specright™

WHITE PAPER

Specifications impact the value chain

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What is a spec? While everyone might have their own idea of the definition of a specification, if one looks to any dictionary, you're likely to find something along the lines that a specification is a detailed instruction of work to be done and/or the materials to be used to complete the job. Additionally, some typical synonyms to specifications include instructions, guidelines, parameters, requirements or conditions.

specification

noun | spec.i.fi.ca.tion
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Simple Definition of SPECIFICATION

: a detailed description of work to be done or materials to be used in a project

: an instruction that says exactly how to do or make something

Synonyms: Instructions, guidelines, parameters, restrictions, requirements, conditions

What we might be able to agree upon is that specifications are required for nearly every product that is developed, grown or manufactured. Whether it's a shipping box, a product label, a table, a medical device or even an avocado – it's got any number of specifications that are used to ensure it is grown or built to achieve the desired quality standards and make it into the customers' hands. Specifications are the critical DNA across every stopping point along the value chain ensuring that companies succeed in delivering their product to the market and get paid for it.

If we agree that nearly everything grown, produced or manufactured needs a specification, the numbers of specs is enormous – too large for this paper. So, we'll focus on packaging specifications. However, the discussion presented here has relevancy to all types of specifications and therefore means the savings and efficiencies achieved with the ability to intelligently share and manage specifications grows enormously.

The packaging specification market is expected to grow to around $1 trillion by 2020, according to the research firm, Smithers Pira, making up around 200+ million packaging SKUs around the world. With 60 million in the United States alone – this number is growing daily, as is the complicated process of sharing specs and managing them, both internally and externally. This growing complexity impacts the entire value chain.

As the DNA of the value chain, packaging specifications are a critical part of the bill of materials (BOM) necessary to ensure delivery of products. An average packaging specification consists of the following:

- BOMs
- Dimensions
- Material
- Graphics
- Vendor Information
- Client Critical Features
- Inbound Information
- Outbound Information
- Cost Analysis
- Audits
- History/revisions

A typical Bill of Materials (BOM) Listing:

- Raw Materials
- Product Components
- Assemblies, Sub-Assemblies, or processed components
- Purchased Components
- Primary Packaging
- Secondary Packaging
- Tertiary Packaging
- Labor
- Unitizing information
- Shipping and Loading

Today, there is no common method, technology solution, or platform for handling packaging specifications and they typically end up being managed through disparate systems and solutions, such as emails, spreadsheets, binders and ERP systems. ERP & PLM systems are not built for SKU and specification management and specification repositories, generally PDF-based, are not comprehensive enough or allow intelligent data analysis.

Because of the lack of standard systems, it is a sad reality that companies typically manage the symptoms of problems and accept them as the normal course of business and acceptable "institutional" costs. They add people, layer on processes, create task forces, restructure, and insert software not designed for a specific purpose hoping that it can be modified to address the business needs and produce results.

The challenge with typical solutions is that they mask the real problems. Tremendous time is spent, costs go up, and the problems don't go away – as soon as any variable changes, the problems reappear. Companies spend many millions of dollars to cover these additional institutional costs and still rarely solve the problem; it hasn't been easy.

Simply, finding and addressing the real root cause of problems has been difficult; there are so many things out of your control and the complexities in the supply chain are increasing even further. Whether it is problems with suppliers and raw materials that create huge production costs, production downtime due to bad or missing parts/products, logistics problems on all ends, groups that cannot communicate, or even the fear of changing suppliers since it creates an entirely new set of potential pitfalls – companies find it too difficult to get to the root cause.

All it takes is one bad spec to lead to a failure, which can lead to product recalls and potential devastating damage to the brand. Packaging specifications can ultimately impact product lead-time, as well as all activities across the internal and external value chain (marketing, sales, purchasing, logistics) and ultimately, impact the delivery to the customer.

With many companies managing their packaging specifications in systems that are not specifically designed to manage specs, the result is a proliferation of SKU's, higher costs, greater business risk, and inefficiencies throughout the value chain – which ultimately is driving costs higher and higher for every stakeholder. And, the answer is not to simply continue to demand price reductions from suppliers. Solving the root cause and ultimately decreasing costs across the entire value chain requires a new way of approaching specifications to ensure their accuracy.

Accurate specs enable the value chain to function faster and effectively, while inaccurate specifications impact logistics, transportation, speed to market, responsiveness to recall/failure, and the very foundations or business. etc.

Compounding the complexities already found within the value chain is consumers' ever-increasing need for transparency and demanding to know, not only what is in their products, but also where they came from and who made them. Today's disparate systems make it difficult or nearly impossible to implement traceability across a value chain. A simple review of the enormous number of FDA recalls due to not identifying allergens shows how difficult it is to maintain accurate specs from multiple suppliers and convey those specs accurately and timely on a product packaging label so consumers are aware of ingredients in their food.

The following table demonstrates enormous cost reductions and efficiencies that can be achieved when packaging specifications are shared/managed by stakeholders across the entire value chain.

