





WHITE PAPER

Software Monetization Best Practices: Lifecycle Methodology and Implementation Plan

Contents

und	
Background	2
Market Considerations	2
Organizational Challenges	3
Key Organizational Considerations	3
Software License Program Management	3
Policy and Procedural Considerations	4
Technology Considerations	4
Establishing a World-Class Software Licensing and Monetization Process	4
Gemalto's Software Monetization Best Practices Lifecycle Methodology	4
Gemalto's Software Monetization Best Practices Scorecard	5
What do the Software Monetization Best Practices Scorecard Results Mean?	6
The Benefits of Building an Optimal Software Licensing and Monetization Process	7
Summary and Conclusions	7
About Gemalto Sentinel Software Monetization	8
About THINKstrategies, Inc.	8

Introduction

Outlined are the most important principles and critical components of an effective software licensing and monetization program to successfully respond to today's rapidly changing marketplace.

The white paper will describe the proven Software Monetization Best Practices Lifecycle Methodology which Gemalto has developed that helps product managers and their corporate executives operationalize and integrate their software licensing operations into their ongoing business to generate greater customer intimacy, improve product quality, and drive greater operating efficiency.

The advent of the Cloud, rapid adoption of Software-as-a-Service (SaaS) and advancement of the Internet of Things (IoT) are fundamentally reshaping how software is developed, acquired and utilized. In response to these trends, software product managers and their corporate executives must rethink how they package, price and protect their software licenses. They must adopt new Cloud-based software monetization portals that can be utilized by their customers, channel partners and employees alike to keep pace with the constantly changing market demands. The portals and platforms which support them must also integrate effectively with established back-office systems and a new generation of Cloud-based alternatives.

This white paper will also describe a useful Software Monetization Best Practices Scorecard that can help software product managers and corporate executives to determine if they are ready to respond to these new challenges and capitalize on today's market opportunities.

The Scorecard Gemalto has created, with the help of THINKstrategies, is based on the consulting framework Gemalto uses when it works with clients. The Scorecard also captures the best practices which Gemalto has witnessed during thousands of client engagements.

The purpose of the Software Monetization Best Practices Scorecard is to help product managers determine the right software licensing and monetization policies, procedures and technologies they should put in place to achieve their business objectives.

Background

In August 2011, Marc Andreessen, Co-Founder and General Partner of the venture capital firm Andreessen-Horowitz, and Co-Founder of Netscape, published a seminal opinion piece in the Wall Street Journal entitled, "Why Software Is Eating the World," in which he claimed:

"More and more major businesses and industries are being run on software and delivered as online services."

Andreessen discussed how a new breed of software-enabled companies were emerging in almost every industry that were significantly disrupting their respective markets. These disruptive players were capitalizing on new Open Source and Cloud-based software development alternatives that lowered the barriers to entry in the software marketplace. At the same time, the proliferation of consumer-oriented mobile apps were resetting customer expectations regarding the ease of use and cost of acquiring software solutions.

Yet, even Andreessen may be surprised by how quickly his vision has become a reality. The rapid rise of Software-as-a-Service (SaaS), usage-based applications and other revolutionary forms of software-enabled innovations are now becoming mainstream.

This software proliferation is closely related to the broader digital transformation process being experienced across many industries. In fact, this new generation of software has created unprecedented business opportunities and an equal number of organizational challenges. As Bill Ruh, President of GE Software, has stated,

"...any industrial business that does not become a software business will not be relevant." 2

GE and other companies, as well as many government agencies, are deploying software everywhere across the "Internet of Things" (IoT). A recent Business Intelligence IoT Ecosystem Research Report forecasts there will be 34 billion devices connected to the internet by 2020, up from 10 billion in 2015. The report also predicts nearly \$6 trillion will be spent on IoT solutions over the next five years.

In order to capitalize on the unprecedented opportunities created by this new connected world, every organization – including commercial enterprises and public sector agencies – must now think of themselves as software developers and providers.

Becoming proficient in developing and delivering new software to meet the escalating needs of customers while keeping pace with intensifying competition has become imperative.

Established and emerging software vendors must implement a new set of software licensing and monetization policies, procedures and technologies to succeed in today's increasingly complex competitive environment. To stay relevant- you have to innovate. To be successful you have to make money as well as guarantee and protect the revenue stream.

Market Considerations

For a growing number of businesses, software is becoming their primary product. Therefore, properly packaging, pricing and billing for the software is critical to their business success.

The first step to building a winning software licensing and monetization process is fully understanding the market requirements for your software solutions.

