

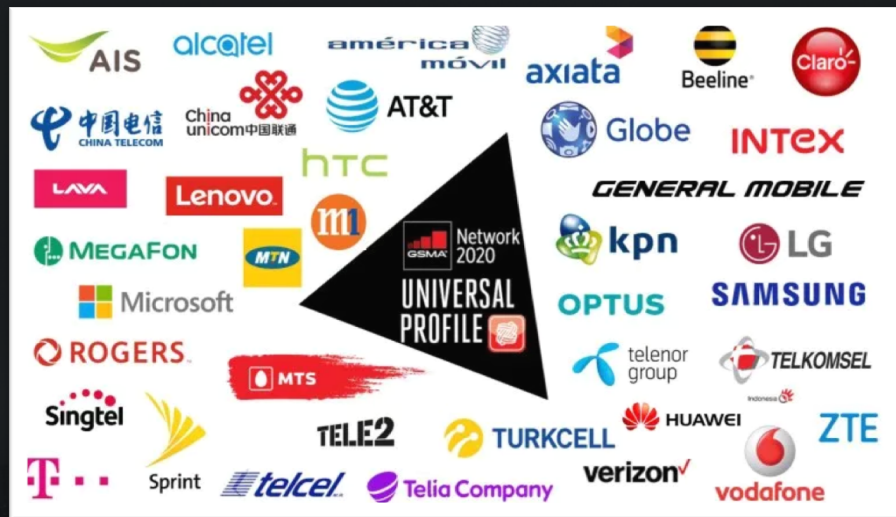


Thinking on MNO Business Messaging Innovation

Network Technology Research Institute of China Unicom

1

Market Situation

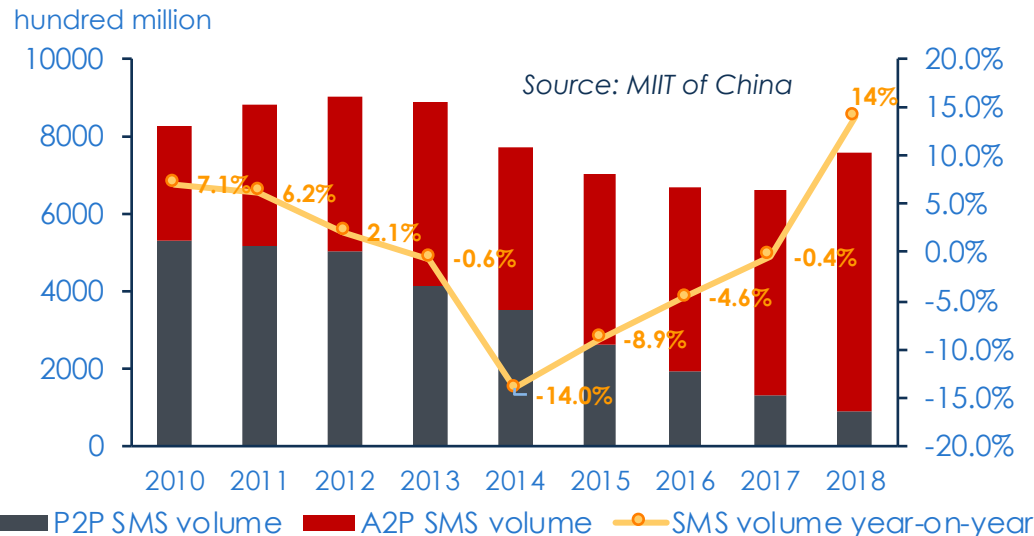


A2P SMS is growing rapidly

Strong demand for multimedia contents

In 2018, the amount of SMS in the Chinese market increased by **14%** year-on-year.

The main driving force is **A2P SMS**.



Multimedia contents and interaction in conversation is becoming more popular.

Based on the A2P SMS, “Smart SMS” and “HD SMS” have appeared in the market. These services have been **supported in most of the terminals**.

