

White Paper



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The Growth of the Integrated Services Center: Within In-Plant Vertical Markets

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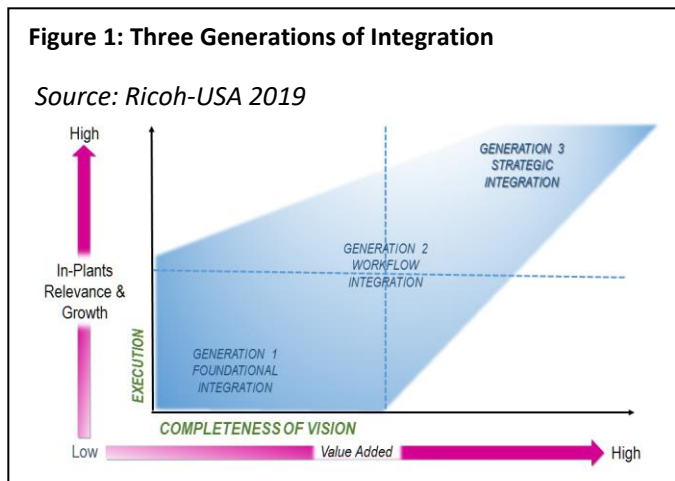
Introduction

In-house printing and mail operations, also known as in-plant service providers, perform a vital role in supporting communication efforts for their parent organizations. Every day, these internal operations are entrusted to design, print and distribute everything from business cards to monthly invoices, to highly advanced marketing collateral and communications. In-plant service providers must adapt to trends and changing customer demands to remain viable and relevant within the organizations they serve. To date there have been two generations of in-plants, and we are starting to see a third generation emerge. Each generation requires more development time and effort to achieve, but the financial and operational payoff increase significantly in terms of productivity, accountability and reducing the “fully burdened cost” of operation.

Generation 1, Physical Integration: The First Generation offered traditional products and services such as print and basic binding. These “traditional” applications include static reproduction (non-variable output) specialty work (forms, reports, wide format), manuals, publications, reports, and other basic documents.

Generation 2, Workflow Integration: The Second Generation of in-plants acquired systems to provide connectivity between customers and technologies and to automate internal workflow processes. In manufacturing, this industrial revolution is known as “Industry 4.0,” a name given to the current trend of automation and data exchange, often referred to as the 4th Industrial Revolution.

Generation 3, Strategic Integration: The Third Generation unites paper and digital communications through integration of variable data printing (VDP), multi-channel communications, data management and analytics along with augmented reality.



Today’s leading in-plants have evolved through all three of these generations, resulting in a fully Integrated Solutions Center (ISC), which is the subject of this whitepaper.

When evaluating in-plant best practices, we find that the most successful operations are those that are uniquely positioned through fully integrated solutions, including a turnkey approach to combining

broad-based hardware capabilities, a fully integrated software infrastructure, and advanced print/digital strategies to achieve improvements across every facet of the business.

What is an Integrated Services Center Strategy?

An **Integrated Services Center** strategy is based on the following principles:

- **Integrate and Co-Create** by bringing interrelated services creation, production and distribution processes together, creating more powerful, efficient outcomes.

- **Erase Boundaries of Business** with accessible, integrated systems to help simplify, standardize and control disparate resources and processes.
- **Create Exceptional Consumer Experiences** through advanced color, e-commerce, and multi-channel communications.
- **Generate Data-Driven Insights** with data that can only be attained through a fully integrated workflow and that is most valuable when it delivers insights and supports better decisions.
- **Be Nimble to Exceed the Rate of Change**, integrating paper and digital-based communications.