In the past, software was primarily deployed on-premise and only required updating on a periodic basis because of the relatively static nature of the operating environment. In today's far more dynamic world, software is expected to be available 'on-demand' and to be continuously enhanced to meet the constantly evolving needs of the user. And, in many cases, the software user/buyer wants to be able to select the appropriate package from a variety of choices.

These changing expectations have forced a growing number of software developers – both established independent software vendors (ISVs) and intelligent device vendors developing software for the first time – to juggle multiple software licensing options with a variety of packaging and pricing approaches.

Properly packaging and pricing software licenses must be combined with the appropriate software monitoring capabilities to ensure that the applications are being effectively monetized. The advent of various SaaS, usagebased and other monetization methods makes the licensing process critical.

In today's world, software licensing is more than just protecting the intellectual property (IP) rights of a software solution. The economics of the on-demand SaaS business model require a more dynamic software monetization management system that can coordinate the packaging and pricing of software solutions across various platforms, including mobile devices. The new software monetization management system must integrate with an organization's back-office financial systems, but also its front-line customer support services. This end-to-end integration is essential to ensure the customer engagement experience is seamless from the initial onboarding process through 24/7 support.

Operationalizing software licensing from end-to-end can enable organizations to manage every customer interaction – from customer acquisition to recurring billing to customer care – in a consistent and profitable fashion. It can even encourage customer self-service anytime, anywhere.

Administering these various alternatives can be complicated. It entails complex back-office systems to properly manage the delivery of the software solutions. It also demands a responsive front-end design to ensure that the customer experience meets the needs of an increasingly unforgiving buyer/user.

In today's market, winning customers is just the beginning of an organization's challenges. Customer retention is essential and properly packaging, pricing and provisioning software is a critical part of the retention process.

Organizational Challenges

Electronic SKU management, on-demand capacity extension and analytics-driven marketing are just a few of the many new opportunities now available to drive new software revenue, delight customers and reduce costs. But software developers and device manufacturers are also faced with many challenges when it comes to maximizing the monetary value of their solutions. These challenges range from how to scale their licensing operation to making their back-office more efficient in order to reduce costs.

Two major disruptions are underway.

First, always-on connectivity and big data is transforming traditional markets. The Industrial Internet of Things (IIoT) is reshaping the healthcare, transportation, telecommunication and many other industries.

Second, seat-based and time-limited software licensing models are giving way to usage-based and on-demand pricing schemes.

These disruptions are creating new business challenges and forcing organizations to adopt new ways to streamline their operational procedures, such as the quote-to-cash process.

Defining the business goals and vision are critical components to developing or evolving any licensing strategy, turning high-level requirements into detailed and actionable plans is another challenge in and of itself.

It's important to understand that embarking on a softwarelicensing project can touch many parts of your organization and each stakeholder will have their own sets of needs and requirements. This requires a vision, a plan, an understanding of best practices, and attention to detail, managed execution, and constant optimization.

Key Organizational Considerations

Software License Program Management

Given the escalating stakes involved in software licensing and monetization, it is increasingly important to establish a centralized program management team that is responsible for coordinating the software licensing and monetization processes.

The Software License Program Management team should be given the authority to administer the business functions related to software licensing and monetization. These functions should fall into three primary areas:

- Audit Collect all the information necessary to properly develop and administer the software licensing and monetization processes.
- Authorize Establish a common set of policies and procedures to determine the appropriate licensing approaches, enforcement techniques and monetization methodologies.

3. Automate – Identify and acquire the necessary technologies to cost-effectively administer the software licensing, enforcement and monetization processes.

Policy and Procedural Considerations

Software licensing and monetization policies and procedures must take into consideration the external market realities along with internal organizational requirements.

As discussed earlier, today's dynamic market forces make it imperative for organizations to establish operating policies and procedures that are agile and can respond quickly to rapid changes.

On the other hand, organizations must also rely on a set of repeatable business practices that can be systematized and even automated to create economies of scale.

Therefore, the Software License Program Management Office must establish a common framework for its licensing and monetization policies and procedures that can be cost-effectively administered in various software procurement and deployment scenarios.

Technology Considerations

In many ways, the technological considerations regarding software licensing and monetization are the most critical components of a successful business approach.

Software licensing and monetization technology is essential to systematically developing and deploying software solutions. It should not only manage the end-to-end process, but also capture critical information about the software deployment lifecycle.

If implemented properly, this technology applies the licensing policies, monitors the usage patterns, measures the pricing methods, analyzes the utilization levels and recommends modifications to optimize the monetization opportunities.

However, the software licensing and monetization technology doesn't operate in a vacuum.

