

Lifecycle Reality in Non-Industrial PLM Businesses: Banks and Insurance Companies Develop and Support Products, Too

CIMdata Commentary

Key takeaways:

- *While PLM strategies are common in manufacturing industries, they can provide just as much value in the development and long-term monitoring of insurance coverages and banking products.*
- *Insurance policy premiums and bank loan repayments do not fundamentally differ from a manufacturer's flow of revenues from sales of goods.*
- *Financial companies are searching for people with PLM implementation experience while PLM solution providers seek people with backgrounds in underwriting and lending.*

One sure sign of a strategy's lasting success is its uptake by industries that have seemingly little in common with the industry that generated the strategy in the first place. Such is the case with industrial mainstay Product Lifecycle Management (PLM), now drawing interest from financial, insurance, and other similar companies.

From its roots in aircraft and automotive manufacturing in the early 1980s, PLM spread into other discrete industries (e.g. high-tech and industrial equipment) and then into the process industries, food, apparel and retailing, consumer packaged goods, and pharmaceutical industries (among others), as well as service businesses such as public utilities. In every instance, relentless cost, competition, and quality pressures drove PLM implementations.

Less obvious, but potentially much more significant, is the enormous value of the product lifecycle information that PLM puts within easy reach. It is essential to understand how much lifecycle monitoring can reveal and why enterprises can be hobbled by failing to act on this information.

Something even more profound is going on, however, and that is the disruption of entire industries by companies such as Uber, Airbnb, Expedia, and Amazon. The question here is how PLM can help steer financial companies through their own disruptions with its end-to-end holistic lifecycle approach to products and lifecycles.

The initial PLM focus is on how banks and insurers create, configure, manage, and end the lives of their products. For insurance policyholders, underwriters, and claims agents, a PLM approach can help make the terms and conditions (Ts & Cs) of new and customized coverages more competitive, less risky, more regulation-compliant, more profitable, and more straightforward.

It is axiomatic in the linked worlds of digitalization, Big Data, and the Internet of Things (IoT) that every lifecycle will be defined upfront and managed throughout. For insurers and bankers, this implies lifecycles can still be better managed even though these financial enterprises have "managed" these products and services, one way or another, for decades.

PLM has long been essential in bringing people and processes together along with business systems and information. This recognition dawned first in mechanical engineering and manufacturing, and has since spread throughout the industrial economies of the world.

Financial companies can use PLM just as manufacturers do, to configure and track information and insights developed in many different parts of the enterprise. Using product lifecycle

management, insurers can reexamine (i.e., if initially captured) how they create coverage policies including those for healthcare. Bankers can reexamine how they create consumer loans and all the other banking products. At the heart of these reexaminations are Ts & Cs, the policy details and loan terms—the fine print that is configured anew for each deal.

Manufacturers address very similar challenges with PLM but under different names and with different numerical values and comparisons. Interestingly, they use most of the same processes. Superficially, calculations and analyses in engineering and manufacturing may be more complex with more variables. Deep down, however, very similar things are happening.

Insurance policies and banking products are structured on a set of required and optional terms and coverages. Likewise, manufacturing companies offer products that are characterized by requirements and options, which have to be defined and managed. Thus insurance policy premiums and bank loan repayments are not fundamentally different from a manufacturer's goods, systems, and services.

Throughout policy/coverage lifecycles, insurance companies and their underwriters strive to avoid spikes in claims, watching for and documenting unsafe, imprudent, or unhealthy practices—especially in policies covering homes, vehicles, and businesses. Whether to renew or cancel coverage is an ongoing concern along with policy limits, deductibles, exclusions, and reserves.

Insurance company bottom lines are expressed in terms such as loss ratios and combined ratios that are unfamiliar to most developers of manufactured physical products. Again, CFOs in manufacturing track the lifecycle revenues of their companies' products in similar ways, often adopting a holistic PLM strategy with an appropriate set of PLM-enabling technologies.

Managing insurance coverage lifecycles with PLM solutions provides timely assurance to the insurer's top management that each new policy is properly structured for risks the policyholder will likely encounter and that the policy itself complies with all applicable local, state, and federal requirements. PLM offers significant improvements in gathering policy information and keeping it secure while making it accessible to those who base decisions on that information.

