



Operator Use Cases for the 3 Ps: Policy, Personalization and Profitability

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The strategic importance of the mobile control plane in 3G and 4G networks, including subscriber, service, and policy controls, has never been more apparent to operators globally as they manage the complexities of rapid growth in mobile devices, applications, and traffic.

To date, operators have focused on implementing fair usage controls, driven by the extensive use of flat-rate plans. However, as operators move to tiered and usage-based service plans and deliver new machine-to-machine (M2M) services, the role of policy control is evolving beyond fair usage to include a plethora of use cases.

The transition from flat-rate to personalized, tiered services

Network, device, and application policy provides operators with a range of controls to implement tiered service plans that let subscribers choose the combination of usage and price that best meets their needs.

In a tiered services model, lower-cost plans can be used to target casual users, middle-of-the-road plans can be crafted to meet the needs of the average user, and premium plans can be used to target tech-savvy consumers and business users.

In order to successfully introduce tiered services, operators need to give subscribers a way to monitor their mobile data usage in real time. Policy solutions that extend to the device, such as Bridgewater's myPolicy™ solution, provide enterprise and consumer customers with a real-time view of their mobile data usage by clicking on an application on their smartphone. It also enables operators to provide real-time, personalized offers such as:

- ▶ **A temporary service upgrade or new service tier;**
- ▶ **A free 'day pass' for a new service;**
- ▶ **A bandwidth boost for a subscriber who wants to engage in mobile gaming in the evening but not during the day;**
- ▶ **Unlimited video downloads during off-peak hours; and**
- ▶ **Location-based social networking services.**

Pre-purchase data services

Pre-paid services are a popular way of increasing market penetration. They give subscribers the flexibility to buy and use a preset amount of data with the convenience of paying for these services via credit card, voucher, or promotional offers.

However, with the recent growth in mobile data traffic, the pre-paid billing servers used by mobile operators have become increasingly complex. Pre-purchase plans make life simpler for the customer as well as the operator, who no longer has to deal with the cost and complexity of deploying a pre-paid billing server.

In this scenario, policy control enables usage to be metered based on time or volume, which must be paid for in advance by the consumer.

Machine-to-machine services

M2M services are experiencing a period of rapid growth, with an estimated 60 billion machines serving a global audience of six billion people. Applications in areas such as healthcare, public safety, and energy are fuelling the drive towards more ubiquitous M2M services.

The control plane function in 3G and 4G networks plays a central role in the delivery of these services by managing network resources, devices, and applications. Public safety services, for example, can benefit from automated communication between traffic cameras, health monitors, and mobile communication devices. The network can give priority to emergency data traffic, devices, and applications, distribute alerts to emergency workers, and even re-route vehicle traffic.

These use cases demonstrate how policy control as an integral part of the mobile control plane has evolved, with fair usage controls just one of many ways that operators are implementing smarter network, device, and application controls to deliver new services.

