Ericsson Catalog Manager

Assemble Proven Components for Faster Time-to-Revenue

Commercial Description

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1   Executive Summary

In today's competitive, customer-driven landscape, fixed and mobile operatorsare adopting a product-oriented approach by centralizing the development of new offerings. This results in streamlinedoperations supporting the development and introduction of new, customer-facing products and their network-facing service counterparts. By enabling better organizational collaboration, operators are expediting all involved processes: from idea-to-implementation, to lead-to-service and service-to-cash, and extending into experience-to-resolution.

Some service providers have taken this approach a step farther by leveraging catalog management systems that propagate important network and service information across the OSS and BSS architecture in real time. This facilitates a uniform customer experience by providing a consistent view of products and services across the customer lifecycle that spans ordering, fulfillment, billing and assurance.

Why is this necessary? Service providers are quickly becoming the facilitators of an entirely new era of integrated communications and entertainment services, and they can no longer afford to wait months or years for the introduction of new services. Theyneed to respond to customer demands in real time to create a distinctive and personalized customer experience. This necessitates a demand-driven architecture, complete with products, services, networks, and enabling technology that can rapidly shift to provide rich services and integrated connectivity, content and devices.

The combination of all of these elements is drivinga new level of customer experience, elevating the importance of real-time catalog management systems that drive the integration of network technology with systems that can leverage network information to fulfill the order, charge for it, and monitor the customer experience. The collective value of these systems – and, more specifically, how they interoperate with each other – will be the platform that enables service providers and customers to personalize and deliver services how, when, and where they are wanted.

The catalog management system is at the core of this ecosystem, and it is the catalog that drives the dynamic creation of powerful product offerings. Ericsson can help you achieve such an operational structure with the discipline and consistency you need to reduce the timetomarketnew services and increase the reliability of fulfilling service orders, even when components reside in third-party service partner domains.

Ericsson Catalog Manager is a centralized product/service/resource catalog platform that allows your product team to define new product offerings and specifications quickly by leveraging pre-defined technical specifications and provisioning processes. It then enables your customer service representatives (CSRs) to find the most relevant customer solutions via an automated product selection search engine. Finally, it drives the coordinated and dynamic provisioning of product offerings, even if those involve third parties by federating processes across multiple fulfillment stacks and methods.

Ericsson provides a solution that uses a well-structured catalog to support new product development that includes the specifications needed to drive related fulfillment processes, making them available to operational systems running across federated domains that may include third-party product partners. This provides the consistency you need to manage and grow your business with:

- Reduced timeto market and lower cost to develop new product offerings and specifications by reusing proven components.

- Reduced time to architect third-party relationships by leveraging consistent data, processes, and methodologies.

- Faster service order processing and reduced service order fallout by enforcing a more consistent structuring of product offers and automation of fulfillment processes.

As a result, your customers will benefit from superior experience due to more consistent structuring and automation of product selection, more relevant product solutions, more reliable commitments, fewer errors, and on-time delivery.

This document describes the need for a centralized catalog platform that manages product offerings throughout their lifecycle. It provides an overview of Ericsson Catalog Manager, and highlights real business value that can be gained through implementation of this product.

2   Business Challenges

Your operations are most likely incapable of supporting the business change or development programs you are looking to execute if you dealing with:

- Re-inventing the wheel every time a new product offering or specification is introduced.

- Inconsistent understanding of new offerings; delayed quotes.

- High rework to realize product variants or to change processes in existing products; high service order rework.

- Manual coordination with third-party service partner systems.

- Inflexible product offerings with limited customer choices and static pricing models.

- Slow, manual service order handling; unattainable levels of automation.

