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# Current Trends in Production Labor Sourcing

*A Series on Lean Manufacturing Techniques: Part I*

## Comprehensive White Paper

Robert B. Handfield, PhD  
Bank of America University Distinguished  
Professor of Supply Chain Management  
Director, Supply Chain Resource Consortium  
North Carolina State University  
Raleigh, NC 27695-7229  
Robert\_Handfield@ncsu.edu

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## What is Production Labor Sourcing?

Imagine you walk into your manufacturing facility, and are pleased to observe a group of semi-skilled workers who are reliable, show up on-time, and are trained to find ways to reduce waste through application of lean techniques. Your facility is not only running smoothly, but you have achieved over 15% production cost savings on an annual basis with no headcount reduction. You are able to focus on strategic planning, coordination with marketing and sourcing teams, and have enough time to actively participate on lean and six sigma initiatives that create value for your customers.

A dream? No – it is happening today. Many manufacturing organizations are seeing these benefits, through “**Production Labor Sourcing**” (PLS). PLS involves having a 3<sup>rd</sup> party manage the semi-skilled production cell labor, in essence a company-within-a-company approach. The 3<sup>rd</sup> party provider is responsible for the total labor process, including recruiting, training, safety and daily management to reach the required KPIs established by the manufacturing team. In short, you trade managing hundreds of semi-skilled workers daily to partnering with one PLS provider.

PLS goes far beyond a temporary staffing company, where laborers are delivered to your front door and billed for hours worked. A PLS provider is viewed as a pure-play outsource management/labor supply firm for specific production requirements/units located within your facility. Most employer risks are moved to the PLS company, including all payroll liabilities, employee benefits, safety compliance/OSHA, training, risk management, turnover and quality of work.

To document the impact and potential of PLS, we conducted a research study to develop key insights into the viability of this strategy by manufacturing executives, as well as the current state. We focused on the analysis of the current situation and the likely changes within this fast emerging industry during the next 1 to 3 years. The study was performed using a process consisting of facilitated brainstorming, structured interviews, primary data collection with multiple subject matter experts and secondary research to address the following critical questions:

- What is the **current level of Production Labor Sourcing** in the United States?
- How much **non-value added time is spent managing** semi-skilled workers?
- What are the **top concerns** manufacturers have with contract labor?
- What has the **true impact been on your business** using PLS?
- What is the likelihood that this **trend with continue** to grow?

Our interviews were carried out with executives from multiple labor-intensive Fortune 1000 manufacturing companies in the following sectors: office furniture, military equipment, energy equipment, pharmaceuticals, packaging, textiles, high-tech, construction equipment, and automotive components. Executives from PLS firms were also interviewed and public information on their value chain/success analyzed.

Based on our empirical analysis of this data, the following key points emerged from our research.

## **A MAJORITY OF FIRMS ARE CURRENTLY USING PLS TO SOME DEGREE.**

The data suggests that over 90% of US manufacturers are indeed receptive to sourcing production labor and view it favorably. A majority of respondents indicated that it is a trend that will continue to occur in the future, and over three quarters of the respondents are already sourcing some set of functions through labor firms.

The most common positions for production sourcing are maintenance, industrial housekeeping, packers, and material movers. However, a diverse set of other functions are also being sourced, including kitting, assembly, logistics, inspection, production helpers, forklift operators, waste handlers, and other non-core, but vital positions. Many reported that adopting PLS has allowed them to increase their efforts in core areas of increased quality, efficiencies and product improvement.

## **BEST-IN-CLASS MANUFACTURING ENTERPRISES ARE INTEGRATING PLS EXTENSIVELY INTO THEIR OPERATIONS.**

Several organizations we interviewed (considered "best in class") have developed advanced levels of PLS, with a well-thought out model that was integrated into their long-range planning process. These organizations began with a corporate-level decision: to improve production labor performance.

These organizations are in highly competitive global industries with very low margins; this has driven them to explore and deploy PLS quickly. They have managed to reduce overall unit costs as an alternative off-shore program while maintaining complete oversight of product quality. By deploying this strategy, they have kept jobs in the United States and have increased quality, reduced costs, improved production yields and streamlined work flow.

