + HDR) playback increased by **80%**
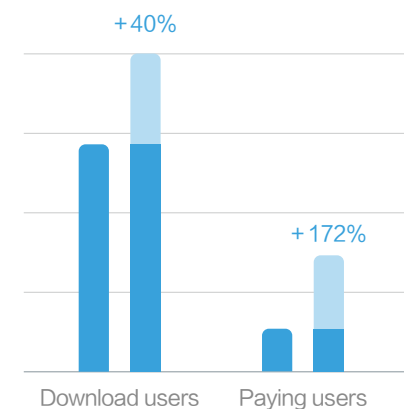
+80%

2017　2018
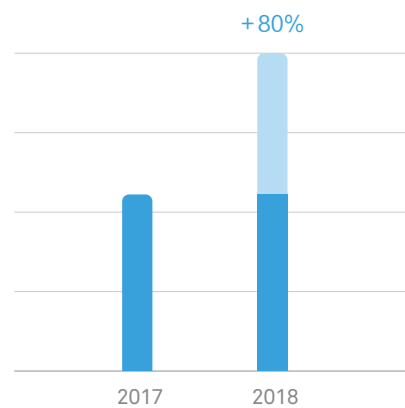
Short video channel playback increased by **402%**

+402%

2017　2018
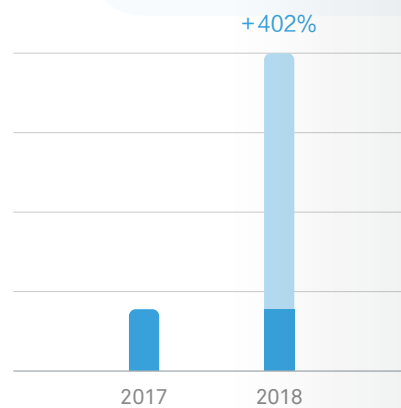
Dynamic, personalized themes and custom fonts are highly appreciated.

Themes download users increased by **40%**. Paying users increased by **172%**

+40%

+172%

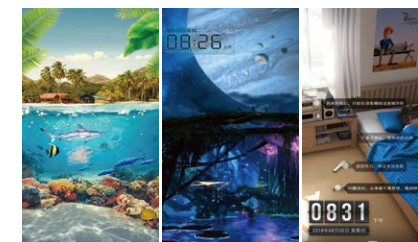Download users　Paying users

Artistic Themes

Popular IP Themes
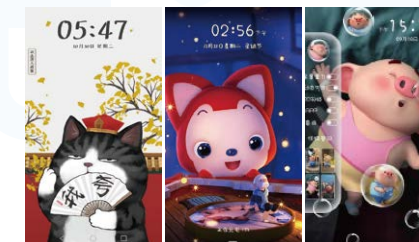
3D Dynamic Themes

Custom Fonts

With the proliferation of picture and video-centric social media, the download volume of media processing Apps has increased significantly.

Media processing Apps
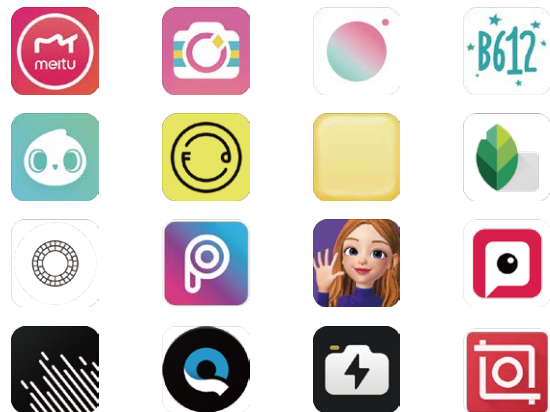
Download volume of image and video processing Apps increased by **42.2%**

+42.2%

2017   2018

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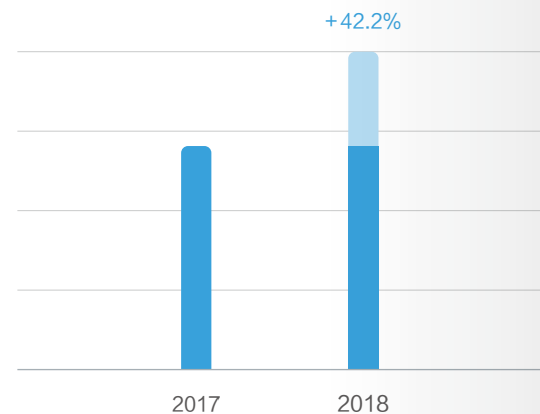
5 Users are fond of both fresh and classic contents.