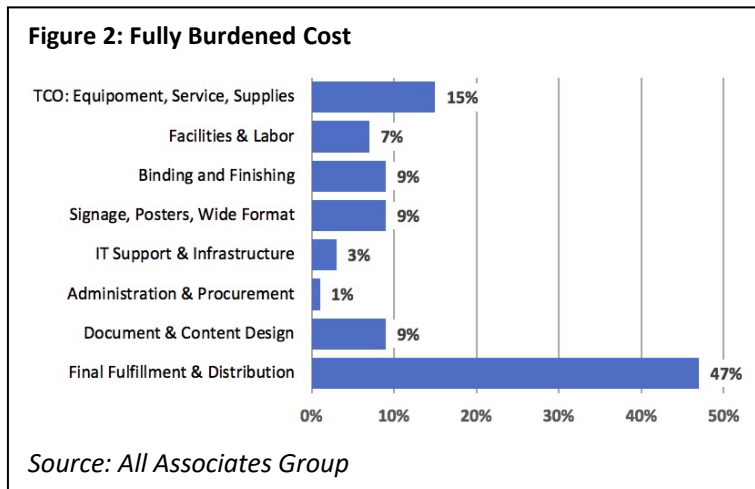
Systems Approach

The Integrated Services Center strategy addresses integrated components as a **system**. Like any system, the document system is a whole made up of parts; each part can affect the way other parts work, and the way all parts work together will determine how well the system performs. This is a fundamental challenge to traditional departmental thinking. Historically, both customers and vendors have focused on the separate components of the document life cycle involved with the design, composition, production and distribution processes rather than considering the **system** in a holistic manner.

Managing in this way always causes sub-optimization, where parts may achieve their goals at the expense of the whole. Understanding the ‘big picture’ of document systems throughout the entire life cycle can lead to extraordinary transformational change, savings, and competitive advantage.

What’s Different with Today’s Integrated Solutions?

Today’s approach is based on leading principals deployed at many of the most successful in-



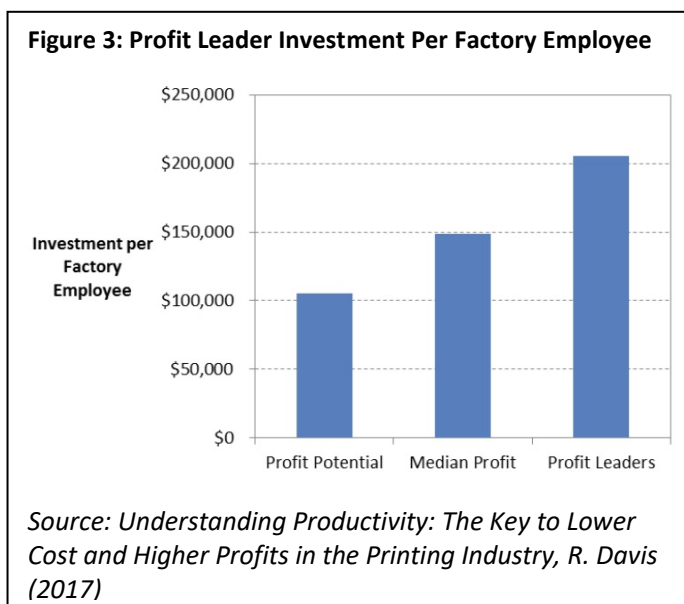
plants across the country. These centers take a much broader view of “fully burdened” document spend that includes the design, composition, production and distribution of paper and electronic documents. These centers recognize that the total cost of ownership (TCO) for equipment and supplies only represents approximately 10-15 percent of the fully

burdened cost for creating, producing and distributing printed materials.

The Integrated Solutions approach targets up to **30% savings on each component** of the fully burdened spend, increasing the savings opportunity by **more than 6 times over what TCO calculations alone would recognize**, while greatly improving compliance, accountability, control, security, and relevance by controlling the entire document life cycle and creating additional synergies and value along the way.

Where Are the Savings?

A frequent question is, “How do I reconcile the claims that spending money on integration will save money?” The key is achieving leader performance by investing more in automation to improve productivity so that you can minimize the amount of work being sent to offsite suppliers or work being done by an internal department that would be better served if it were completed in the in-plant. According to Printing Industries of America ratio studies, high profit commercial printers spend almost double the investment per employee (automation) while achieving 30% greater employee productivity per million dollars of sales (ratio = employee/revenue.) In-plants that evolve their level of integration from Generation 1 to Generation 3 experience increased savings, offer a broader scope of services, and shorter turnaround times. As a result, they can enter into more aggressive service level agreements with their internal customers, resulting in increased customer satisfaction, greater relevance, increased enterprise savings and in-plant revenues.



Generation 1 often results in employee/revenue improvements of 8% as you minimize outside redundant, disparate resources while increasing in-plant revenue. Automation which occurs at Generation 2 can improve employee/revenue ratios by another 14% by eliminating time consuming steps in design, make ready, estimating, job ticketing, finishing and postal/delivery operations allowing the in-plant to produce greater volumes. Cross training can further improve employee/revenue rates by approximately 8%, achieving

a combined employee/revenue improvement of 30%. Generation 3 can further improve employee/revenue rates as graphics and digital communications functions are consolidated across multiple departments driving even greater revenues into the in-plant.

