



“With low-code no-code providing us the essential development acceleration, TM Forum Open APIs offer a higher reusability index with easily deployable integration touchpoints.”

Ashish Kar, CTO Platforms, PCCW Solutions

Tell us about yourself and your job.

As the Head of Technology Strategy & Architecture at PCCW Solutions, I am responsible for conceptualizing and designing products and solutions that meet our customers' future needs. With over 24 years of experience in the telecom industry, I have been associated with TM Forum for over a decade, leading several Catalyst projects with Vodafone, Telstra, AT&T, Telefonica O2 UK, Liberty Global, and Orange, and contributing to various standards design programs. I now have the responsibility to build a world-class micro-frontend, microservices and cloud-native architecture based software as a service (SaaS) product for our telecom BSS/OSS customers.

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

As a technologist and product evangelist, I have plans to build a TM Forum compliant and certified software based on a microservices design and cloud-native architecture. As we progress into 2021, my team will be securing TM Forum Open API conformance certification for each API that we build in Infinitum Communications Suite (ICS), in an effort to deliver a market leading telecom platform providing digital BSS/OSS, data analytics, core network provisioning and open RAN capabilities and support to our customers. We are at the precipice of excellence and TM Forum has helped us along our journey in a vital and time-critical way.

To learn more about PCCW Solutions visit:
www.pccwsolutions.com

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

- TMF620 Product Catalog Management
- TMF622 Product Order Management
- TM 629 Customer Management
- TMF632 Party Management
- TMF637 Product Inventory Management
- TMF663 Shopping Cart Management
- TMF666 Account Management
- TMF641 Service Order Management

Why did you choose to highlight those APIs?

Mainly due to their industry alignment and Open API architecture conformity. With low-code no-code providing us the essential development acceleration, TM Forum Open APIs offer a higher reusability index with easily deployable integration touchpoints. They also cover the significant core functions that any B/OSS system is built on and provides the framework to build more functions around; for example the product catalog, customer model, order management and subscription management.

How do you use those APIs?

We built the “Common Information Model” for logical data modelling using the TM Forum Information Framework (SID) model and leveraged the domain wise API data models to create the distributed logical and physical model for each of the domains covering catalog management, customer management, inventory management, customer order management and service order management. We leveraged the data models to

build our solutions around them and built the domain logic in parallel knowing the input and output into each domain. In addition, we looked at JSON's SCHEMAS using the SID model to create an equivalent PCCW Solutions model of common information for logical data modelling. We also leveraged YAMLS, request and response payload samples, and PUMLS for low level component design. inter and intra integration bridges also contributed to fast tracking code development to build APIs.

How have you benefited from using these APIs?

Our SID-based Open API contract designs allowed us to devise solutions quickly and efficiently. Also, by leveraging the industry standard data model as the reference to build our core telecom product components, we have a uniform entry and exit point into the different business domains including customer relationship management (CRM), product management, order management and customer assurance. This allows us to integrate quickly and seamlessly with other TM Forum compliant products such as Ericsson, Netcracker, Amdocs and Oracle. Advancing into 2021, we will be contributing back to TM Forum with various product component architectural blueprints from our microservices based designs, in an effort to build the Open Digital Architecture Component Accelerator.

Where do you use the APIs?

We use them as guidelines across our development teams located in Singapore, Malaysia, Hong Kong, Philippines, India, Australia, Russia and Ireland.