

for CodeMeter

Insights from Customer Case Studies

Thomas Oberle, Member of the Management Board WIBU-SYSTEMS AG www.wibu.com



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About the Author



Thomas Oberle holds a degree in electrical engineering from the University of Karlsruhe. He began his professional career as a hardware and embedded software developer for industrial fieldbus systems, machine controls, and operating devices.

After completing his postgraduate studies in industrial engineering at the Kaderschule St. Gallen (CH), he moved into management consulting. Working initially as a process consultant for innovation management, product development, and project management initiatives, he then became a senior consultant for production, purchasing, and

supply chain management endeavors. As project manager for the implementation of SAP ERP systems, he gained profound knowledge of common best-practice business processes in manufacturing.

At WIBU-SYSTEMS AG, he is a member of the management team, responsible for organizational development, process optimization, and the use of methods and tools, as well as for program and product portfolio management.

1. Management Summary

This white paper makes the commercial case for CodeMeter as a technology for protecting software and intellectual property. Its key findings are based on realistic Return on Investment (ROI) calculations, with the underlying data drawn from interviews with Wibu-Systems' clients of different sizes.

Key results:

- Investing in the CodeMeter software protection and licensing solution has generally paid off for all respondents within a period of a year or less.
- The ROI at three years after launch varies between 350% for larger and 750% for smaller software businesses.

The study underlines the commercial potential and effectiveness of CodeMeter for a range of use cases in different sectors of industry. Choosing CodeMeter means more than just investing in a premier licensing and software protection solution. It also ensures a proven means towards commercial profitability and success.

2. Introduction

This white paper provides a viable answer to the "Make or Buy" question when it comes to selecting and integrating a software licensing solution. It addresses the financial implications of ineffective licensing as well as the impact of an effective licensing strategy for long-term revenue growth. Additionally, the white paper points out the many advantages of automated licensing technology for software developers, which can range from improved efficiency in internal processes to the creation of flexible licensing models and positive impacts on the sales process.

A licensing system protects software and other contents, allows the introduction of innovative licensing models to help monetize software IP, and thereby create new potential revenue streams. The ROI analyses presented here distinguish between the initial investments required, the operating costs moving forward, and the benefits to be expected over time, including added revenue, the prevention of piracy, and greater internal efficiency. A positive ROI is proof of the commercial sense of investing into software protection and licensing as a smart business decision.

2.1 The Problem

Today's businesses are facing a multitude of challenges when it comes to protecting and licensing their software. These have a direct impact on profitability, but also on more intangible factors like the reputation and integrity of system and software providers. This chapter covers the basic problems that companies can expect to encounter.

2.1.1 Software Piracv

Software piracy and ineffective licensing have a direct financial impact for businesses: Unauthorized copies and unlicensed use mean significant losses in revenue, while poorly enforced licenses can mean lost revenues and lost control. Cracking tools are easy to come by and illegal copies are easily shared over the Internet. Recognizing and averting attempted piracy needs effective technologies and strategies to make sure that only legitimate users can access their software.

2.1.2 IP Protection

A key challenge for innovative enterprises is finding the right means to protect their intellectual property. Protecting copyrights and patents is paramount, not least to secure one's financial integrity and ability to keep innovating. Without adequate protections, creative ideas and other intellectual assets are at risk of theft, emulation, and unauthorized use. The danger is not just financial in nature; companies also stand to lose their good name and reputation in the worst case. Protecting intellectual property therefore needs robust technologies and strategies to ensure that digital assets are safe from theft and manipulation.

2.1.3 Software Security

Today's digital life has put software security in the spotlight. This means more than protection against unauthorized use or piracy. Far more importantly, it means preventing manipulation and cyberattacks. Important industry standards like IEC 62443, the EU NIS-2 standards, and the EU Cyber Resilience Act all underline how important it is to secure software products against such threats.

In practice, protecting against manipulation and tampering means making sure that no unauthorized third party could change, harm, or otherwise compromise software in any way. This calls for security technology on various levels, from encrypting and signing code to more advanced techniques for recognizing and averting attacks. The challenge lies in implementing robust measures that do not harm the functionality and efficiency of the software, while still offering effective protections against increasingly smart attacks.

2.1.4 Flexible and New Pricing Models

The manufacturing industry is facing increasing pressure to respond to changes in its markets and in the expectations of its customers. This also translates into a growing call for more flexible, novel usage and pricing models, as clients are turning increasingly to custom solutions that are designed to match their specific needs and budgets. Conventional monolithic and rigid licensing models struggle with doing so, and they may lead to growing dissatisfaction among clients and missed opportunities. Today's customers want the ability to select among different licensing options, including subscriptions, pay-per-use models, or other innovative alternatives.