The software licensing and monetization technology must also integrate with an organization's existing back-office systems and inform its front-office functions about customer support, order entry & fulfillment, sales and marketing issues and opportunities.

Establishing a World-Class Software Licensing and Monetization Process

There are a number of specific internal and external elements which must be carefully examined in order to establish a world-class software licensing and monetization process.

These include:

- > Key business drivers
- > Current business pain points
- > Current product portfolio
- > Current sales models
- > Maintenance sales model
- > Future sales models (Cloud, SaaS, etc.)
- > Sales channel pain points and requirements
- > Fulfillment process, order and license fulfillment process
- > Customer experience, requirements and use cases
- > System architecture and analytics
- > Back-office integration
- > Legacy data migration

Gemalto's Software Monetization Best Practices Lifecycle Methodology

Maximizing software profitability hinges significantly on how well a software developer's license models meet the needs of the market and of its core business.

It is essential that the software monetization process is built on a proven methodology that leverages best practices and optimizes the software investment.

Gemalto recognizes that successful software implementations are a continuing process - not a single event. It believes that only through careful alignment of strategy, process, design, technology, and people can the software business objectives be achieved.

The Gemalto Professional Services and Consulting team uses a phased best practices implementation lifecycle methodology to address the technical and business issues associated with software monetization.

This approach enables organizations to develop a scalable software monetization process using a proven methodology to achieve positive results. Results that include improved and more efficient licensing operations, a great customer experience, increased customer satisfaction, and a rapid Return on Investment (ROI).

The software monetization best practices lifecycle methodology is a four-phase process which is designed to guide organizations to successfully implement the right software licensing products and management processes.

As Figure 1 illustrates, the Gemalto lifecycle methodology encompasses the following four phases:



Figure 1: Gemalto's Software Monetization Best Practices Lifecycle Methodology

Discovery-Determine the strategic software monetization business objectives, align the organizations needs with monetization solutions, and establish specific measures and baselines for the operating standards. The consultant will then help you conduct an internal assessment of the business goals for your licensing system and go on to use these goals to define an actionable strategy. You will find Gemalto's hands-on approach to be deeply focused on your customers, your business processes and your organizational needs.

Appraisal & Optimization- Many software developers have an existing licensing strategy in place but may find it difficult to manage, too expensive, lacking in functionality, or incapable of adapting to new business goals. Gemalto's software monetization consultants specialize in system design and optimization. Whether you know how your licensing strategy needs to evolve or you just know there is a broken process somewhere, a Gemalto consultant will clarify your organizations new or additional business goals for licensing, conduct an assessment of your existing licensing processes and then define an actionable plan for evolving your strategy.

Architecture and Solution Design- While defining the business goals and vision are critical components to developing or evolving any licensing strategy, turning high-level requirements into detailed and actionable plans is another challenge in and of itself. Gemalto's team of software licensing consultants has been responsible for designing some of the world's most complex licensing systems. Your dedicated Software Licensing Consultant will use the organization's defined business goals to design an end-to-end licensing system architecture that addresses:

- > Business Integration
- > End-to-End Fulfillment Processes
- > Back Office Design
- > Customer Experience
- > Sales Impact
- > Business Intelligence
- > Security
- > Product Design
- > License Models
- > Use Case Definition
- > Detailed User Workflows
- > Data Migration Planning
- > Business Agility

Go Live & Evolution- Gemalto will develop a project plan including success factors and risks associated with the rapid deployment of a fully configured software monetization solution that achieves the organization's desired business objectives, this includes a continuous optimization program. This optimization program assess and improves the software monetization applications, business process, user adoption and technical support requirements.

Gemalto's Software Monetization Best Practices Scorecard

Gemalto has developed a Software Monetization Best Practices Scorecard to measure an organization's software implementation readiness and the organization's ongoing software management capabilities based on its specific business objectives.

The scorecard is completed as a part of the discovery process and then again after the go-live phase of the Software Monetization Best Practices Methodology Lifecycle is completed with periodic updates during the evolution process. The goal is to measure the maturation of the organization's software monetization policies, procedures, technology and skills.

Figure 2 outlines the key considerations and objectives the Software Monetization Scorecard measures.