Top 10 popular movies of HUAWEI Video in 2018 (In China)

| Hello Mr. Billionaire | Dying To Survive | Shadow | The Island | Project Gutenberg |

| The Godfather | The Truman Show | Jurassic World | Notting Hill | Pearl Harbor |

Playback volume of classic songs, popular Internet songs, and TV show songs ranked Top 3 in HUAWEI Music.

The number of monthly active users in HUAWEI Music exceeded 100 million. Users' average daily listening time increased to 49 minutes.

Top 3 popular music genres
(In China)

Classic songs

Popular Internet songs

TV show songs

Top 3 charts
(In China)

DIGIX
热歌
每天更新
9861万

DIGIX
新歌
每天更新
2079万

DIGIX
人气飙升榜
每天更新
265万
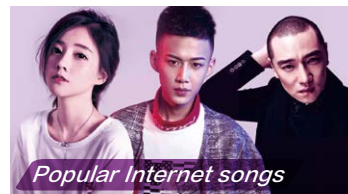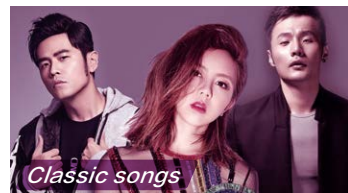
1 有一种悲伤
A-Lin
2 绿色
陈雪凝
3 天亮以前说再见
何野

1 Crying Over You
周笔畅/Honne
2 好不好
黄子韬
3 邂逅回忆
星元

1 我要找到你
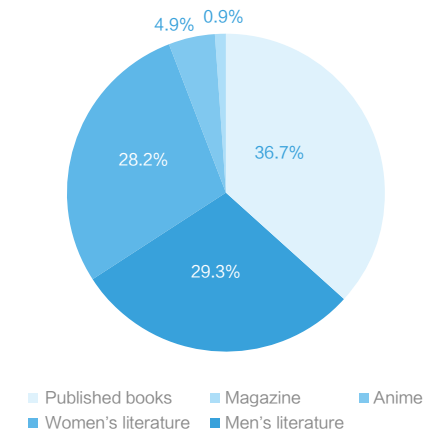连音社
2 秋月着霜
清弄
3 与春不疑
叶洛洛/董真

Most popular albums list
(In China)

HUAWEI Reader users prefer to download published books, historical novels, and the original work of the film and TV drama.

Download preference for HUAWEI
Reader users

4.9% 0.9%
28.2%   36.7%
29.3%

■ Published books   ■ Magazine   ■ Anime
■ Women's literature   ■ Men's literature

Top 10 popular books
(In China)

6

Environment-friendly, safe, and convenient self-service travel has become fashionable.

In addition to subscribing to data services on SkyTone，users also pay more attention to hotel and flight reservations and overseas car rentals.

Huawei users can use SkyTone to enjoy mobile Internet data in 80+ countries and regions, and enjoy 4G high-speed service in 60+ countries and regions worldwide.

In 2018, HUAWEI SkyTone users traveled in 80+ countries, about 2.7 times a year on average, with each stay lasting averagely 4.1 days.

HUAWEI Wallet enables mobile financial and travel services more secure, convenient, and smart.

Exclusive mobile eID check-in with 110+ Shenzhen hotels already supported.

Mobile shield provides upgraded assurance for secure and convenient large amount mobile payments.

NFC key + fingerprint recognition effectively guarantee card swipe security.

UnionPay instant payment upon touch: using your phone work with the bank card.

Mobile POS machine: merchants can use their mobile phone to get paid.

Card and QR code in one: supports non-QuickPass and UnionPay QR codes.

UnionPay ODA: open transportation cards right from your phone and quickly pass through gates.

Verification Efficiency

| inSE | Token Technology | Fingerprint Recognition | Trusted Security Environment |

Huawei Pay users can travel in 160+ cities nationwide, and consume at 17+ million POS machines.