Transitioning to new pricing models can be a complex project for many businesses. A new pricing policy goes far beyond technical changes. It has repercussions for the entire business model and internal processes. The trick here is to strike the right balance between flexibility and profitability and making sure that the pricing and licensing options are not so complicated that they confuse customers.

2.2 Software Licensing with CodeMeter by Wibu-Systems

CodeMeter offers exceptional levels of security on multiple fronts: Users can decide their own level of protection, as CodeMeter allows them a free choice of how deeply they want to integrate the technology in their own products. The powerful encryption uses advanced cryptographic technology to guard source code against unauthorized access and prevent code decryption and tampering. With the ability to move critical software functionalities into particularly secure, cryptographically protected components like hardware dongles or the secure cloud, CodeMeter can raise the level of protection even further. CodeMeter also gives its users granular control over the licensing strategy with the ability to protect and license individual functions and modules, giving only authorized users access to specific parts of the protected software. It also monitors the integrity of the software during runtime, creating a means to stop the software when unauthorized actions are noticed and to prevent piracy and manipulation with certainty.

By combining these technologies, CodeMeter offers a dependable and versatile tool for companies interested in protecting their intellectual property and ensuring the reliability of their software licenses.

The seamless integration of CodeMeter with its License Central management system promises process improvements for software vendors. The combination of solutions helps automate and optimize processes for a more efficient administration of the entire software license lifecycle. As the licensing processes are automated, software businesses benefit from the simple creation, provision, updating, and management of their end user licenses. Custom licensing models are possible as well as additional means for monitoring license usage in the field: a powerful tool that keeps the license admin efforts to a minimum without compromising compliance standards. The scalable and flexible CodeMeter License Central system lets software businesses respond dynamically to the changing needs and expectations in the market and easily adjust their licensing strategy and models accordingly.

2.3 How to Calculate the ROI

A precise calculation of the Return on Investment (ROI) is critical for a meaningful discussion about the added value of an advanced licensing solution. The following explanation of the methodology illustrates how the ROI was calculated from four extensive interviews with actual users in the market. The underlying figures and other statements drawn from interviews with the leading executives of companies using CodeMeter offer a valid basis for these calculations. The ROI is then determined by taking the initial investment, the licensing costs during active operations, the potential revenue growth, and the expected savings into consideration to get a clear impression of how the solution will impact the user's profitability.

The first step addresses the initial one-off investments needed to put the specific licensing system to work. This includes the basic price of the protection software as well as the internal costs for developing and integrating it into established order processing systems. In active operations, certain costs will be incurred for providing CodeMeter license containers for each unit of software sold. These are also included in the calculation.

On the plus side, there is expected revenue growth due to the prevention of piracy and the effective protection of intellectual property, which also helps promote sales of legitimate licensed products. There is also the additional option of introducing flexible pricing models that can be matched more perfectly to the needs of actual clients and help generate new revenue streams.

After the initial introduction phase, automated license distribution can help bring down running costs. Integrating a fully formed licensing technology can also reduce development costs, as developers have access to a standardized and complete package. This also promises more consistent and efficient administration and, in turn, lower support costs.

The ROI calculation is based on a three-year timeframe, since the decision in favor of a software licensing system is strategic in nature and will typically be made for the long term, even though the ini-

tial investment itself should reach break-even as quickly as possible. The three-year period allows the calculation to capture the sustainable effects on operations, profitability, and long-term value creation while also offering a realistic period for calculating the investment decision.

Initial Start-Up costs

Software License fee [TEUR] CodeMeter Protection Suite Wibu-Systems Professional Services [TEUR] Wibu-Systems Academy / Training [TEUR]

Initial costs CodeMeter [TEUR] technology

ISV development costs for [TEUR] integration into software products

ISV development costs for [TEUR] integration into backoffice systems

Initial development cost ISV [TEUR]

Total Initial Start-up costs [TEUR]

Image 1: Initial costs

Revenue Increase			
Revenue		Average Sales price per unit Annual quantity	[EUR] [pcs.]
		Annual revenue	[TEUR]
Revenue increase by reducing illegal copies		Annual quantity increase	[pcs.]
Piracy rate in market:	15%	Revenue increase	[TEUR]
✓ Revenue increase by IP protecting (software + data)		Annual quantity increase	[pcs.]
Market share increase:	10%	Revenue increase	[TEUR]
✓ Revenue increase by offering flexible pricing models by offering new pricing models		enue growth by flexible pricing models evenue growth by new pricing models	[%] [%]
		Revenue increase Total Revenue increase	
		Total Quantity increase	[pcs.]