Three Generations of Integration

Generation I – Physical Integration:

The first Generation -- Physical Integration – represents the optimization and consolidation of hardware resources and capabilities spread across multiple departments, facilities and suppliers. This is one of the easiest types of integration and involves bringing that equipment together under one roof allowing the in-plant to cross-train departmental staff and increase utilization of infrastructure and internal resources.

Some key benefits of physical integration are the ability to co-create the most efficient and effective document design and workflow throughout the entire document life cycle.

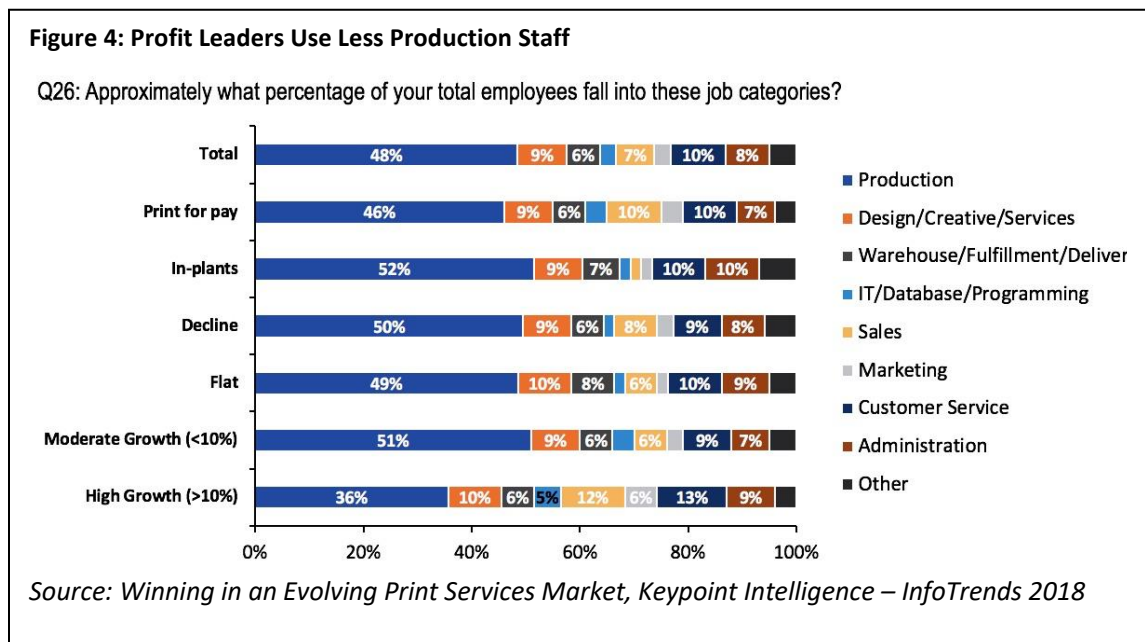
The advantages of physical integration include:

- Reducing costly redundant infrastructure spread across multiple locations.
- Lowering reliance on off-site suppliers.
- Minimizing logistics and transportation of materials.
- Smoothing peaks and valleys of production scheduling through cross training.
- Improving the customer experience by providing a full view and recommendations for their document life cycle, guidance for the design, production and distribution process, reducing their costs and improving outcomes.
- Targeting competitive activities and internal relevancy.

Generation II – Systems Integration:

The second Generation - Systems Integration -- involves the integration of traditional print and mail and workflow software. Perhaps the most important facet of the Integrated Solutions approach is the ability to link disparate departments, suppliers and workflows, eliminating siloes within the business by implementing a single point of communications, job order entry and control.

The integration of these different and often disparate functions results in time and cost savings. As you can see in the chart below from Keypoint Intelligence – InfoTrends, High Growth leaders are achieving a decrease in production labor hours when considering all facets of the workflow.



In addition, Systems Integration also improves organizational and print center staff productivity and accountability, with results such as an improved order process and better service levels while gaining valuable data-based insights into further improvements that could be implemented. The advantages of Systems Integration include:

- Driving system-wide control and accountability.
- Minimizing off-site spend.
- Improving customer engagement and experience with an Amazon-like experience.
- Providing secure user authentication for internal and external customers.
- Improving compliance with an audit trail and piece-level integrity.