## **EXECUTIVES FEEL THAT THEIR MANAGERS SPEND TOO MUCH TIME (UP TO 50%) MANAGING SEMI-SKILLED WORKERS.**

Executives feel too much time is spent with semi-skilled workers (between 20 and 50%) and too little with skilled workers (less than 20%), and that these figures should be reversed (see Figure 1). Several managers mentioned "it is far easier to motivate a \$60,000 a year skilled worker, than a \$9/hr worker". Work ethics are very different between the low/semi-skilled and skilled/professional workforces. "Skilled workers give two weeks notice" when they leave. Some low/semi skilled workers just, "don't show up for work because they have already started a new job".

Another plant manager commented "After a new material handler 'resigned without notice' to take a position at a nearby fast food restaurant – he handed me his PPE along with my order. The hassle factor managing these workers are very high and a big distraction for my supervisors, managers and me."

Another comment consistent throughout all interviews was the time spent assuring low/semi skilled workers are at work and productive. "We (managers/supervisors) spend 2 hours at the beginning of each shift verifying workers are in place and productive. During the day, we spend considerable time with non-productive issues like: smoke and lunch break abuses, rumors and gossips, retraining and safety compliance. Take all of these hassles and let me manage the labor company."

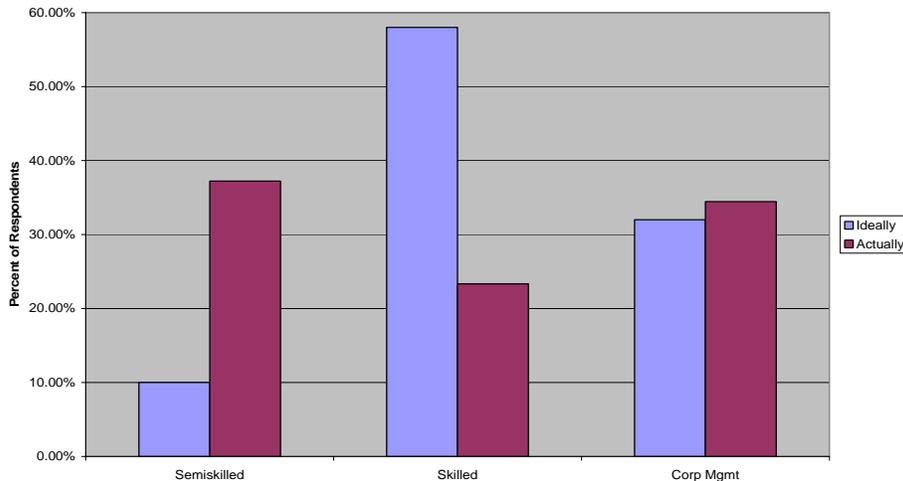
Conversely, the skilled workers suffer from reduced attention to their core-issues including production quality, streamlining and product enhancement. One skilled worker commented, "I had a major production issue, but my manager was too busy covering (low skilled) no-shows, which eventually stopped the production line".

## **BARRIERS TO OUTSOURCING PRODUCTION LABOR ARE SIGNIFICANT.**

Executives struggle with some key concerns regarding the issues associated with outsourcing production labor. Number one on the list is the risk of quality problems from high turnover and significant training costs. Seamless integration of "their" workers with "our" workers, along with "who is the boss" confusion is another concern expressed. Additional issues on how to identify and justify the value and build a compelling business case were common throughout the interviews.

Successful deployment of this strategy did reveal significant returns in both hard cost savings and increased quality and production. In all cases, selecting a highly competent PLS firm and engaging them early in the process was a critical element to the overall success and the required "buy-in" from senior management.

**Figure 1 - How should your managers ideally be spending their time versus today?**



## **THE PLS MARKET IS HIGHLY FRAGMENTED.**

The PLS market is highly fragmented with a wide variety of companies competing for this rapid growth. However, it should be noted that these companies were spread over a variety of services. Temporary staffing companies have extended their services in an attempt to maintain their current customer base and "grab" new business at any cost.