Image 2: Revenue growth due to software protection measures

Cost Savings [FTE] Number of licensing order-taking Reduction of licensing order-taking [FTE] Cost savings licensing [TEUR] FTE cost per [TEUR] Order-taker order-taking Number of legacy licensing developers [FTE] Reduction of licensing developers [FTE] FTE cost per [TEUR] Cost savings development [TEUR] developer Number of legacy support experts [FTE] Reduction of support experts [FTE] FTE-Kosten pro [TEUR] Support-Experte Cost savings support [TEUR] Total Cost savings [TEUR]

Image 3: Potential savings from automating the licensing system

NOTE:

For the English localization of this German white paper, it's important to note that the acronym TEUR is frequently utilized. TEUR stands for thousand euros, and while it is predominantly used in German-centric countries, it efficiently conveys the concept in charts and tables throughout this document.

3. The Use Cases in Brief

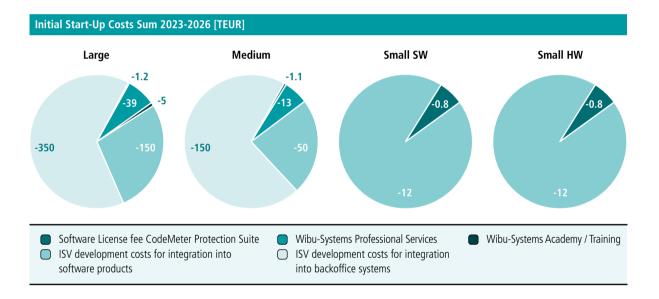
	Business Model	Needs	Annual revenue from the products to be protected
Small SW	Small Software Ltd (Small SW Ltd) creates a software package that simulates the commissioning of industrial systems. The end user can activate the right libraries for different makers' controllers, sensors, and actuators by buying them from the company's web store.	A simple solution that can be easily integrated in the existing web store.	Approx. €0.2 M
Small HW	The 3D Printing Startup Small Hardware Ltd (Small HW Ltd) maintains a website where end users can create and download 3D models for use with approx. 120 print service providers in Germany. These files need to be protected, while also making sure that only the paid-for number of prints can be executed. For additional flexibility, the licenses are stored on USB dongles: Users can simply take them to the machine that is available at the time.	Exceptional protection against unauthorized copying of the printing data and easy, flexible handling for end users.	Approx. €0.2 M
Medium	Medium LLC is a medium-sized mechanical engineering business that has, to date, provided the machine operating software for free with its machines. In the future, Medium LLC intends to not only protect the inherent know-how, but also be able to sell individual machine functions separately. The machines are typically located in conventional OT shopfloor environments, but with data access for predictive maintenance via edge devices running the new maintenance software made by Medium LLC. The (Python) software on the machines runs on embedded devices, while the maintenance software (based on .NET/C#) runs on virtual edge devices.	Monetizing the soft- ware with compre- hensive protection of individual func- tions; use of soft- ware, hardware, and cloud license containers for compatible, cross- platform licensing.	Approx. €10 M
Large	Large LLC makes software that covers all business processes for its corporate users. The individual modules of the package are licensed by binding the software license to individual workstations. This means that different users can access the software on the company's devices.	Distributing very high numbers of licenses that end users can manage themselves in a self- service portal.	Approx. €36 M

4. Costs

4.1 Initial Costs

The initial costs cover the price of buying the protection software and the money invested for implementing and integrating it at the client. Depending on the needs on the ground, this can extend to ordering support from Wibu-Systems Professional Services to help integrate CodeMeter seamlessly in the existing landscape. Clients can also incur other specific development costs for completing feasibility studies, additional integration work, data migration, or for tailoring the protection software specifically to match their business processes and ERP systems.

Initial Start-Up Costs up to the Date of Sale (DoS) [EUR]	Large	Medium	Small SW	Small HW
License fees for CodeMeter Protection Suite	-1,200	-1,100	-800	-800
Wibu-Systems Professional Services	-39,000	-13,000	0	0
Wibu-Systems Academy / Training	-5,000	0	0	0
Development costs for integrating CodeMeter in the client's own software	-150,000	-50,000	-12,000	-12,000
Development costs for adjusting the existing back office systems (ERP)	-350,000	-150,000	0	0
Initial start-up costs	-545,200	-214,100	-12,800	-12,800



Certain expenses will be incurred before the licensing system is up and running. These can represent a considerable entry threshold affecting the decision in favor of or against an external licensing system. Once the system is implemented and ready, extraordinary costs like these are unlikely to occur again.