- Accounting for all internal and external spend.
- Transforming to a Revenue Generator with credit card billing and full access to itemized cost allocation and recovery.
- Access to system-wide analytics for all transactions: volumes, spend, resources, etc.
- Improving shop floor productivity, quality, and reporting metrics.
- Smoothing peaks and valleys of production scheduling through cross training.

Generation III – Strategic Integration:

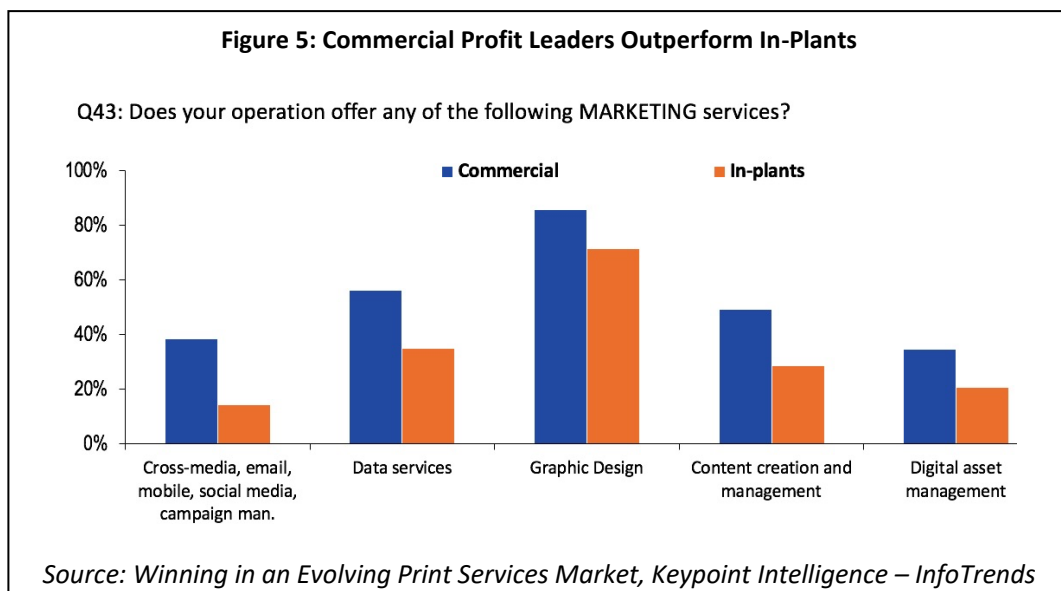
The third Generation is Strategic Integration which goes beyond traditional print and mail services to include customized messaging (variable data), multiple channels (email, digital and mobile) with cross-media or omnichannel communication tools. Strategic Integration includes variable data and personalized print, mail, email and social media communications.

New technologies with powerful applications can combine template-driven marketing campaigns that can get a campaign up and running quickly – without any programming experience, uniting paper and digital communications into a single, coherent messaging system:

- Creating stunning websites for mobile and desktop tied to printed applications.
- Sending personalized email with automatic triggers.
- Making the printed page come to life and become interactive.
- Designing rich VDP documents for more effective direct mail.
- Reducing print and postage, by producing fewer, more targeted and effective pieces.
- Embedding Personalized URLs and QR codes in marketing communications.
- Sending out interactive customer surveys.
- Building marketing and Facebook apps.

High growth centers are also more likely to offer cross-media/social media/etc., content creation, and digital asset management. According to the Keypoint Intelligence – InfoTrends study, today’s in-plants lag behind commercial print services providers in many areas of Generation III, Strategic Integration. This means that in-plants are not staying ahead of the technology curve and may face significant – even insurmountable – competition from outside providers.