In 2018, Huawei Pay supports 19 different public transport cards, the total number of users of it has increased 4 times, the average transit card swipes per month increased 5 times.

Huawei Pay supports bank cards issued by 90 banks.In 2018, Huawei Pay card issuance increased 3.5 times, and transaction volume increased 4 times compared to 2017.

Public transportation card in 9 cities

10 Union Pay transportation cards

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7 "New Lazy lifestyle" has become popular for users to enjoy smart and convenient services.

HUAWEI Life Service users increased by **41.5%**

+41.5%

2017   2018
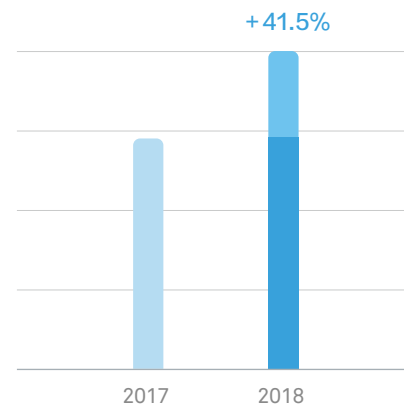
"At your fingertips" services are the most popular with users

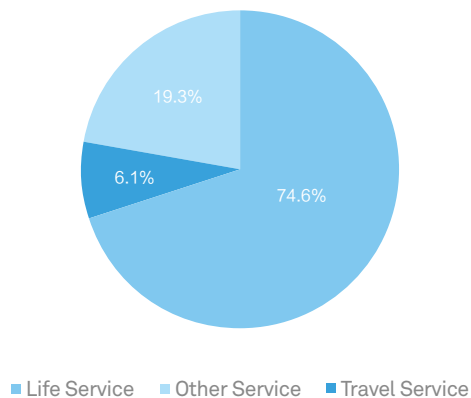| Credit top-up | Taxi | Hotel booking | Airline tickets |
| Train tickets | Food delivery | Cross-border online shopping | Express inquiry |

HUAWEI Assistant provides users with up-to-date information and smart services.

HUAWEI Assistant is woken up 2.9 times per user per day.

Usage of HUAWEI Assistant smart cards

- 74.6%
- 19.3%
- 6.1%

■ Life Service　■ Other Service　■ Travel Service

The most popular functions of HUAWEI Assistant

News　Search　Smart Care　Instant Access
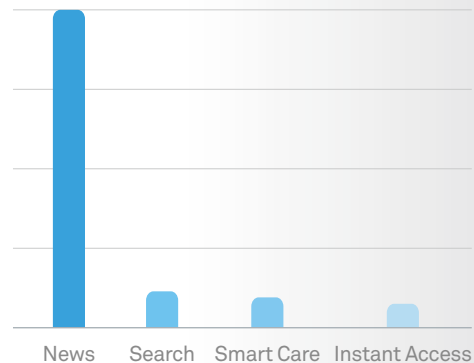
Voice Assistant and Smart Vision of HUAWEI Assistant provide users with the convenient and intelligent human-computer interaction experience.

Voice Assistant

Set alarm

Weather forecast

Smart Vision

Shopping

Calories

Translation

Identify

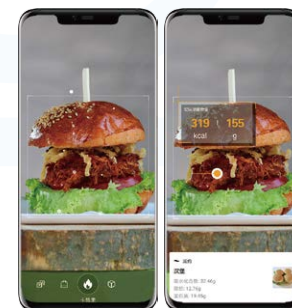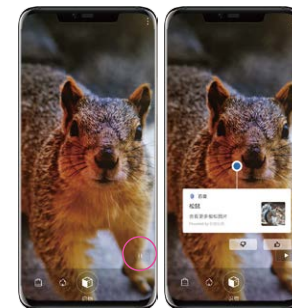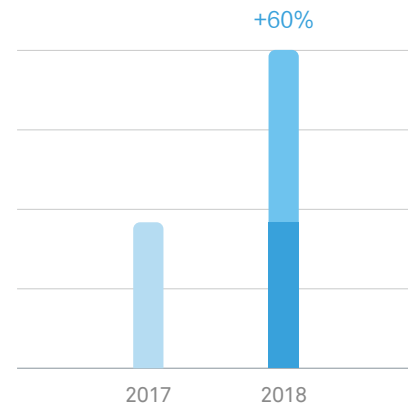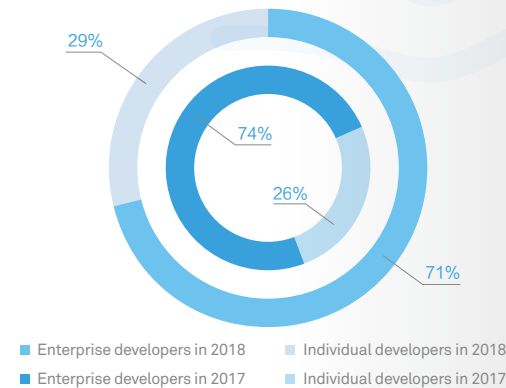## Developers focus on innovation and entrust platform partners with global service capabilities.