HD SMS



Smart SMS

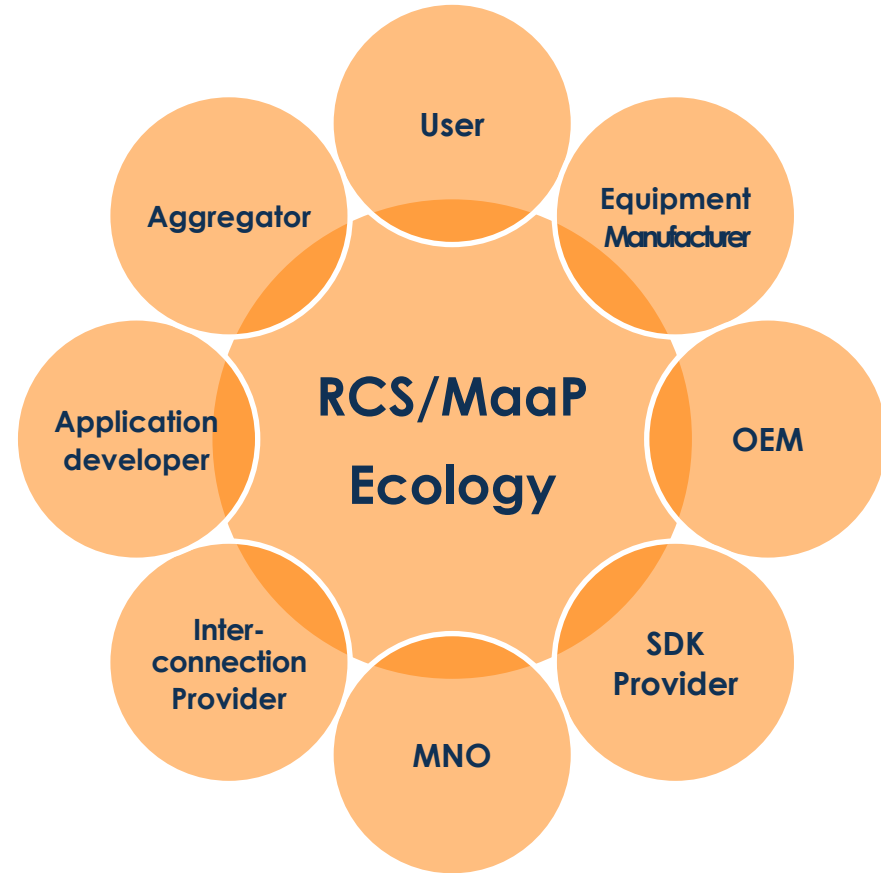


Ecology is gradually established

Eco players gradually subdivide



**Diversification of service demand to
further subdivide eco players**



Innovation-driven development

Provide opportunities and motivation for industry players



RCS device popularity

RCS terminals must be scaled, based on open APIs or SDKs on the terminal side, enabling rich application innovation.



Improve the industrial chain

The RCS ecosystem is like a complete chain, and each participant's innovation in their own fields will drive the entire ecological development.



Differentiated competition

Develop standard messaging services together and encourage differentiated innovation based on it.



All parties can get income

The key is a reasonable business model that allows all parties involved in eco-innovation to benefit from it.

A composite image featuring a night view of the Shanghai skyline with the Oriental Pearl Tower on the left. On the right, a man in a white shirt is seen from behind, interacting with a large, glowing digital screen. The screen displays various business and innovation-related icons and charts, including a bar graph, a pie chart, a lightbulb, a car, and the words 'idea', 'TEAM', 'SUCCESS', and 'WWW'. The overall theme is 'Thinking on Innovation'.

2 Thinking on Innovation



Building the "innovation layer" of messaging service

Use RCS as the basic platform for message innovation

Develop standards to support **"innovation layer"** that can be flexibly defined on demand.

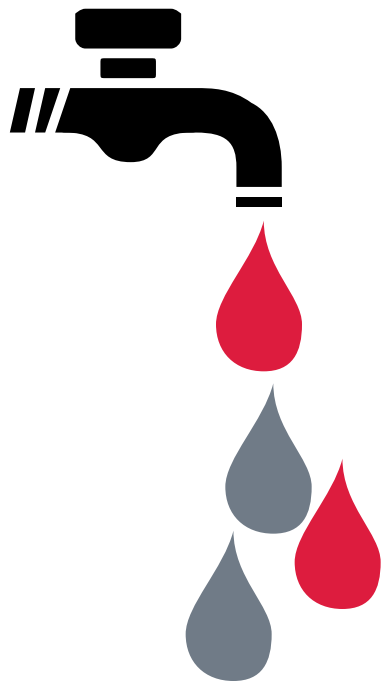
EXP: Currently, RCS Rich Card cannot flexibly change the card layout according to different business needs.



