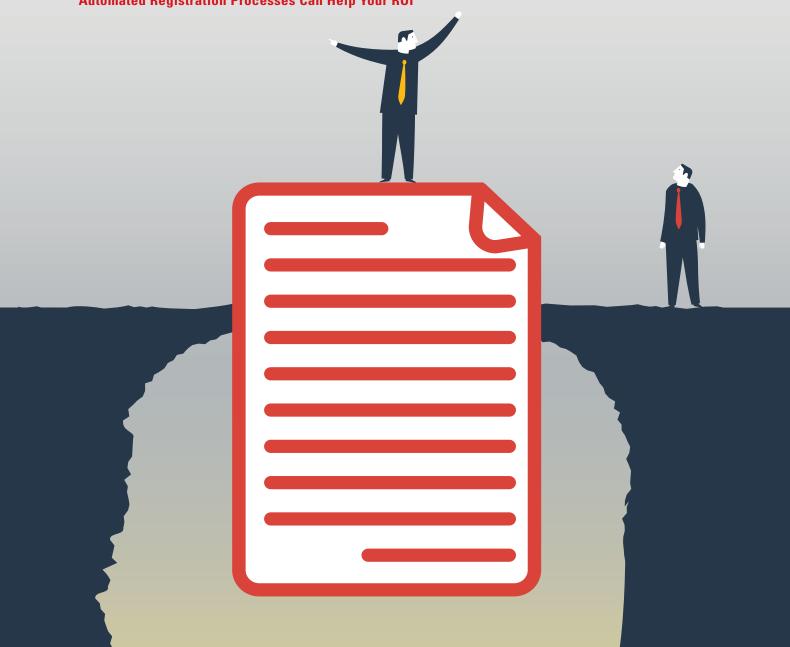
Product Warranty Registration: The Cost of Ineffective Processes and Bad Data

Automated Registration Processes Can Help Your ROI



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oor product warranty registration processes can seriously damage customer retention and profit margins. Yet underperforming registration processes usually go undetected, with limited management visibility and control. Even worse, unverified (and potentially incorrect) information is often accepted as "good," triggering a chain of events that can undermine the quality of data in warranty claims and data-mining systems. Manufacturers frequently accept these faulty registration processes, assuming that rising costs are a given — and ignoring opportunties to help improve productivity and value.

It shouldn't be this way.

An efficient product registration process can serve *everyone*: Customer purchases are protected under warranty, and customers' claims experiences tend to be positive. Manufacturers can generate customer loyalty and gain visibility into their product registration operations, allowing them to help improve products and services.

Unfortunately, many manufacturers may damage customer relationships with outdated ad hoc systems that store inaccurate information and have trouble matching up customer registrations with serial numbers and product names in their warranty claims process.

Challenge areas that can contribute to high warranty costs are:

- Lack of verification in the capture process:
 Flawed data captured in registration forms at the frontend can create problems with claims processing at the back of the system when integrated in a warranty work flow.
- No access controls for stored data: Open access to stored registration with no controls of who can see the information.
- Inability to assess registration activities because of lack of visibility: Without monitoring or having a window to measure process results, management may have no effective way to respond to issues as they occur.
- Poor integration and limited utility of data: Product registration data is often siloed and of limited use. Opt-in programs and marketing systems may not be correctly set up to take advantage of communicating with the customer.

Total costs for product registration and claims processing can be significant, even if they're well-managed. But inefficient product registration processes complicate warranty claims and damage the customer experience when a claim is filed — potentially driving even higher and more unpredictable warranty costs. The impact to the bottom line can be devastating, and can make the product manufacturer uncompetitive.

An efficient product registration process can serve everyone.

Registration and Warranty Processes Can Be Neglected

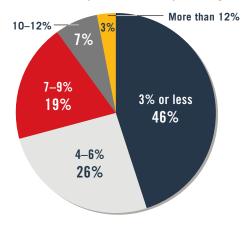


or some manufacturers, registration and warranty operations may not be fully developed, with relatively low C-level visibility into these critical processes. Companies that are operating efficiently have an average warranty cost of 0.5 percent to 3 percent of revenues. The Registration and Warranty Claim Automation Study, sponsored by Canon U.S.A., Inc., found that a majority of companies spend significantly more than that, with a few exceeding 10 percent of revenues (Figure 1). These

warranty claims costs also can vary by industry, sub-industry, and maturity of warranty process.²

There is hope: While the Canon study found that many manufacturers struggle with their product registration and warranty claims processes, it also surfaced some insight into how these same companies can help transform their processes into competitive advantages.