4.2 Costs for the Licensing System

This category of costs covers the expenses incurred for licensing sold software. Every licensed product needs a license container, which can cost different amounts of money depending on the chosen pricing system. The licensing costs can, for instance, be covered by a blanket payment based on total turnover with the protected software, or they can be calculated by the actual number of license containers. Clients have the opportunity to buy additional license admin and support services for more comprehensive support.

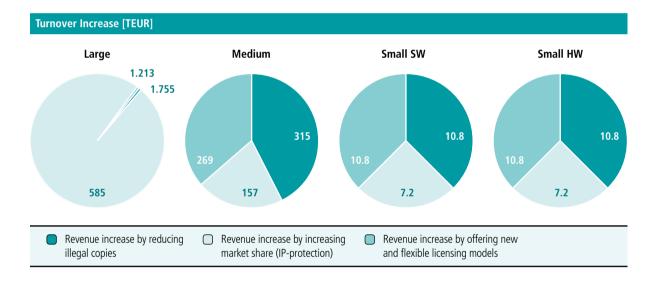
Wibu-Systems Licenses [EUR]	Large	Medium	Small SW	Small HW
Total operating costs	-1,071,000	-258,000	-13,900	-29,500

5. Returns

5.1 Revenue Growth

Introducing licensing technology gives companies a valuable opportunity to substantially increase their revenue. This is primarily due to the significant reduction in pirated copies of their product. Effective protection of their IP also makes it harder for competitors to emulate key functions of their software, which keeps their wares unique and more valuable for the end user. Additional revenue can be expected from the new flexibility afforded by the licensing system, which allows the companies to introduce new, bespoke pricing models that are far more responsive when it comes to matching the individual needs of end users. This agile pricing policy enables companies to strengthen their relationships with their users and seize new upselling and cross-selling opportunities.

Revenue Growth [EUR]	Large	Medium	Small SW	Small HW
Revenue gained by preventing piracy	1,755,000	315,000	10,800	10,800
Revenue gained by expanding the market (IP protection)	585,000	157,000	7,200	7,200
Revenue gained by introducing new and flexible licensing models	1,213,000	269,000	10,900	10,900
Total	3,553,000	741,000	28,900	28,900

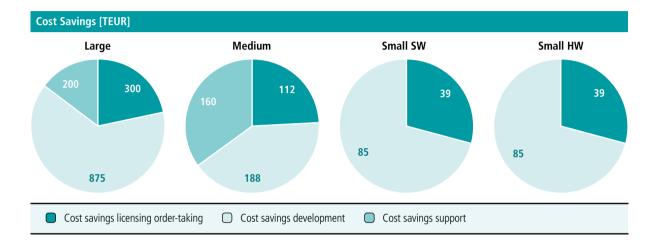


5.2 Costs Saved in Development, Sales, and Support

Implementing the licensing solution gives immediate access to substantial cost savings due to the system's perfect integration in the established business processes. By fully automating the license creation and provision process, the operating costs in sales can be brought down by a substantial margin, and integrating a single, unified hardware, software, and cloud-based protection and licensing solution promises lower development costs, especially for companies that need to rely on different types of licensing technologies. These savings also extend to support operations, as the integrated licensing system means less need for active support and optimized costs over the long run.

The interviewed companies were able to achieve the following cost savings in their development, sales, and support operations:

Cost Savings [EUR]	Large	Medium	Small SW	Small HW
Savings in order processing	300,000	112,000	39,000	39,000
Savings in development	875,000	188,000	85,000	85,000
Savings in support operations	200,000	160,000	0	0
Total savings	1,375,000	460,000	124,000	124,000



6. Calculating and Analyzing the ROI

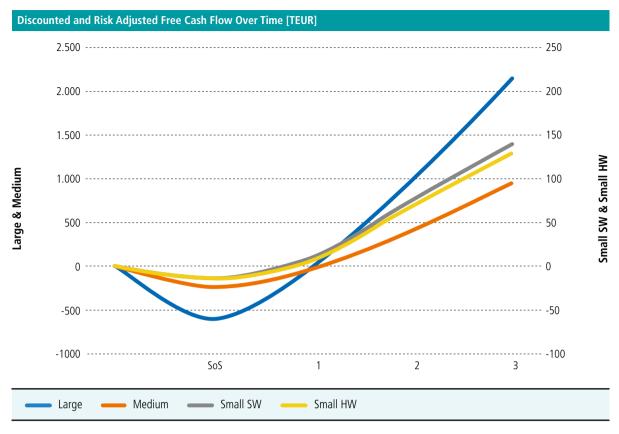
For the final calculation of that key commercial indicator, the ROI, the additional revenue won in the first three years and the costs saved in that period by using the licensing system were considered. This defines the Net Margin Increase from operating the licensing solution.