Implementing step by step, **joint industry-wide to construct** innovation platform based on MNOs' messaging service.

Innovating based on MNO messaging

Toward to 5G, focusing on four directions for innovation



1

Messaging experience upgrade

On the one hand, focus on the construction and optimization of the messaging experience; on the other hand, focus on the experience improvement and habit cultivation of non-RCS users.

2

Reuse message entry point and make cross-ecological system connection

Assist in establishing connections with users to achieve business innovation.

3

Message-based traditional service upgrade

Upgrade traditional services based on A2P SMS to provide a richer, faster and safer upgrade service experience, such as OTP authentication and login.

4

New business model of messaging service

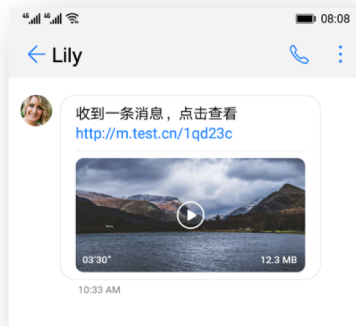
RCS A2P message has a revolutionary upgrade compared to SMS & MMS, providing development space for new business opportunities based on messaging.

RCS business innovation practice

Provide seamless integration and consistent experience

EXP : Rich Card fallback

1. For RCS user who isn't online, "Smart SMS" is used for RCS Rich Card fallback with a similar UX.
2. For non-RCS user, provide RCS A2P message experience, cultivate user habits and gradually transit to RCS.



Smart SMS

VS



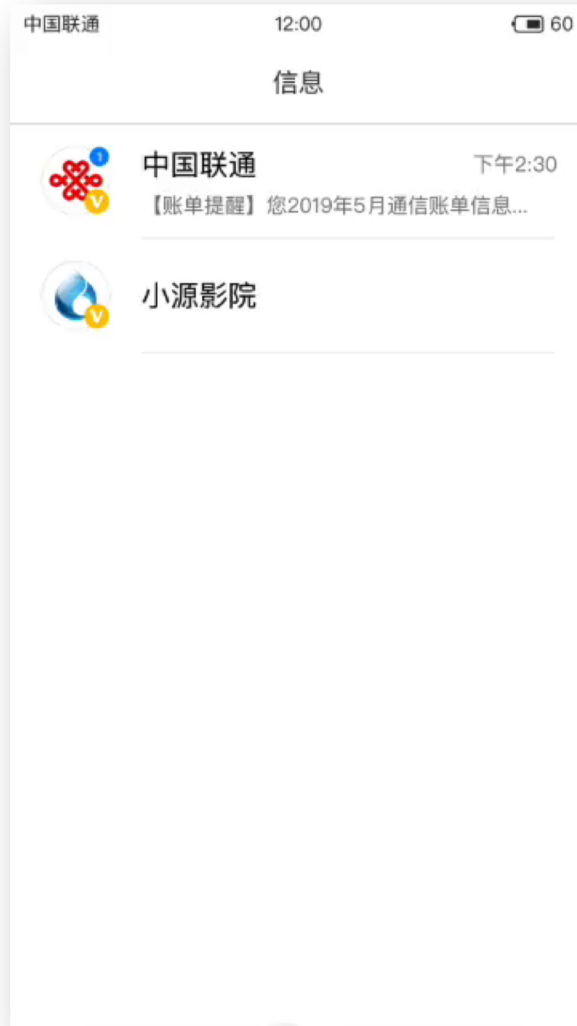
RCS Rich Card

RCS MaaP Example

Chatbot and Richcard

EXP1 : Buy traffic package

EXP2 : Buy ticket and choose seat



3

Win-Win
Together



Establish a community of development interests across the industry

RCS will become the ubiquitous operator messaging service, through industry wide cooperation we are building the ecology to create win-win innovations which open up new business opportunities for everyone.



Cooperative innovation

Strengthen cooperation between ecological actors in different fields



Reshape the market

Create a universal, neutral messaging innovation platform



Sharing innovations

Helping global messaging service innovation.



Willing to work with partners to build and develop new business opportunities for RCS

Network Technology Research Institute of China Unicom