1. Approximate total warranty claims cost as percentage of revenue



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¹ IDC Insights Automating Warranty Process for Manufacturers 2013

² Canon Registration and Warranty Claim Automation Study conducted in March and April of 107 manufacturing executives who were responsible for, involved with, or had awareness of their company's production registration and warranty claims processes. Unless otherwise noted, all data in this white paper is from the Canon study.

Product Registration Challenges

Registration methods can vary dramatically among organizations. The good news is that two-thirds of manufacturers use online registration to some degree. But a mix of old and new methods still prevail at most companies, and it's this overlap of approaches that can create problems (Figure 2).

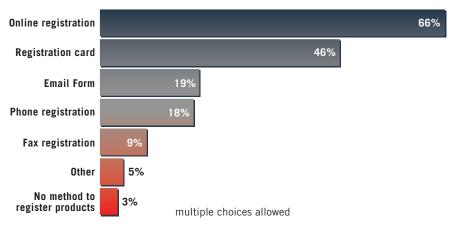
Manufacturers are often unaware of this maze of registration options and requirements, even as their customers suffer through them. This lack of standardized procedures and information can create real irritation among customers. Although *most* manufacturers describe at least *some* aspects of their registration process as easy ("extremely" or "somewhat"), about one in five create problems for customers ("somewhat" or "extremely"

difficult), often the result of trying to get too much information:

- Amount of information required —
 25 percent
- Length/time of registration process —
 21 percent
- Type of information required —
 19 percent
- Overall ease of process 18 percent
- Access to registration forms 14 percent

Seventy-eight percent of customers with bad warranty-claims experiences end their relationship with that manufacturer.³ A process intended to foster a lifetime relationship instead may destroy it.

2. Methods used to capture customer registration for product warranties (% of manufacturers)



³ Bill Pollock, "Effective Warranty Management for Improved Customer Satisfaction and Profitability," Warranty Week, January 2015.

Ignoring Accuracy of Captured Data Can Devalue Its Utility

A ccurate data capture during the product registration process remains a huge problem for many manufacturers. Surprisingly, a high percentage of companies respond to data-capture problems by doing *nothing*, with one in five companies accepting all product registrations as is.

Companies that *are* trying use a variety of approaches. The two most common are to cross-check information against a database of known products, serial numbers and existing products, then verify the data manually (44 percent of manufacturers); or to cross-check and verify the data automatically (28 percent) (*Figure 3*).

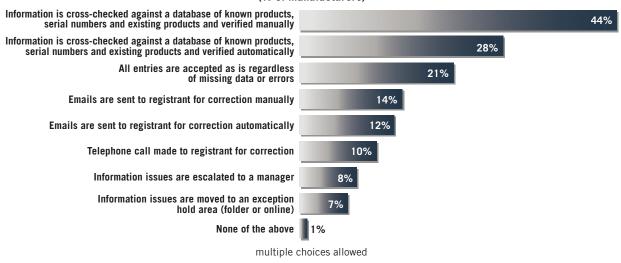
Inaccurate or missing product names and serial numbers can be core issues in the data-capture process — and may be difficult to correct. The most common ways of fixing these are to cross-check customer

input against a database of valid product names and serial numbers (47 percent of manufacturers); or to use optical character recognition (OCR) and validate the information with a back-end system (20 percent).

Online product registration systems make the handling of flawed or missing information easy to address. About 45 percent of online systems will challenge a user if information is missing, requiring the user to input the information again; and 30 percent challenge incorrect product names and serial numbers.

The negative impact of missing or bad information can extend well beyond the cost of fixing it. Product registration volumes can vary due to seasonality, discounts, and advertising campaigns; a spate of bad registrations at the wrong time can potentially cause delays in servicing claims and can negatively impact the customer experience.

3. Method to handle registration issues when data is missing or incorrect (% of manufacturers)



Information Inconsistency Can Kill the Bottom Line

A critical first step in registration processes, yet many manufacturers stumble out of the gate (Figure 4).