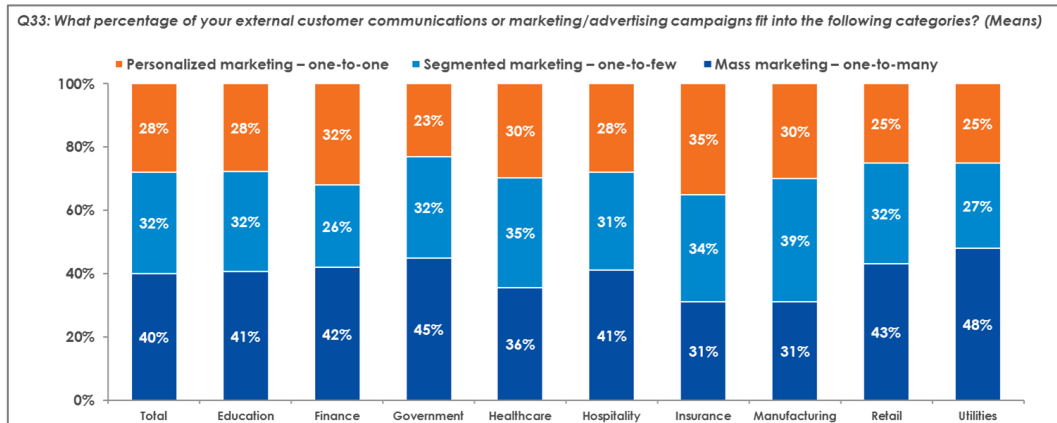
The figure below shows that commercial leaders offer more value-added services than in-plants.



Vertical Market Adoption of Generation III – Strategic Integration

Strategic Integration is all about the ability to promote and personalize content and conversations. Personalized content can include variable graphics, images, text and pURLs, as well as augmented reality and QR Codes – all integrated to improve engagement and help internal customers connect with their clients by combining paper and digital in their communications strategies. Keypoint Intelligence – InfoTrends research reveals that on average, 60% of external customer communications across a variety of industries surveyed are personalized or use some segmented marketing.

Figure 6: Vertical Market Adoption of Segmented Marketing



Source: *In Search of Business Opportunities: Finding the Right Prospects*, InfoTrends 2017.

With the transformation to electronic-based marketing and customer communications, all in-plants must have a strategy in place that helps internal and external customers unite paper and digital. Here are several examples of Generation III early adopters.

Integrated Services Center in Government

Within the in-plant community, the early adopters of Integrated Services Center strategies were state government printers. The state government in-plants are a small section of government printers but contain some of the largest sites. According to *In-Plant Graphics Magazine* (2017), state in-plants comprise 10 of the 50 largest in-plants based on number of employees. One of the primary reasons state government printers are large is because they now integrate graphic arts printing, transactional printing and mail under one roof. States were the first to integrate physically.

Here's one example: The Pennsylvania Department of General Services Bureau of Publications is responsible for printing everything from secure transactional documents to signage. Marcie Carr serves as the Director of the Bureau of Publications, with more than 50 staff working across three shifts of print/mail production. Since 2006, the Bureau has mastered all three Generations of Integration:

1. Generation I, or the physical integration, began in 2006 when the State consolidated in-plant print shops into a centralized operation in Harrisburg. By 2016, they had discontinued offset printing, centralized approximately 25% of their printing facilities and had saved about \$1.2

million in the process. In 2017, the Bureau consolidated mail presort operations and courier services, resulting in significantly discounted postage rates that reduced state mailing costs by two-thirds. Mail collection and delivery are now faster, and the state has saved more than \$2 million since November of 2015. The fastest growing application for the organization is signage. In the last 16 months, the volume of has tripled, and the revenue has doubled.

2. Generation II or systems integration began with an online ordering system and the creation of back up services. Online ordering can drive reduced production hours and allow staff members to work directly with customers as account managers. According to Carr, the Bureau's back-up works on the same platform and uses the same fully integrated hardware and software throughout the state operations. This means that in case of equipment or building failure, they can transfer all the work to other locations within the State.
3. Since the Bureau offers transactional print, it is already offering Generation III services.

Integrated Services Center in Insurance

With more than 74 million enrollees and more participating dentists than any other company, Delta Dental is one of the most popular dental insurance providers in the country. Todd Graham, the Manager of Printing Services at Delta Dental of Michigan, believes that systems integration is a journey rather than a destination and requires ongoing efforts.

Graham and his team added existing forms into Marcom Central, its marketing automation solution, creating a custom order intake form using Fusion Pro as well as creating fillable Business Cards and went live in the Fall of 2018. The site is also the "go-to site" for official branded content, which helps ensure brand compliance. This simplifies the ordering process, makes them more productive and helps avoid mistakes due to a lack of coordination among many different departments. One of Delta Dental's goals was to simplify the ordering process and make it more convenient for customers to order everything at one time, and that goal was achieved.