- Fragmented, disconnected processes.
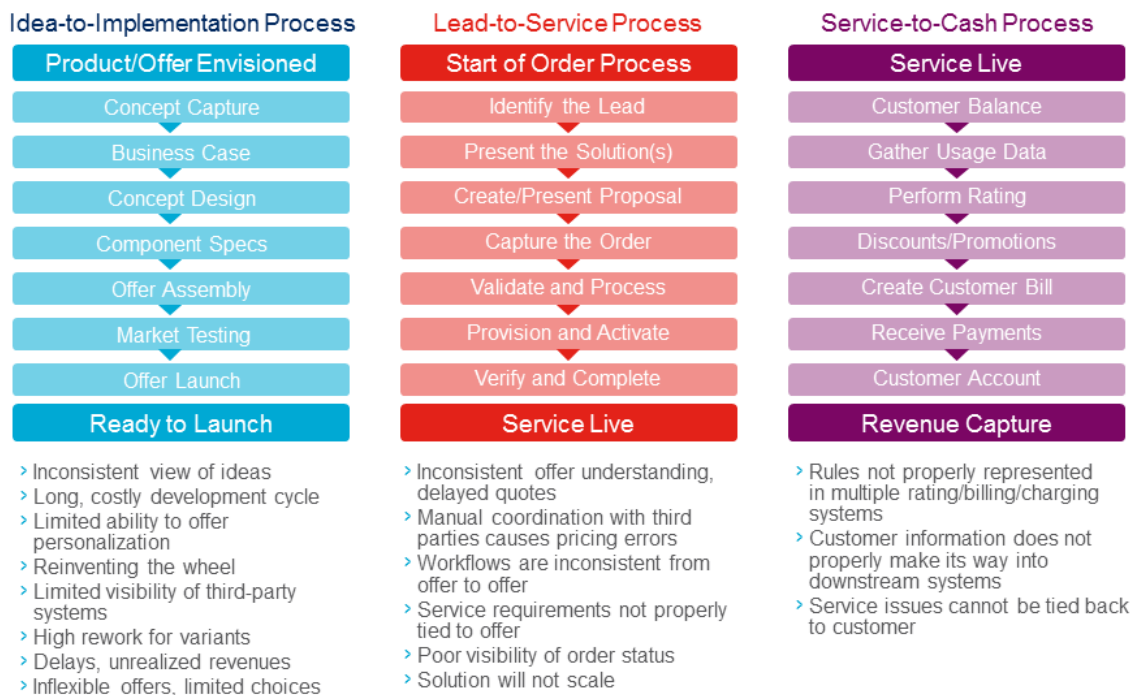
Figure 1   Typical Inefficiencies from Scattered Catalogs

Your current operational environment may require significant resources to introduce new product offerings. With each introduction, your processes tend to get overwhelmed with extended analysis and development times, many system updates and correspondingly high costs. Even new products composed of components that are fundamentally similar to existing ones usually take a long time to launch.

Once a new offering is deployed, many people, processes,and systems must dip into the information to do their jobs, and rising customers' expectations are adding pressure acrossall of your current operations.

A most critical business process is service order negotiation, and when information is not readily available and accurate, these challenges negatively impactyour customer care organization. Customers expect fast and reliable delivery of requested services. Your current situation may lack a consistent understanding of product offerings, have rigid product feature sets, all followed byunexpected service order processing delays.

You are probably looking for ways to improve the ordering of complex products. Your customers increasingly expect to order products online or to have an efficient and informative interaction, for example, with a customer service representative (CSR). Your current approach of dealing with product complexity may be limiting process automation, creating complex information exchanges with CSRs, or resulting in cumbersome and frustrating interactions with a web self-service portal.

Your operations organization is probably under pressure to support the fulfillment of increasingly complex service orders. You may be at a competitive disadvantage if new product introductions are delayed because the underlying processes and systems are not ready, or if implementation costs are too high.

You may be experiencing a situation where there is no consistent approach to automating service provisioning processes. The need for dynamic customization makes this even more difficult. Even if you have some level of automation, it takes you time to optimize these processes to increase your level of flow-through.

In addition, you may not have a common operational platform in place to handle the various services typically included in your growing portfolio. A portion of your portfolio may not be offered to customers directly, but rather via suppliers/partners. That means that an individual service order may be handled by a variety of systems external to your company, making it difficult to understand the status of an order at any given moment.