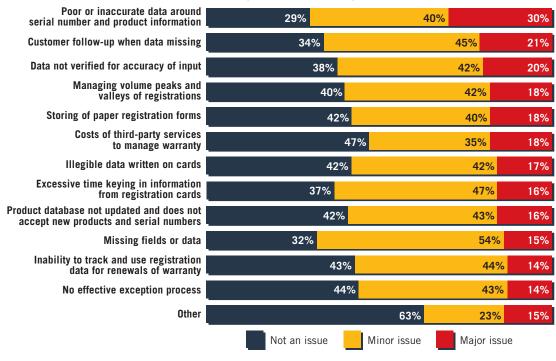
The root cause of most of these problems is human error. Even semi-automated processes require a human-to-IT handoff, helping to create potential issues. Yet few manufacturers have fully automated various information-capture activities:

- Online entries 36 percent have fully automated
- Verification of data 26 percent
- Exception processing 25 percent
- Registration and card processing —
 23 percent

- Handling missing data 19 percent
- Handling missing products in database
 18 percent
- Other 17 percent
- Outsourcing registration process to third party — 21 percent

And make no mistake: poor data capture can drive massive costs. The U.S. manufacturing sector alone sells trillions of dollars of products, creating tens of millions of associated product registrations. If even if a small percentage of those contain data errors, the price of fixing them can easily outweigh the benefits of having a registration process in the first place.

4. Issues typically confronted when capturing product registration information (% of manufacturers)



Even worse than rising costs, however, can be the effect of poor data capture on customer loyalty. If purchasers can't claim warranty protection or access value-added services, they often become infuriated — and may abandon not just the product, but the company itself.

Poor data capture can also lead to excess warranty costs, when a company can't distinguish between legitimate and fraudulent claims. A majority of manufacturers spend at least 4 percent of revenues on warranty claims.⁴ In 2015, U.S. manufacturers paid more than \$26 billion in warranty claims.⁵ Some experts estimate that as much as 15 percent of warranty claims are fraudulent.⁶ The savings from minimizing fraudulent claims can be enormous — and possibly enough to even fund an improved product registration process.

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⁴ Canon Registration and Warranty Claim Automation Study, April 2016.

⁵ "Thirteenth Annual Product Warranty Report," Warranty Week, March 24, 2015.

⁶ "How can we proactively manage claims to prevent millions of dollars in fraud losses?" SAS Institute Inc., 2010.

Weak Security Practices Welcome Registration Fraud

A llowing duplicate records and storing unsecured data can expose a company to fraud. If registration systems have no checks on the front end when registration forms are accepted, they're vulnerable to multiple user-registration claims for the same device.

Unsecured registration data (not stored behind a firewall) can be accessed by unauthorized users, opening the door for hackers to steal customer account information, make fraudulent claims, and steal directly from customers. In just one example, online accounts belonging to wearers of fitness devices were penetrated by hackers who changed email addresses and usernames. The hackers also gained access to users' GPS history.⁷

Screening out duplicate records and protecting registration data can't be an afterthought; it must be built directly into the process.

Lack of Management Visibility



f executives can't see the problem, they can't fix it. Continuous improvement is based on an ability to find and fix problems. Approach product registration and warranty claims with the same mindset.

Too often manufacturers allow their warranty registration and claims process costs to increase without question. Yet without the analytics to measure entry activities, track exception processing, or record issues, how *can* they raise questions? Effective warranty analytic applications aid in root-cause analysis, enable identification of suspect claims (either through definition of specific business rules, automatic discovery, or both), apply statistical models and other algorithms to help predict emerging issues, and accelerate analysis of warranty and peripheral data through predefined report templates. The use of graphical dashboards can enable customized workflows and reports and further augment big data opportunities.

⁷ Nichole Fouler, "Account Takeover (ATO) and Warranty Fraud," Business2Community.com, Nov. 25, 2016.

Managing Registration Information in an Era of **Data Theft**

Product registration

information should be

securely stored, with

electronic access for

authorized parties.

igital practices have been implemented at many manufacturers for product registration data, but the sophistication of these systems can vary.

At the high end, information is managed by registration and claims processing

software (in place at 29 percent of manufacturers) or moved directly to comprehensive back-end systems for claims management (25 percent). Yet 18 percent of companies still manually file and store

this information, limiting access and the ability to leverage the information across

securely stored, with electronic access for authorized parties. But without a common platform, legacy practices remain; nearly one-third of registration systems aren't linked to warranty claims systems.