Operational Capability/ Organizational Consideration	Products	Policies	Processes	Business
Programmable/	Focus on	Focus on	Focus on Customer	Focus on Maximizing
Dynamic	SW Responsiveness	SW Operations Agility	Satisfaction/Success	SW Monetization
Automated/	Focus on	Focus on SW Scalability	Focus on Customer Self-	Focus on
Systematized	SW Production		Service/ Experience	SW Measurement
Standardized/	Focus on	Focus on	Focus on	Focus on
Structured	SW Entitlement	SW Governance	Customer Retention	SW Reporting
Ad-Hoc/	Focus on	Focus on	Focus on	Focus on
Unstructured	SW Protection	SW Accountability	Customer Entitlement	SW Licensing

Figure 2: Key Software Monetization Best Practice Considerations (Developed by THINKstrategies, Inc.)

As Figure 1 suggests, there should be a strong connection between the system that generates and manages the software licensing and entitlements and the back-office systems. This integration provides valuable insight about your customers' software usage patterns, preferences and needs.

The Software Monetization Best Practices Scorecard was developed to help organizations understand the current state of their software licensing, monitoring and measurements capabilities, and where they can go in the future. This enables the organization to develop a strategic plan with specific steps to achieve their business objectives.

Gemalto has worked with a wide array of software developers and intelligent device manufacturers with varying software product offerings. Based on these experiences, Gemalto has developed its Software Monetization Best Practices Scorecard to help organizations assess their software readiness level. It also helps them identify the key business issues they need to address, and provides recommendations to achieve their specific software objectives.

The goals of this process are:

- > Expedite the planning process and licensing strategy development
- > Maximize revenue opportunities
- > Reduce licensing costs
- > Streamline operational workflows

The Software Monetization Best Practices Lifecycle Methodology takes into consideration an organization's licensing pain points, current licensing policies and procedures, their business use cases, back office system integration needs, new system requirements and industry best practices.

Gemalto utilizes a multi-step process to assess, analyze and act on the organization's software licensing requirements from a business, organization and technology standpoint.

The methodology produces the following deliverables:

- > A prioritized software licensing requirements inventory
- > An order-to-fulfillment and product activation blueprint based on prioritized use cases
- > A map of current fulfillment system workflows and optimal design recommendations
- > An audit of current back-office systems and new system requirements

What do the Software Monetization Best Practices Scorecard Results Mean?

The Gemalto Software Monetization Best Practices Scorecard examines twelve key factors that impact the software readiness of established ISVs and enterprises creating new software businesses.

The Scorecard includes the following key questions:

- 1. **Software Business** Is your company primarily a software vendor, hardware vendor or enterprise developing new software solutions?
- 2. Software License Models Are your customers demanding new ways of licensing your software products that are creating challenges for your organization?
- 3. What Types of Software Licenses Are in Place and Being Considered On-Premises, SaaS, Usage-Based, Other?
- **4. License Key Generation and Ease of Fulfillment –** Do you have multiple license key generation systems or too many manual processes in the delivery of the keys?
- 5. Software Licensing Program Management Does your company have a centralized organization that governs and defines company-wide software licensing and monetization policies/procedures?

- 6. Software License Monitoring & Enforcement Technology – Does your organization have software licensing technology in place to monitor and enforce contract compliance, or do you rely on contract terms and "trust and verify" audits?
- 7. Software Sales Models Do you face challenges supporting multiple sales channels, royalty reporting requirements, and multi-tier customer/channel relationships?
- **8. Software Distribution & Updates –** Do you provide your customers with the ability to access downloads of software and upgrades?
- 9. Software Billing Is your billing system capable of keeping up with your current or planned software options?
- **10. Renewals –** Is your SW License Management system able to automatically handle renewals?
- 11. Customer and Channel Web Portals Does your company provide Customer/Channel portals that provide visibility into the status of software licenses, renewals, etc.?
- **12. Analytics –** Does your organization have the ability to easily analyze its software licensing and monetization status / capabilities?

The Scorecard asks the respondent to indicate how much 'pain' their organization is experiencing regarding each of the key factor areas. The higher the level of pain, the greater the urgency for the respondent organization to address its specific software monetization issues.

Scores of '50' or below clearly indicate that the software monetization issues should be addressed immediately. Scores of 50-70 suggest that the organization is facing software monetization issues that should be addressed as soon as possible. Organizations that score 70 and above can be proud that they are following industry best practices for software licensing and monetization, but should also stay abreast of the rapidly changing requirements of today's marketplace.

The Benefits of Building an Optimal Software Licensing and Monetization Process

Addressing the issues identified by the Gemalto Software Monetization Best Practices Scorecard and establishing a world-class software licensing and monetization process will enable you to:

- > Facilitate and automate license order entry, management and fulfillment in ERP/ CRM systems that are more flexible and scalable to meet escalating customer/ market demands.
- > Ensure data integrity across back-office and entitlement management systems.
- Improve account management, tracking, customer service and support.
- > Sell more based on actual data regarding which customer licenses are used and which are about to expire, allowing for automatic renewal and up-sell opportunities.