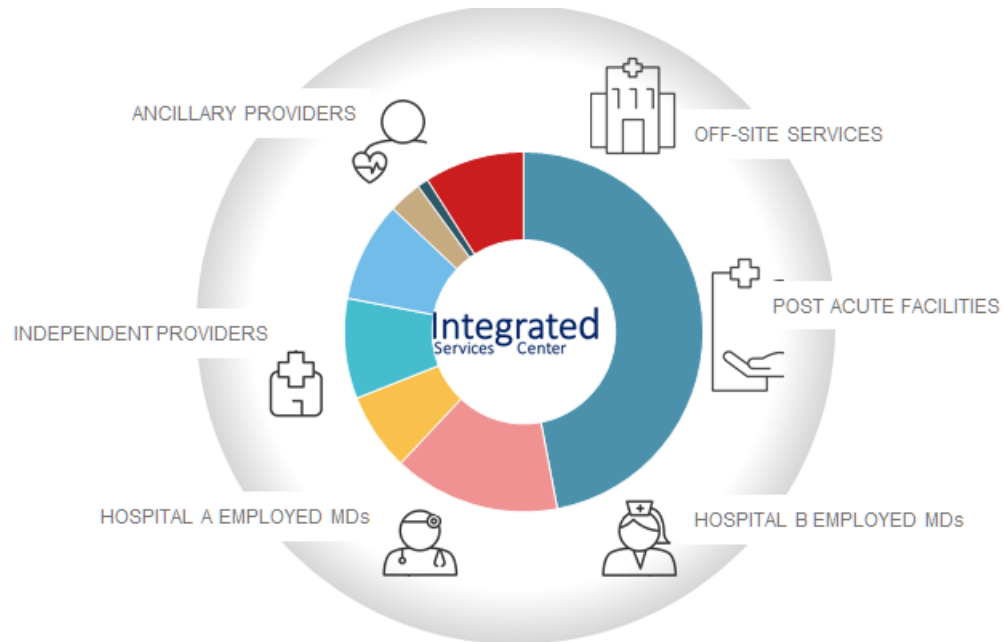
"The next step in my vision for this integrated system is to integrate Avanti Slingshot to not only monitor costs but also aid in fulfillment," Graham states. "Slingshot will identify each item and shipping will identify a shelf number for all the products. When the order goes into Slingshot, it will create pick tickets which they will place on the shelf. When inventory is low, the product will be automatically reordered and the pickers informed that it is printing."

Integrated Services Center in Healthcare

One healthcare company that has seen the benefits of integration is Intermountain Healthcare. This company has taken an innovative approach to supply chain management, was ranked number one in Gartner's Healthcare Supply Chain Top 25 for 2016 and 2017, and achieved the prestigious Masters award in 2018. Until 2011, this Salt Lake City nonprofit health system and health insurer allowed staff to order print from any print provider.

This resulted in high costs, inconvenient service, an inability to track costs and inconsistent branding. Once these issues became obvious, Tami Reese, the Operations Manager at the Intermountain Design and Print Center, was asked to research these problems and consider integrating Intermountain's various print operations into one central plant. "We needed to do something, because we knew that there was a lot of spend that was going outside wherever they had budget," says Reese.

Figure 7: An Integrated Services Center in Healthcare



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Reese developed a business plan for an Integrated Services Center, and today Intermountain offers transactional printing, medical billing, design, large format printing, and fulfillment services. According to Reese, “The most important integration tool we implemented was online ordering which automated the ordering process, increased accessibility and convenience for customers, and reduced errors and waste.” According to Intermountain, the Design and Print Center is saving \$1.3 million/year compare to the previous process, and the entire Supply Chain Center has saved more than \$586 million.

Summary

Leading in-plant service providers have undergone a three-generation evolution of products and services. The first was Physical Integration of traditional printing, copying, and mailing services. The second was Systems Integration. The third, as outlined in this whitepaper, is Strategic Integrated Services Center. State government in-plants were the first to experience the change followed by Universities. Ultimately, the Healthcare market may be most impacted by these changes. The examples provided in this white paper clearly demonstrate the value of building and implementing a strategy that takes the in-plant operation to the third generation as an Integrated Services Center.

Howie Fenton has been a consultant in the printing industry for 30 years specializing in benchmarking commercial and in-plant print production. To learn more visit HowieFentonConsulting.com

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