A modern storage and management system not only can help improve security and access, but also creates a rich pool of

> customer insights. Leading companies tap into these insights to find new product opportunities and to make better decisions for future product lifecycles — e.g., durability of products and components, product mean times

between failures, and product characteristics (materials, finishes, packaging) most likely to lead to warranty claims. Unfortunately, more than half of manufacturers cannot access all registration information with their current business analytics applications (Figure 5).

the enterprise. Product registration information should be

5. Registration information incorporated into company's business analytics applications (% of manufacturers)

All registration information incorporated into business analytic 46% 45% Some registration information incorporated into business analytics 10% No registration information incorporated into business analytics

Help Improve Product Registration Processes *Now*

anufacturers of all sizes can benefit from robust, end-to-end product registration processes that convey accurate, timely insights across their companies. This can be achieved with a six-step strategy, supported by technology:

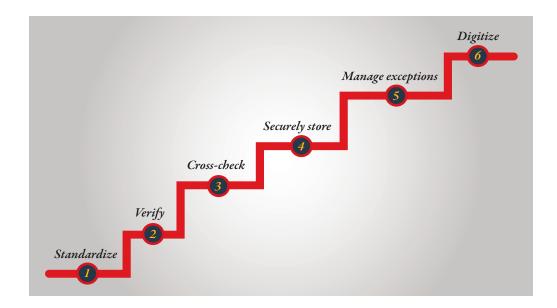
- 1. Standardize to a fully automated data-capture process by moving away from physical registration forms and manual keying of information, toward electronic systems.
- 2. Verify data during the capture process by creating electronic forms that can challenge mistakes while still engaged with customers, and before information is accepted into the system.
- 3. Cross-check data against existing registrations and pool data to help prevent inaccuracies in new registrations, and to update historical registration data.
- 4. Store approved registration data and customer proofs-of-purchase/receipts together, to help prevent claims or incentive problems. Screen out duplicate records as part of the capture process.
- **5.** *Manage exceptions* via a detailed process and dedicated resources, so one-off problems don't slow automated registration processes.

6. Digitize key process steps and manage them via an enterprise content management (ECM) system, so information is available companywide, and leverage data with analytics to help to gain visibility into key activities.

Imaging technologies and ECM can be applied to make registration processes more automated and efficient:

- Manage front-end capture with verification for product number, name, and key information
- Block duplicate registrations by comparing new inputs to numbers already registered
- Verify new information as good data and help reduce errors
- Leverage encrypted storage and authenticated access of registration information
- Run activity analytics to detect patterns, see volume changes, manage input activities, and monitor problem areas

It's important to remember, though, that technology alone can't improve registration results. Senior executives and managers need to lead cross-functional teams in implementing new procedures and tools,



and then monitor for success, including such metrics as:

- Registrations per product sold
- Input accuracy
- Errors by type
- Errors by times
- Errors by input method
- Exceptions resolution
- Missed errors
- Customer complaints related to claims process
- Extended warranties per product sold

Senior manufacturing executives also must link product-registration information across the enterprise, and into the supply chain. Collaboration is the key to achieving accuracy (i.e., no errors); increasing customer value (e.g., sale of extended warranties, opt-ins for rewards programs); and leveraging data via analytics to improve production, sales, and product development.

A product registration process is only as good as the quality, visibility, and security of the data within it. Technologies have evolved to help executives update antiquated registration processes and move from ignoring problems — and damaging their company's reputations and bottom lines — to implementing lasting solutions with security features that can improve product quality, workforce productivity, and customer satisfaction.



Canon can help. Our imaging and scanning technologies, along with professional offerings, can provide turnkey solutions to the vexing problems that can derail registration processes.

This white paper and the Canon Registration and Warranty Claim Automation Study (May 2016) were developed to help product manufacturers better understand the advantages of adopting automated practices for Product Warranty Registration Processes. Poor registration data that goes uncorrected can compound the value of captured information and may have negative impacts in claims processing and in customers' experiences. By combining imaging and content management technologies with consistent registration document workflow practices, manufacturers can overcome these challenges and can improve both the accuracy of information stored and the utility of data for sharing with backend systems.

Canon offers a customizable Product Warranty Registration Service that can help manufacturers to actively validate and help improve the quality of information captured and to streamline their Product Warranty Registration workflows. Information can be crosschecked in electronic forms against serial numbers, product names, and missing data before it is accepted, to confirm accuracy of content and to help improve the quality of information captured. Information stored is protected with authorized access controls and can be integrated into backend systems for claims processing, marketing data mining, and extended warranty sales.

To learn more about Canon ADVANCED Solutions for Manufacturing go to, usa.canon.com/advancedsolutionsformanufacturing

Methodology

The Canon Registration and Warranty Claim Automation Study was conducted using an online questionnaire promoted to manufacturing organizations. There were 107 total valid respondents, with completed questionnaires received in March and April 2016. Responses were received by The MPI Group, an independent research firm, and then entered into a database, edited, and cleansed where necessary to ensure answers were plausible. All respondent answers to the Canon Registration and Warranty Claim Automation Study are confidential.