- Enable sales and marketing teams to plan, launch, and execute sales campaigns to existing and prospective customers.
- > Empower the marketing team to track sold products and license usage across the installed base to improve up-sell and cross-sales campaigns.
- > Enables improved data collection and analysis capabilities for better visibility and customer management.
- > Encourage better customer service by providing support teams access to the most up to date data on customer license entitlement and consumption patterns.

Summary and Conclusions

Developing and delivering software has become a pivotal part of the corporate success of a widening array of businesses. And, the range of software packaging and pricing alternatives aimed at addressing the needs of a broadening set of business use cases is also expanding rapidly.

Given these market realities, the traditional software licensing methods and legacy operating systems can no longer keep pace with the escalating organizational and technological demands of today's software monetization requirements.

World-class software development and delivery organizations must adopt new tools and techniques to meet rising customer expectations and respond to intensifying competitive pressures.

Market leading companies can achieve their business objectives by adopting a Software Licensing Solution Design process like Gemalto has developed. This process can help organizations thoroughly assess their software licensing and monetization requirements and analyze their alternatives.

The Software Monetization Best Practices Lifecycle Methodology also enables companies to act quickly to implement repeatable software licensing and monetization policies. These policies should be supported by agile technologies which can automate their business processes and optimize their effectiveness.

The Gemalto Software Monetization Best Practices Scorecard gives organizations an easy to use selfassessment tool to determine their readiness to address today's escalating software monetization challenges.

The Scorecard also allows organizations to identify the software licensing and billing issues of greatest concern. It also enables them to understand how these issues should be addressed. Ultimately, the Scorecard can ensure the organization is properly prepared to respond to their customers' rapidly evolving needs and the constantly changing competitive landscape.

Find out your Readiness Score:

http://www5.gemalto.com/ sm-best-practices



About Gemalto Sentinel Software Monetization

Gemalto, through its acquisition of SafeNet, is the market-leading provider of software licensing and entitlement management solutions for on-premises, embedded, and cloud-based software vendors. Gemalto Sentinel is the most trusted brand in the software industry for secure, flexible, and future-proof software monetization solutions. http://www.qemalto.com/software-monetization.

About THINKstrategies, Inc.

THINKstrategies, Inc. is the only strategic consulting services company focused entirely on helping its clients capitalize on the unprecedented business opportunities created by the technology industry shift from a product-centric to a services-driven orientation and an "on-demand" delivery model, such as Cloud Computing, Software-as-Service (SaaS) and Managed Services.

THINKstrategies' mission is to help our clients re-THINK their corporate strategies, refocus their resources and realign their operations to achieve their business objectives. THINKstrategies helps enterprise decision-makers with their sourcing strategies, IT solutions providers with their marketing strategies, and VCs with their investment strategies.

Join the Conversation



> Facebook

https://www.facebook.com/Sentinel-Software-Monetization-1758261374199865/



> LinkedIn

https://www.linkedin.com/showcase/10586190/



> Twitter

https://twitter.com/Sentinel SM



> Google+

https://plus.google.com/u/2/111213966957422791805



YouTube

https://www.youtube.com/channel/UCO_hjzzJXm0wE7L1kxZjfcg



> Blog

https://sentinel.gemalto.com/blog

THINKstrategies has also created the Cloud Computing Showplace online directory and best practices resource center to help IT and business decision-makers find and fully leverage today's leading SaaS, Platform-as-a-Service (PaaS) and Infrastructure-as-a-Service (IaaS) solutions. To learn more about the Cloud Computing Showplace, go to www.cloudshowplace.com.

THINKstrategies also hosts a series of executive forums focused on the latest business opportunities and technological developments in the Cloud marketplace, called the Cloud Innovators Summits. To learn more about these events, go to www.cloudsummits.com.

For more information regarding our unique capabilities, visit www.thinkstrategies.com, or contact us at info@thinkstrategies.com.

Contact Us: For all office locations and contact information, please visit www.gemalto.com/software-monetization Follow Us: sentinel.gemalto.com/blog





¹ http://www.wsj.com/articles/SB10001424053111903480904576512250915629460

 $^{2\ \}underline{\text{http://www.computerweekly.com/news/2240241843/Executive-interview-GEs-software-chief-Bill-Ruh-on-value-of-an-industrial-cloud}$

³ http://www.businessinsider.com/iot-ecosystem-internet-of-things-forecasts-and-business-opportunities-2016-2