In 2018, the number of registered developers of HUAWEI Developer increased to 560,000，a **60%** increase compared to 2017
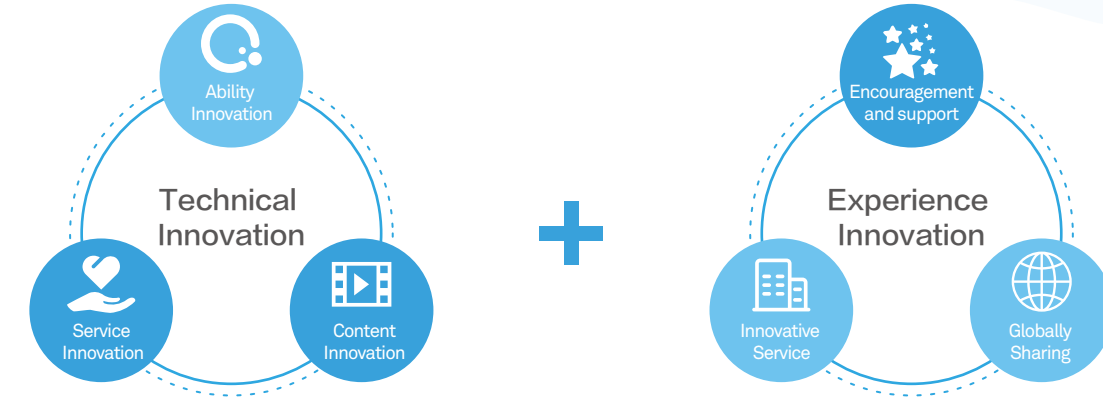
Enterprise developers are still the majority，but individual developers are growing significantly, and the proportion of new individual developers increased by **11.5%** compared to 2017

+60%

2017　2018

29%

74%

26%

71%

- Enterprise developers in 2018
- Enterprise developers in 2017
- Individual developers in 2018
- Individual developers in 2017

HUAWEI MOBILE SERVICES

"Chipset–Device–Cloud" synergy and openness enable global developers to create full–scenario experiences.

- During the 2018 DIGIX – Huawei Consumer Business Global Partners and Developers Conference, Huawei launched the "Chipset–Device–Cloud" synergy strategy. Through the Shining–Star Program and DigiX Innovation Studio, Huawei helps global partners and developers provide more high–quality contents and services for end users and bring a better digital life to them.

- In 2018, HUAWEI Developer Alliance launched 20 new open capabilities and services, covering 259 APIs, 5 SDKs, 1 DDK, 3 IDEs and 2 solutions.

- In 2018, newly launched Apps accounted for 28% of the total.