Throughout loan lifecycles, bankers scrutinize late or missed payments. They also keep an eye on each borrower's security (pledged assets and valuations) and general financial standing, all of which fluctuate. Much more is involved than FICO scores or Dun & Bradstreet ratings, down payments, and whether interest rates are fixed or floating. A bank's products include many types of mortgages, working capital for businesses, credit cards, and a plethora of consumer loans for new cars, tuition, etc. If borrowers struggle, banks must decide whether to ease the terms, refinance (or repossess or foreclose), or simply discount the loan and sell it. In manufacturing, savvy CFOs watch their companies' products through their lifecycles with similar ends in mind.

Bottom lines in banking are expressed as asset utilization, leverage, and yield; cost of funds, interest-rate spreads and net interest margins; returns on assets and equity; and loan loss reserves, among others. These terms are rarely heard in connection with manufactured products but they are highly relevant to the sales portion of the lifecycle. (Bank "products" also include CDs and checking and savings accounts, all of which contribute to the bank's asset base.)

Managing the creation and packaging of loans with PLM solutions assures the bank's top management that terms and repayment schedule of each new loan adhere to all applicable local, state, and federal requirements. As with insurance policies, PLM offers a significant improvement in gathering financial information and protecting borrowers' privacy while

providing information, as needed, to those who rely on that information in day-to-day bank operations and decision-making.

There are, of course, even more fundamental distinctions, which drive product strategies, operations, and business models. Here are two:

- Regulatory compliance. Insurers and bankers hold funds in trust for policyholders and depositors. They are fiduciaries so they must conform to local, state, and federal regulations that direct their operations.
- Control of the assets. Insurers and bankers hold the assets (e.g., coverage policies and loans) that generate their revenue. Manufacturers' products are in the hands of customers and distributors (inventories and factories aside).

Collaboration in PLM environments makes sure everyone on a product definition team is up to speed with everything that has been done to date, what is being done now, and how both will impact what remains to be done, beginning with tomorrow and reaching to the end of the product's lifecycle. Along with "what," of course, comes the rest of the decision-makers queries: who, where, when, why, and how.

The many business partners who support engineering units and factories have analogs in financial services. Insurers, for example, use reinsurance companies as business partners. In banking, business partners include insurance companies that provide coverage for large loans. To the extent that financial partners are part of the product development processes, these partnerships are best monitored in a comprehensive PLM strategy.

Documentation itself benefits greatly in PLM environments—the reams of paperwork including signed originals and facsimiles, releases, and certifications. If real estate is involved, these reams swell with floor plans and specifications with photos and drawings, terms of leases and covenants, easements, and zoning restrictions. Applying PLM best practices to managing documentation can also pay significant dividends when lawsuits lead to court-ordered "discovery," a.k.a. file searches.

We're talking here about a great deal more than online insurers and online lenders ("fintech") and blockchains, the technology behind Bitcoins, and how they make risk-averse managements fretful. PLM is enabling new ways of creating and thinking about insurance policies and bank loans. PLM can foster deeper understanding of their lifecycles and offer radically new approaches to managing policy lifecycles within evolving regulatory frameworks.

For this deeper understanding, PLM provides tools to generate new workflows and new feedback loops as needed with minimal human intervention and backed by best practices and industry standards, and in conformance with regulatory requirements.

If there is such a thing as "the PLM question" for financial services, it is whether insurers and bankers can use PLM to reach a future that is more productive, secure, and profitable or stand aside and watch as cherished views about their industries are demolished.

Meanwhile, financial services companies are searching for people with experience in PLM implementations. PLM solution providers are quietly hiring people with insurance and banking backgrounds.

As we noted at the beginning, PLM can be invaluable for insurers and bankers who realize the vital need (and great benefit) of creating, managing, and winding down the lives of their products in an end-to-end holistic, and compliant manner. In financial services as in every other industry, PLM makes it easier to innovate from a solid basis of facts and experience. As in every business, standing still is risky. So is acting on guesses and recollections.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata's services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.