VALUE CHAIN STAKEHOLDER	IMPACT OF ACCURATE, EASY TO SHARE, MANAGE, AUDIT SPECS
Company-wide	• Decreased admin costs due to reduction of converting file content. • Increased efficiency with one system to learn - a single point of truth. • Faster time to market when everyone "speaks" the same language. • Workflows enable project managers to monitor progress and reduce project duration costs. • Dramatically reduced risk of lost revenues due to recall with accurate specs easily shared across suppliers/sup-suppliers. • Fully managed specs and BOMs reduce delays by removing confusion between departments creating opportunity for faster time to market. • Sales, Marketing, R&D, and Purchasing are all working from the same product spec set.
Sales & Marketing	• Sales and marketing have the same up-to-date specs as everyone in the organization.
Packaging Engineering	• Streamlined/decreased admin costs with ability to accurately search existing specs for appropriate packaging. • Reduction of duplication of existing/like SKUs eliminates the creation of unnecessary SKUs and focuses efforts on the right SKUs. • Drastically reduce design and cycle time for packaging and product development. Efficient reporting: • Packaging Waste – costs savings opportunity • Materials Usage & Optimization – cost savings opportunity • Like Size SKU Consolidation – cost savings opportunity
Marketing/Branding	• Brand equity retained/protected. • Workflows/approvals ensure the latest approved artwork versions are used. • Common storage/language ensures marketing specs are used throughout the company.

Product Documentation

- Everyone knows what is current or obsolete.

Sustainability

- Easily recognize and take action to reduce packaging needs and maintain quality.
- Dynamic reporting on recycled content usage - faster sustainability reporting.

Logistics

- Touch it once and ship it right leads to lower operational and freight costs.
- Accurate, easy to find Inbound/Outbound logistics information.
- Seamless search/navigate primary packaging spec to pallet to truck pattern means dramatic reduction of logistics admin costs/personnel costs.
- Optimized specs mean optimized logistics, lowering costs.
- Ability to view palletization instructions, etc. real-time to identify optimization and cost-savings opportunities.
- Reduced handling costs due to reduced admin work.

Purchasing

- Dramatically reduced admin time needed to prepare packaging bidding/RFQ.
- Increased flexibility to secure multiple bids from multiple suppliers.
- Accurate, version-controlled documents lead to a reduction of purchasing errors/admin.
- Dramatically reduced time to transition to/on-board new supplier(s).

Audit/Quality

- Faster root cause analysis with approval history, traceability for changes/revisions.
- Ability to develop checkpoints based on business rules to ensure standards are met.
- Reduced risk of recall due to improper labeling reduces risk of thousands in lost sales revenues.
- Develop checkpoints based on business rules to ensure standards are met.
- Reduction of time and resources required performing audits means more audits can be performed in a faster timeframe.
- Easy to communicate/request audits from suppliers.

Accounting/Invoicing

- Reduction of shipment delays and associated admin costs with accurate packaging spec information.
- Faster time to invoice.

Suppliers

- Reduction of supplier errors caused by obsolete/inaccurate documents.
- Increased cooperation/reduction of wasted time/efforts when suppliers have clear specs/know the expectations.
- Optimized delivery/production based on supplier specialties for related specs reduces costs and increases revenues.

Happier Customers

- Accurate shipments to customers increase efficiency, reduce costs, and create happy customers.

Conclusion:

Solving the complexities of just packaging specifications alone across value chains can produce enormous savings for all stakeholders. Achieving those savings requires cooperation among stakeholders and an easy-to-use, simple solution that enables the sharing of specification DNA, both internally and externally, across the entire value chain. With today's mobile and cloud-based technology, the field of specification management is poised to take advantage of these latest advances in technology. Solutions that allow anywhere/any device access greatly enhance companies' ability to deploy their specs anywhere, anytime to employees and suppliers around the world.

Furthermore, the DNA of billions of specifications creates an enormous amount of big data. With 200 million specifications, each with 30 attributes equates to 6 billion data points that can be analyzed. Big data analysis provides the ability to identify cost-saving trends and opportunities that are otherwise hidden in a myriad of unconnected, disparate systems. Opportunities, such as raw material indexing, new product development, green idea development, analyzing currency impacts on raw material, transportation optimization, capacity expansion and more.

Today, specifications are impacting all value chains and the impact is more negative than positive. With systems designed and built specifically for spec management, specifications will have a positive effect for every stakeholder across the value chain, no matter what the product.

About specright

specright is a specification management company with a vision to leverage specification expertise and cloud technology to improve the way specifications are shared, analyzed and audited. Our mission is to empower customer efficiencies by providing Intelligent Specification Management Platforms that are available anytime, anywhere from any device.

> specright is the first and only solution designed specifically to manage specifications end-to-end. Whether it's packaging, formulas or other specifications, specright lets companies reduce costs and empower efficiencies by sharing, analyzing and auditing specifications.

Our customers operate in food & beverage, produce, manufacturing, FMCG/CPG, medical, or any industry reliant on accurate specifications. We offer on-boarding, testing and auditing services to ensure products and components meet specifications. Founded in late 2014, specright is headquartered in Irvine, California.

About the author

Matthew Wright
President & Founder of specright

Matthew Wright has over 24 years of experience in packaging and has held various operational and management roles with International Paper and Temple Inland. His last position in a major paper and packaging company was Vice President for Temple Inland running a $500m business unit. Known for being the entrepreneurial manager within Fortune 100 companies, he used to run a unique packaging business focused on point-of-purchase, automotive, agriculture, food and beverage. He later invested in a private packaging company and over the 2 years of his management, the company doubled revenue and increased in value. Matthew developed the concept of specright from years of experience seeing how the lack of a standard way of sharing specification data between companies leads to inefficiencies and waste.

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