Ability Innovation

Technical Innovation

Service Innovation

Content Innovation

+

Encouragement and support

Experience Innovation

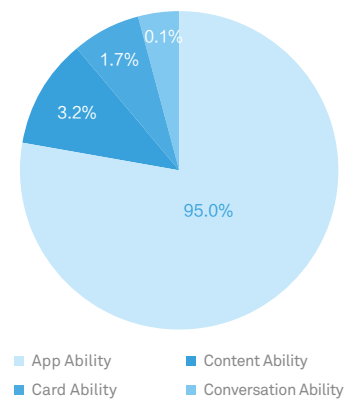Innovative Service

Globally Sharing

Open Framework　|　Quick Apps　|　Ability Gallery　|　DigiX Innovation Studio　|　Shining-Star Program
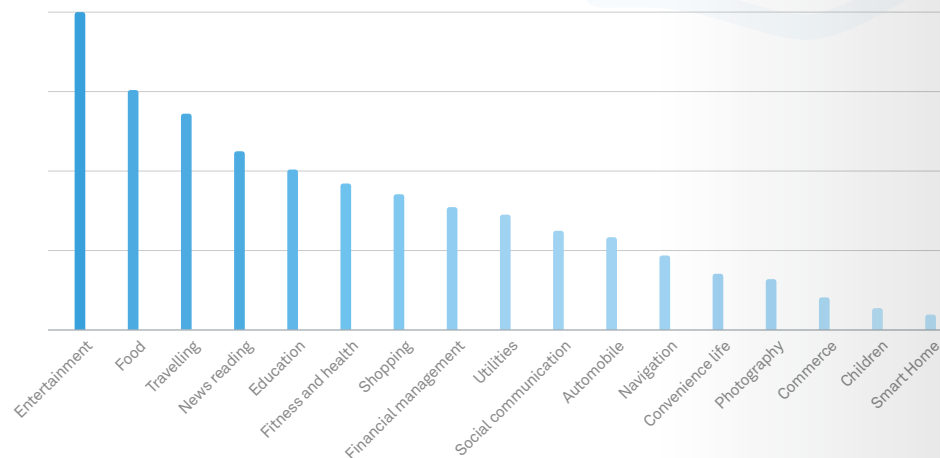
HUAWEI Ability Gallery distributes innovative applications to cross Huawei hardware and software.

- HUAWEI Ability Gallery can help developers achieve distribution on HUAWEI Assistant, HiSearch, Huawei AI Cube, Voice Assistant, Smart Vision, and other media channels.
- In 2018, 2 conversation abilities, 57 card abilities, 101 content abilities and 3030 App abilities were released.

Distribution of launched services

- 0.1%
- 1.7%
- 3.2%
- 95.0%

App Ability
Card Ability
Content Ability
Conversation Ability

Classification of Abilities

Entertainment, Food, Travelling, News reading, Education, Fitness and health, Shopping, Financial management, Utilities, Social communication, Automobile, Navigation, Convenience life, Photography, Commerce, Children, Smart Home

Huawei helped developers to achieve 100% revenue growth in 2018.

Through Huawei Mobile Services media channel, HUAWEI Developer Alliance helps developers achieve precise marketing and rapid access to 500 million users.

The number of games uploaded through HUAWEI Developer Alliance has increased steadily, with the total revenue of game developers increasing by 42%. The number of themes uploaded increased significantly, and the total revenue of theme developers increased by 81%.

AppGallery
- 120 + billion cumulative downloaded in 2018
- Available in 139 countries
- Monthly activity 270 million

PPS
- Promotion resource exposed 490 million times daily in 2018
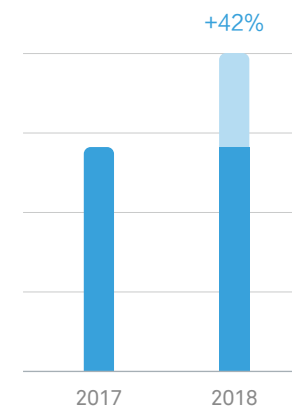
Themes
- 730 + million cumulative downloaded in 2018
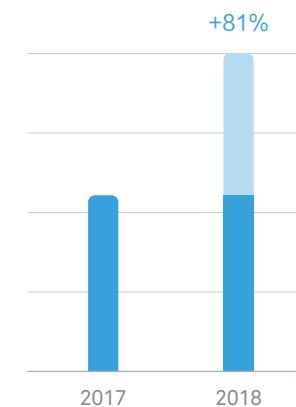- Monthly activity 53+ million

GameCenter
- Average monthly downloaded 210 million in 2018
- Monthly activity 40+ million

Revenue growth for Game developers

+42%

2017   2018

Revenue growth for Themes developers

+81%

2017   2018

HUAWEI Developer Alliance provides services for developers in 170+ countries and regions worldwide.

- HUAWEI Developer Alliance provides global developers with registration, authentication and other account services, and through the global business settlement service, easily carry out intermodal cooperation with developers in 119 countries.
- In 2018, more than 20,000 consultation and help requests from global developers were resolved and the counseling satisfaction rating increased by 11%.