There are a host of commercial challenges as well. You may be trying to figure out how you can support a third-party retail model without having to expose internal configurations to the third parties. When including third-party components in your products, you may be handling the time to architect, integrate and support each "relationship" as a "project within a project" with consequent excessive delays. You may also have rigid product structures that are difficult to change to meet new requirements, along with cumbersome distribution of product information to the third parties involved.

You may be using configurable commercial off-the-shelf (COTS) software packages that improve time-to-market, but these packages still need to be updated individually. The pre-ordering, ordering, and fulfillment processes are driven by disjoint systems, coordinated only through the efforts of IT, business, and operations staff.

Customizing your current provisioning platforms is probably labor-intensive – usually involving long lead times. Specialized knowledge and development tools are usually required to run and maintain these platforms as well as the associated middleware. It takes too long to develop provisioning capabilities to support a new device or service. It takes too long to modify these platforms when there is a service request change and your downstream systems mustbe updated individually.

In summary, your current operational environment may not be structured to automate and orchestrate the processing of increasingly complex service orders because the related processes and data tend to be fragmented and disconnected. This lack of a common platform to federate and orchestrate processes and policies, along with the product/service/resource definitions, is an obstacle to the profitable offering of complex multi-product offers.You probably need centralized product management and development processes to reduce time and cost across your business.

3 Product Overview

3.1 Basic Functionality

Ericsson Catalog Manager provides the consistency you need, in terms of operational structure and discipline, to reduce the time to market new services and increase the reliability of fulfilling service orders, even if those reside in third-party service partner domains. It centralizes product/service/resource specifications to allow you to assemble product offerings via component reuse, and to orchestrate service fulfillment. By having a common platform to support offer creation, pre-ordering, and ordering processes in a cohesive fashion, you have a consistent way of introducing new products and processing orders, even those involving third-party partners.

Ericsson Catalog Manager provides a component-based approach to assemble product offerings and orchestrate/federate Operations Support System (OSS) and Business Support System (BSS) processes throughout the product lifecycle.

With Ericsson Catalog Manager you can "build" products using reusable components that have clear definitions for parts assembly and integration options, including the underlying workflows. All product, service, and resource specifications are defined using a structured framework based upon TM Forum's Information Framework[1] modeling. By reusing components already proven in your business, you can reduce development time and cost while improving the reliability of your fulfillment processes.

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[1] The Information Framework (SID) is a component of Frameworx, the TM Forum's blueprint for enabling successful business transformation. It provides standard definitions for all the information that flows through the enterprise and between service providers and their business partners. Source: TM Forum

Ericsson Catalog Manager also drives the decomposition of service orders during fulfillment. This is crucial to managing the increasing operational complexity of new services and enabling process automation.

3.2 Product Features

Ericsson Catalog Manager features a full product catalog capability that is oriented towards commercial product definitionsto support overall product management functions. These functions include: product definition; products offered; product business hierarchy; commercial product hierarchy; rules relating to offers including prerequisites and embellishment options, and relationships with other offers and parameters; availability rules; and validity period.

Ericsson Catalog Manager also features a full service catalog that supports the technical aspect of a product catalog used to support fulfillment in terms of service and resource provisioning, and service order management. Services are then tied to the operator's resources that are consumed in providing the requested service.

Ericsson Catalog Manager provides a design tool that supports an operator's rapid service deployment objectives. The tool is highly intuitive and requires only minimal IT expertise. It is used to model the workflow activities, establish systems interfaces, and generate the GUI screens required by participants in the order fulfillment process. Velocity Studioadds advanced user interface modeling capabilities for an enhanced user experience with ease of navigation.

With these graphical design capabilities, you can create individual components and assemble them into product specifications. In turn, those specifications serve as templates for creating any number of offerings. They include all the technical and business aspects – attributes, workflows, policies, prices, bandwidth, suppliers, and metrics – so you do not waste time and money re-inventing the wheel with every offering. The end result is a consistent view throughout your entire fulfillment process.