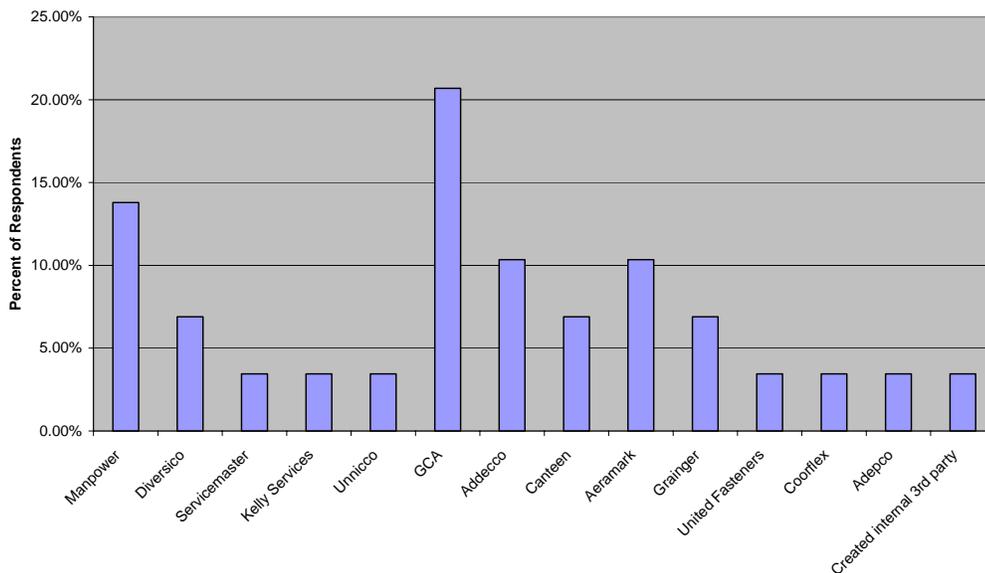
However, upon closer review of the marketing materials and discussions with contract labor executives, some companies only provide an on-site HR manager (referred to as "Vendor-On-Premise") and have limited industrial expertise, programs and systems to assure consistent production performance and quality control. For many contract labor companies, production labor services were formed to remain competitive in the marketplace and not as their core business (i.e., administrative, clerical and other non-industrial functions).

Through our interview process with numerous “Best-in-Class” manufacturers, we discovered a national PLS provider, GCA Production Services ([www.gcaproduction.com](http://www.gcaproduction.com)). To reduce risk and assure continuous quality, this company has developed a Comprehensive LeanLabor Program (CLP) using the principles of Lean, Six Sigma and strategic sourcing and training, safety and HR programs culled from over 40 years of expertise. This PLS provider’s services are priced as a mark-up to wages plus a variable management fee, a piece rate price or a total managed services fee. All service offerings included a quality/performance guarantee and gain-share program. Our review suggests that GCA appears to be alignment with the needs of companies interviewed in this study (See “Comprehensive PLS White Paper” for interview details, concerns and requirements).

Based on the GCA review, we are conducting an assessment of the complete PLS marketplace and key service providers. Some of the leaders in this space include GCA, Manpower, Diversco, and Adecco.

The results of this study will be published in the Fall of 2006. In the meantime, it is advised companies who are exploring PLS: carefully assess the PLS firm’s programs, operational experts and existing customer success. The PLS provider quickly becomes your partner in production with shared risks and rewards.

**Figure 2 - Which companies would you consider using for production services outsourcing requirements?**



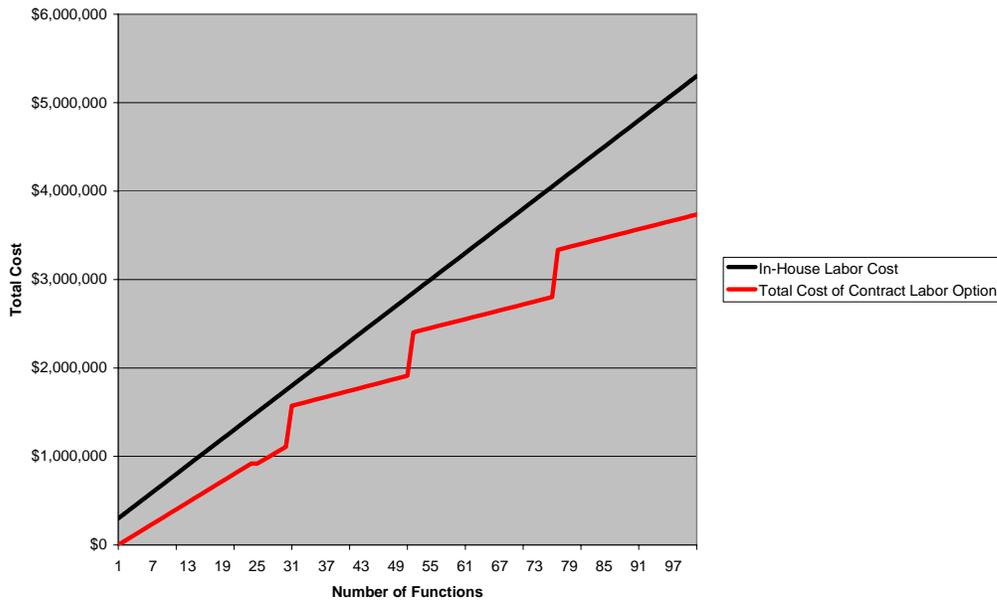
**EXECUTIVES BELIEVE THERE IS A REAL BUSINESS CASE FOR PLS, BUT LACK THE FRAMEWORK TO CREATE IT.**