Nothing is harder to predict than the future, which calls for a blanket risk adjustment of 20% to keep the calculation realistic. The resulting value is contrasted with the initial costs for implementing the licensing solution.

The cumulative and risk-adjusted free cashflow after three years of operating the new licensing solution represents the cash value of the investment, divided by the discounted initial costs to determine the final ROI.

Total Cost Savings Until Start of Sales Undiscounted [EUR]	Large	Medium	Small SW	Small HW
Present Value of Net Margin Increase and Initial Costs [EUR]	2,142,900	952,900	104,600	92,900
Start-up Costs [EUR]	-599,700	-235,500	-14,000	-14,000
ROI	357%	405%	745%	661%

Finally, the ROI calculation revealed that CodeMeter is indeed an extremely profitable investment for all use cases covered in this white paper. The brief time to break-even of around twelve months and the significant revenue growth attributed to CodeMeter make it a convincing solution for all companies interested in optimizing their software protection and licensing capabilities.





7. Conclusions

The ROI calculation presented here for the CodeMeter software protection and licensing solution made by Wibu-Systems is impressive proof of the financial benefits that can reasonably be expected from buying a professional licensing solution. The benefits of such a system can be found not only in the improved monetization of the software, but also in the competitive advantage offered by it and the long-term boost to the user's financial prowess.

Introducing efficient licensing gives companies a clear opportunity to increase their revenue. By preventing software piracy and protecting the IP invested in the product, they can expect not just increased sales, but also greater trust among their end users in the reliability and integrity of their software. Added flexibility and agility in pricing policy let companies create new, bespoke offers that are a far better match for the needs of their users and can generate entirely new revenue streams.

Implementing professional licensing also means saving costs at a substantial level. The ability to fully automate the license creation and logistics process not only facilitates internal processes, but also has a direct impact on process costs. With a single, standard licensing technology that covers hardware, software, and cloud capabilities, development costs are reduced, administration is made easier, and the updating of licenses in the field facilitated – translating into lower support costs overall.

The present ROI calculation is based on extensive interviews with actual clients and covers the investment costs and the licensing fees for the system itself as well as the expected revenue growth and the likely savings gained. The calculation was made over a three-year timeframe to offer a meaningful impression of the long-term effect of opting for such a licensing solution. By organizing the available data in four distinct scenarios, the calculation offers meaningful insights into a range of different use cases and sectors of industry – all of which clearly benefit from adopting an efficient licensing system.

Finally, this ROI calculation is impressive proof that companies that opt for CodeMeter by Wibu-Systems are not only able to markedly improve their profitability, but also sharpen their competitive edge, protect their IP, and secure lasting growth. The right licensing solution is therefore far from another cost factor, but rather an invaluable investment that can pay off in many different ways.

About Wibu-Systems

Headquarters



WIBU-SYSTEMS AG

Zimmerstrasse 5 76137 Karlsruhe, Germany Telephone: +49 721 93172-0 sales@wibu.com | www.wibu.com

















Wibu-Systems is a global leader in cutting-edge cybersecurity and software license lifecycle management. We are committed to delivering unparalleled, award-winning, and internationally patented security solutions that protect the intellectual property embedded in digital assets and amplify the monetization opportunities of technical know-how. Catering to software publishers and intelligent device manufacturers, the interoperable hardware and software modules of our comprehensive CodeMeter suite safeguard against piracy, reverse engineering, tampering, sabotage, and cyberattacks across mainstream platforms and diverse industries.

Wibu-Systems Branch Offices

WIBU-SYSTEMS USA, Inc.

USA: +1 800 6 Go Wibu +1 425 775 6900 sales@wibu.us

WIBU-SYSTEMS BV/NV

The Netherlands: +31 74 750 14 95 +32 2 808 6739

sales@wibu.systems

WIBU-SYSTEMS

Spain | Portugal +34 91 123 0762

sales@wibu.systems

WIBU-SYSTEMS (Shanghai) Co., Ltd.

Shanghai: +86 21 5566 1790 Beijing: +86 10 8296 1560/61

info@wibu.com.cn

WIBU-SYSTEMS LTD

United Kingdom | Ireland +44 20 314 747 27 sales@wibu.systems

Scandinavia | Baltics +46 8 5250 7048 sales@wibu.systems

WIBU-SYSTEMS

WIBU-SYSTEMS K.K.

Japan

+81 45 565 9710 info@wibu.jp

WIBU-SYSTEMS sarl

France

+33 1 86 26 61 29 sales@wibu.systems