To support component-based product assembly, a selection engine is used for selecting product offerings and product/service/resource specifications from the catalog. These specifications may refer to standard provisioning workflows that are provided via Ericsson Order Care fororder negotiation and order management, or any other workflow engine, to drive the orchestration.

Ericsson Catalog Manager provides a product lifecycle management capability supporting the lifecycle of items in the catalog. This includes products, services, offers and resources from conception, through design and development, to service and retirement. Product Lifecycle Designer provides functionality that integrates people, data, process, and systems through a single view of items at each stage of their lifecycle.

Ericsson Catalog Manager also keeps the master data required to determine service availability, supplier availability, service level agreements (SLAs) and costs. When a service order request comes in, Ericsson Catalog Manager recommends a choice of offerings, decomposes the selected offering, and can be used to trigger the service order fulfillment processes to be executed across BSSs, OSSs, and third-party systems.

Ericsson Catalog Manager enables consistent provisioning process federation across various business process engines (e.g., order management, real-time charging, and cloud provisioning).In addition, Ericsson Catalog Manager provides a consistent approach and structure for supporting product/service ecosystems involving thirdparties. It relies upon a centralized catalog that enables thirdparties to retire their offers, update existing offers with new components, or create new offerings.

Ericsson Catalog Manager relies upon web services to make catalog data accessible to external systems for customer relationship management (CRM), order management, and provisioning. Web services enable business processes to request information about offerings, get product recommendations and quotes, and receive guidance on service order decomposition. Web services are also used to create, update, and delete data about specifications and offerings.

The catalog assists with change orders and supplemental orders by providing a clear way to effect the change and supply the appropriate information for order management processing.

In summary, Ericsson Catalog Manager provides a centralized product/service/resource catalog platform that:

- Applies a component-based approach that promotes reuse and speed in new product offerings and specification development.

- Allows CSRs to find unique customer solutions via an automated product selection search engine and to trigger the coordinated fulfillment across BSS/OSS and third-party systems.

- Enables third-party service partners to retire, update, or add new product offering components.

- Federates service provisioning processes for consistency and accuracy.

4 Product Benefits

With Ericsson Catalog Manager, you can adopt a disciplined and structured operational approach that allows you to:

- Rationalize product definitions.

- Reduce time-to-market as a result of component reuse.

- Maximize the reliability of fulfillment processes as a result of process optimization and cleaner service orders.

- Leverage horizontal supply chain features to facilitate the integration with third-party service partners.

4.1 Making the Case

The typical business case is based on a combination of several key factors:

Reduced time and cost to deploy new services – service component reuse, improved product visibility and communication within divisions of the enterprise and third-party suppliers, tools to manage product specifications, offerings, components, workflows and rules.

Reduced time and cost to process service orders – business process automation, service qualification/validation/selection.

Greater throughput of service orders – catalog-driven automated provisioning; cleaner service orders.

Leverage multiple existing provisioning systems – process federation.

The following Ericsson Catalog Manager value points can help you in creating your business case.

Table 1   Ericsson Catalog Manager Value Matrix

Benefit	How Ericsson Catalog Manager Helps
Reduce time to market new product offerings	• Reduce launch time by using a catalog-driven approach that promotes the reuse of proven components to systematically turn an idea into a practically-realized offering. • Reduce the time to architect each third-party relationship by leveraging consistent data, processes and methodologies. • Reduce OSS development costs via service component reuse, flexible modeling and consistent data, processes and methodologies.
Accelerated order-to-service for increased customer satisfaction and faster time-to-revenue	• Accelerate revenues with a centralized catalog to orchestrate processes over disjoint systems and by enabling reuse of workflows. • Enable third parties to create hybrid products/services that include processes, policies, and execution instructions. • Overall increased data transparency and integrity
Superior customer experience with more relevant product solutions and more reliable service order commitments from first-time-right	• Enforce a more consistent structuring of product offerings and automation of product selection and fulfillment to reduce errors. • Fewer errors due to a common understanding of product composition and proper qualification. • Adds discipline and structure to processes from offer assembly to activation.

