# THE STORY FUNDAMENTAL CONCEPTS: PRODUCT, ORDERING, INVENTORY, AND PARTY

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Ma Xu, Huawei Software BSS Product Management Director, Huawei

#### Tell us about yourself and your job.

Since 2001 I have been working on BSS & OSS products which is also one of the most exciting domains in the Information Communication Technology industry. After joining Huawei Software in 2004, I worked with many communications service providers (CSPs) and consultancies in different regions (Europe, Africa, Middle East, and Southeast Asia). It is always a wonderful experience to meet the best experts and learn something new in this fast-developing realm. Especially, as a contributor on behalf of Huawei Software, I have presented in many TM Forum meetings and summits, including sessions on the Business Process Framework (eTOM), Information Framework (SID), Open APIs and other interesting topics during which both Huawei and I benefited a lot from the ideas and guidance of the Forum.

#### Why do you believe in TM Forum's **Open API program?**

In Huawei, we openly embrace all advanced ideas. TM Forum is surely one of the best at practicing openness. No one person or one company can grow in isolation. That is why we keep following the Forum, even in the shadow of the current pandemic (Covid-19).

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### What TM Forum Open APIs are most valuable to your company?

There are many excellent Open APIs. To decide which are the best could be a little biased. I prefer to list the following ones here:

- TMF632 Party Management
- TMF669 Party Role Management •
- TMF663 Shopping Cart
- TMF622 Product Ordering
- TMF620 Product Catalog Management
- TMF637 Product Inventory Management
- TMF639 Resource Inventory Management

#### Why did you choose to highlight those APIs?

If I speak with a little exaggeration, these APIs could sketch the outline of the whole IT system, just as an artist draws a few lines and figures and then the masterpiece emerges before our eyes. Whenever I need to provide a system or a solution to a customer, I will refer to these most fundamental concepts: product, ordering, inventory, and party (customer and account can derive from it). We will rarely find a practical issue which cannot be depicted and solved using such concepts and models. Open APIs already give us the key to open the locks, whatever their sizes and modes are.

#### How do you use those APIs?

As I oversee Huawei BSS product planning and architecture, the Open APIs are vital for me to lead the product design. TM Forum has opened a treasury for the whole industry, no one can waste the opportunity to pick

up some jewels from it. During internal seminars, I do not hesitate to share the Open API designs and some of them are adopted in our BSS & OSS portfolio. For example, the TMF632 Party Management API is an incarnation of party entity from the Information Framework (SID). It is one of the most important designs from TM Forum since "party" effectively describes the model of natural humans and corporations. To explain its influence, I dare to compare this API to Calculus in mathematics. Calculus can be found everywhere in the calculation of complex problems. The same applies with the Party Management API. I introduced this API and its data model to many products in Huawei BSS & OSS. Everyone found it easy to understand and apply to business features or problems.

#### Where do you use the APIs?

TM Forum Open APIs have been used in many Huaweirelated projects, including CMCC, Vodafone, Telenor, Zain. Etisalat. T-Mobile. etc. Sometimes the stakeholders adopt the API as a literal expression, and sometimes we may refer to its design model. But they will work in most situations. One example is the Namibia project. Namibia is not a big country, and it only has a population of over 2 million, but the legacy system in the project was extremely complicated. During the BSS & OSS implementation, we met various integration issues. However, the CSP, consultancy and Huawei as systems integrator (SI), all agreed to refer to TM Forum Open APIs as the standard, thereby making the subsequent work significantly smoother.