There is a significant economic benefit associated with outsourcing the semi-skilled workforce. Based on our research, we believe an annual savings of 20 to 40% of current labor costs can be realized through the implementation of a PLS strategy. The combined potential savings of an in-house versus PLS is shown in Figure 3. The projected savings are significant, especially as the number of outsourced positions increases. One “Best-in-Class” manufacturer revealed an annual cost savings in excess of \$30,000 per function

(worker) outsourced. To date, this manufacturer has realized savings of \$12M per year and has incorporated PLS as a strategic initiative for the next 3 years.

Many companies have already depleted other opportunities for cost/waste reduction and value improvement through material cost leveraging, headcount reduction, and process mapping. Most, however, have forgotten to include low/semi-skilled labor as an opportunity to drive out waste. PLS remains as one of the last, but also the most critical, tools in achieving true lean capabilities. Unlike other “lean” tools, PLS can yield significant results within 30 days of deployment.

**Figure 3 - Projected Savings in a Single Plant Environment**



Without a commitment to focus on value-added activities and elimination of waste, managers will spend too much time “spinning their wheels” and will be unable to focus on those things they need to work on to be successful. To gain a competitive advantage, leadership teams will need to actively engage PLS as a competitive weapon in their arsenal. PLS is NOT simply a way to reduce headcount or reduce cost; it is a way of improving economic value and realigning production costs, when other options have been depleted.

## CONCLUSION: PLS IS A NEW PARADIGM FOR DEPLOYING LEAN MANUFACTURING

Certainly PLS is an emerging tool and quickly becoming a mainstream technique to control costs, reduce labor variances and remain competitive. Global companies challenged with keeping jobs within the United States, while maintaining tight control on quality and increasing production, must assess PLS now. This is a top down approach starting with the SVP of Manufacturing as the visionary and extended to the plant level through their Lean experts and production managers.

Our study revealed a common approach in assessing PLS for their company:

- Segregate job functions as “skilled” or “semi-skilled”.
  - o Semi-skilled work is defined as highly repetitious, simple functions which require limited on-going training. Semi-skilled wages are at the bottom to mid-range of a pay scale. Typical functions are material movers, Work In Process (WIP) handlers, prep and stage workers, kit installers and machine tenders.
  - o Skilled work requires a technical understanding of a complex function, empowered to correct production variances and significant on-going training. Skilled wages are at the mid-range to the top of a pay scale. Typical functions are machine operators, line inspectors, die changers, finished goods inspectors and kit assemblers.
- Identify two or more production cells early in the WIP (lower unit cost) where significant semi-skilled tasks occur for PLS. To properly assess the impact of PLS, production cell integrity is a key element to establishing a valid baseline and measuring bottom-line impact. Deploying PLS disparately works best when a specific job class (i.e., Grade 1) is outsourced.

Outsourcing a production cell allows a service provider complete control of the process and quality assurances. This also allows a company to track variances and hold providers accountable for all functions within the cell. Finally, contractors have the ability to price their services by the piece rate thus transferring cost variances from the company to the provider. In short, your provider becomes a “company within a company” with all the benefits of outsourcing while maintaining close control over production standards.

- Engage a PLS firm early in your assessment to assist with building the business case. A competent PLS provider must have proven (and well documented) programs, systems and methods to meet production changes quickly while also reducing risk and exposure. By engaging a PLS provider early, they bring best practices, solid case studies/references and templates for building a true business case for your specific goals.