4.2   Benefits for Customer Care

For Customer Care, Ericsson Catalog Manager enables you to:

• Meet or exceed customer expectations due to a more consistent structuring and automation of underlying product selection processes that provide more choices to customers that are consistent with downstream provisioning systems.

• Offer a wider variety ofproducts,and providemore reliable commitments with fewer errors for on-time delivery.

• Reduce time and errors by qualifying service order requests against existing inventory and invoking the most suitable provisioning processes.

4.3 Benefits for Operations

For Operations, Ericsson Catalog Manager enables you to:

- Achieve faster and less costly fulfillment of complex service orders due to more efficient automation and process orchestration.

- Reduce operational expenses by reusing proven product/service/resource components and invoking/coordinating the most suitable provisioning processes – even for the most complex products.

- Reduce service order fallout due to a more consistent, well-structured process orchestration and cleaner orders that result from structured order decomposition.

- Increase operational flow-through by providing proven, well-structured components and related provisioning work flows to third-party service partners.

4.4 Benefits for BSS/Marketing/Product Management

On the commercial side, Ericsson Catalog Manager enables you to:

- Reduce time to market new product offerings by providing a common nomenclature across your business for products and its definitions, and by enforcing consistency in the underlying processes across multiple provisioning systems.

- Increase customer satisfaction through a centralized platform that enables consistent support for products including related pre-order, order, and fulfillment processes.

- Reduce product creation costs by promoting component reuse.

- Quickly meet new customer requirements by using flexible product structures.

- Adopt a well-structured distribution of product information across different domains, systems and channels.

- Reduce time to architect each third-party relationship by leveraging common data, processes, and methodologies with the proper access restrictions.

- Reduce time to respond to changing needs when dealing with third-party service partners.

4.5   Benefits for IT

For IT, Ericsson Catalog Manager enables you to:

- Provide a platform for data and process consolidation.

- Reduce time to market new product offerings by providing a common nomenclature across your business, and by enforcing consistency in the underlying data and processes.

- Reduce OSS development and updating costs via flexible modeling and consistent methodologies that promote fast product redesign and better coordinated order fulfillment.

- Reduce the cost of BSS development and updates by supplying a centralized platform that documents product offerings and makes product recommendations and quotes.

- Reduce third-party integration costs via component reuse, flexible modeling, and a consistent, well-structured view of product/services/resources and underlying provisioning processes across internal and third-party systems.

5   Solution Differentiators

Ericsson Catalog Manager provides a cohesive foundation for both the structuring of new product offerings and specifications, and the automation of order-to-service processes. It provides extensible modeling and a component-based approach based upon consistent data, processes, and methodologies to promote reuse, fast product redesign and improved order fulfillment.

To support workflow design and implementation in a pre-integrated solution, Ericsson Order Care is available on the same platform and architecture as Ericsson Catalog Manager.

Ericsson Catalog Manager benefits from the broadest and deepest telecom expertise in the industry to implement a catalog-driven approach across fulfillment for pre-order, order validation, order management, inventory assignment, and activation. It bridges idea-to-implementation with order-to-service processes to provide comprehensive qualification of dynamically assembled product offerings and reduce time-to-revenue and service order fallout.

6 Related Solutions and Services

6.1 Consulting and Implementation Services

The bulk of the work involved in an implementation is not related to the installation itself, but to the retrieval, analysis, translation, and validation of current configuration data. Ericsson has developed efficient tools and methodologies for tackling this complex process, significantly reducing the time and effort that might otherwise be required. Some of the services available to you include:

- Initial consulting to assess key processes or network strategy

- Project management

- Solution architecture design including hardware configuration

- Implementation/installation services including system configuration or customization

- Integration to other systems or data migration

- Change management and training needs analysis

- Developer/administrator and end-user training

- Support training

- Support services

In addition, our consulting organization will help to assess and ensure the seamless flow of service orders from the point of catalog query during order initiatiationthrough your entire provisioning process including dispatch and activation. These consulting services also focus on new service approval processes, billing implications, service assurance processes and the work centers and systems that support these processes. Our recommendations and implementation plans ensure flow-through from service order negotiation to order completion.