Three new authentication methods

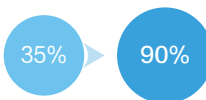D-U-N-S Registered   Bank Transfer   ZHIMA Credit

Provide online services

¥ $ €   £

Billing | Inquiry | Payment application
Dispute resolution | Real-time reminder

Verification Efficiency

2 days → 30 minutes

Passing Rate

35% → 90%

Satisfaction rating increased by 11%

Huawei encourages developers to innovate and creates a full-scenario smart mobile services ecosystem through Shining-Star Program.

Huawei provides billions of resources to encourage innovation.
In 2018, 120+ Apps were supported through the Shining-Star Program.

Incentive object

Digital Service Innovation in all scenarios	Openness Innovation based on Huawei Devices' Capability	Partners in Huawei Mobile Services Ecosystem Construction
Games, Education, Entertainment, Smart Home, Fitness and health, News, Photography	EMUI AI AR VR Hi-Link	Quick Apps, HUAWEI Ability Gallery, Service Aggregation

Incentive level

100,000 user traffic	300,000 user traffic	1 million user traffic	3 million user traffic	5 million user traffic
			Shining-Star Zone	Shining-Star Zone
		Shining-Star Zone	Store Exposure	Store Exposure
			All-media Resource	All-media Resource
Shining-Star Zone	Shining-Star Zone	Store Exposure	Promotion in Flagship Store	Promotion in Flagship Store
			Global Promotion	Global Promotion
				HUAWEI Smart Pavilion
				New Device Launch

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Partners and developers are more interested in Huawei's open capabilities in AI and AR area.

In 2018, more and more developers chose to use Huawei open capabilities, and the number of integrated Apps increased by 60%; the usage of AI and AR capabilities ranked Top 5.

Through the DIGIX geek innovation competition platform, 4700+ developers actively participated in AI, AR and future application creative contest, after professional evaluation and public vote, Top 10 AI innovative Apps were born.
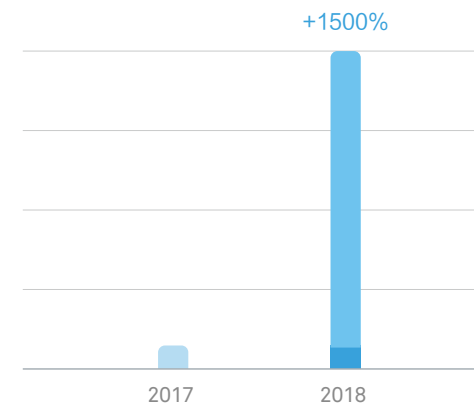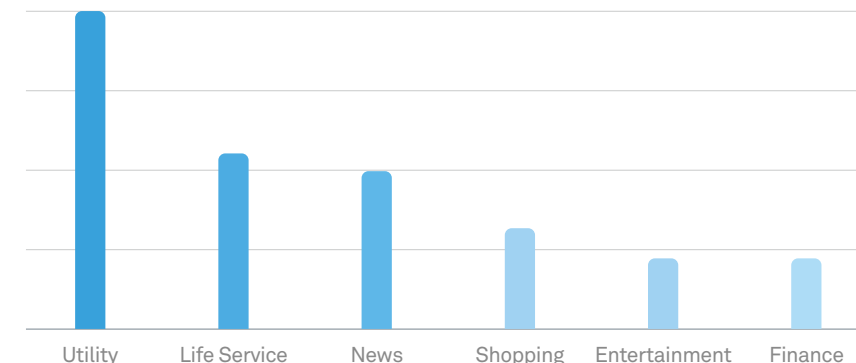

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The ecological development of "Quick Apps" gained developers' optimism, and it shows a rapid growth trend.

- Quick Apps have the advantage of penetrating users' awareness by distribution channels and traffic, and shortening the usage access path.
- In 2018, 1650+ partners of HUAWEI AppGallery were accessed to Quick Apps, and 500+ Quick Apps were launched.

The number of Quick Apps uploaded through HUAWEI Developer Alliance grew rapidly

Among the newly launched 500+ Quick Apps, utility Apps account for 23%

+1500%

2017   2018

Utility   Life Service   News   Shopping   Entertainment   Finance

DIGIX

Explore a Better Digital Life