6.2 Rationalization/Normalization of Data

To improve the management of product/service/resource data and leverage Ericsson Catalog Manager's capabilities, Ericsson can help you define a rationalized set of product offerings using a consistent modeling approach that enables repeatable business operations.

Ericsson experts work with you by gathering existing product model data, analyzing the data, and grouping the information into appropriate categories. Redundant data are removed and the data are normalized to create standardized product models.

6.3　　Related Products and Solutions

Ericsson Catalog Manager is part of a suite of products that provides an end-to-end catalog-driven suite of order fulfillment automation software with Ericsson Order Care. The Ericsson products are part of the Ericsson service agility software setthat includes Ericsson Order Care, Granite Inventory, Ericsson Discovery and Reconciliation, Ericsson Customer Number Manager, Ericsson Multi Activation, Ericsson Automatic Device Configuration, and Ericsson Remote Device Manager. It can also integrate with other fulfillment solutions and catalogs to initiate provisioning, track service orders, and activate services.

With this suite of products you can increase planning efficiency, automate provisioning/activation, reduce service order fallout, and maximize asset utilization and inventory data accuracy. It aligns your service design and fulfillment resources into an automated flow while using proven approaches for managing manual work activities. It ties all your applications in the process to data that is clean and synchronized, while protecting the process with "rainy day" features, including full or partial rollback. The suite of products enables you to federate legacy inventory to support your transition to new technologies and services.

In conjunction with Ericsson Order Care, Ericsson Catalog Manager enables you to tackle order-to-service process areas for specific lines of business including residential, enterprise, and mobile. Catalog data not only promotes component reuse when creating offers, but also ties these components to the corresponding workflows. As a result, Ericsson Catalog Manager can be used in combination with the order negotiation and order management functions in Ericsson Order Care to consistently drive the implementation of fulfillment flows.One common platform supports offer creation, pre-ordering, and order execution processes in a cohesive fashion.

7　　Ericsson as Your Partner

For decades, Ericsson has been playing a critical role in defining and developing today's global telecommunications industry. Today we continue to set the standard of excellence for the converged network environment of the future. Our depth of technical knowledge and breadth of practical experience give us a unique insight into evolving business needs. Service providers of all sizes have consistently depended on Ericsson for support in planning, designing, building, and managing their complex telecom networks and operations.

With our global scale, we have supplied, deployed, operated and optimized networks and ancillary systems all around the world – more than 1,000 networks in more than 180 countries use our equipment. From business planning and network configuration, to regulatory analysis and long-term maintenance and support, Ericsson has been at the forefront of the industry, helping operators to reduce the time to design, develop, and deploy networks, network equipment, and associated network management systems.

We have earned the respect of the communications service provider community based on our ability to provide the fundamental operations support systems and associated services that provide an unparalleled degree of automation and seamless interoperability among network elements, people, processes, and entities.

With Ericsson Catalog Manager, Ericsson delivers of a highly scalablesystem that centralizes the management of all product/service/resource information used to drive both customer care and service management. Our goal is to help you address the growing number and complexity of product offers so you can manage and grow your business.

Ericsson expertise in helping operators to define and manage communications services through their lifecycle, along with our considerable experience in the deployment of mission critical OSSs, has been the foundation of successful projects around the globe. Plus our ability to draw on a broad range of talent helps to mitigate the risks associated with any major OSS deployment. With our telecom expertise and experience, you can be sure that your solution is built for a telecom environment, not banking or retail. We know your systems, your networks, your market, your customers, and your business.

And as communication changes the way we live and work, Ericsson is playing a key role in this evolution, using innovation to empower people, business, and society. We are working toward the Networked Society, in which everything that can benefit from a connection will have one.