There is a trend emerging of temporary staffing agencies expanding into PLS. It is important to note that a staffing agency’s profit model is predicated on increasing headcount and billable hours – this would appear to be counter to the benefits of a PLS strategy. For additional information related to the limitations associated with using a temporary staffing agency for deploying PLS, please referred to the “Comprehensive PLS White Paper”.

- Obtain an executive sponsor to support the PLS strategy and defend against internal (very real) opposition from various departments including human resources, safety, training and purchasing. Again, a competent PLS provider will have business case templates to address key concerns within internal constituents.

One element from our research is clear. In the modern era of global competition, the companies that will succeed and continue to lead will be those that have a strong vision for lean manufacturing within the context of a dynamic and integrated supply chain which now includes PLS as a key lean tool.

The core element that defines the winners from the losers will be an ability to leverage the expertise and knowledge of workers within your four walls, and establish collaborative results with external parties that can support your area of focus.

## INTRODUCTION

Outsourcing has become a common business practice to decrease manufacturing costs. Almost every element within a manufacturing company has been analyzed for suitability and impact. Leading edge manufacturers have outsourced vital key services and core departments in an effort to convert fixed overhead to variable costs. Just-in-time inventory, supply chain compression and sub-contracting key processes are sourcing success stories. Manufacturers of non-durable goods have successfully off-shored the complete manufacturing process to lower wage countries in an effort to compete globally. Apparel, textiles, durable goods and sub-components are examples of off-shore industries

In today's business environment, every company is looking for ways to reduce costs. And yet, there is a limit to the savings that can be achieved through reduced inventory and lean manufacturing. Most companies have leveraged their material spend to achieve savings, and have undergone significant headcount reduction. Many are now turning to sourcing as a weapon in the cost-cutting arsenal. But outsourcing the management and labor supply to a 3<sup>rd</sup> party (herein referred to as: **Production Labor Sourcing – PLS**) goes far beyond shrinking budgets and reducing headcount. Pursued strategically, PLS can deliver a broad range of advantages.

Progressive companies are using PLS to:

- **Leverage the Best Practices** of a PLS provider.
- **Focus on their core competencies** and remove the hassles associated with managing semi-skilled workforces.
- **Quickly adapt** to changing market conditions.
- Rethink and actually **transform the business**.

PLS is far beyond typical outsourcing model. PLS providers are partners with their customers – sharing the same risks and rewards. In order to fully comprehend what is appropriate for PLS, you must first agree on what outsourcing is.

Conventional wisdom defines outsourcing as ANY function that's not core to an enterprise's business or related to its strategic direction. In general, functions that affect revenue generation, such as product development and direct customer contact, are core. In the past, outsourcing targeted clearly definable functions. In IT, for example, activities like help desk, security, and backup and recovery became ideal candidates for outsourcing. But forward-thinking companies have discovered effective ways of outsourcing entire functions. Such business process outsourcing (BPO) can include financial accounting, payroll and benefits management, and even some aspects of customer care. In fact, the BPO market is expected to grow at nearly a 10 percent annual rate, reaching \$173 billion by 2007, according to Gartner, a research firm. IT outsourcing will expand more slowly, from \$536 billion to \$707 billion during the same period.

### **Production Labor Sourcing: A NEW BREED OF LEAN MANUFACTURING?**

Manufacturing companies are beginning to examine the PLS business case. There is a major difference between temporary staffing agencies and PLS providers. Temporary staffing agencies supply companies with workers on a short-term basis, either to fill in for absent employees or to supplement existing staff during particularly busy times. Temporary employees are employed by a staffing company, but the work they do is for

the client company. This means that the staffing company is responsible for the employee's salary and other employer expenses, and the staffing company charges the client company for the work done by the temporary employee. There is a high risk of co-employment under this model with significant financial risks.

An increasing proportion of workers are finding permanent job positions through PLS providers, which reflects the trend towards changing demand, on-demand supply chains, and dramatic increases in the need for a "flex and respond" capability in the supply chain. As customers demand increasing responsiveness in a lean environment, more organizations are finding their production requirements will shift dramatically. The need to "flex" the workforce is becoming a major requirement for success in the 21<sup>st</sup> century business environment. Notwithstanding this trend, a majority of contract employees eventually become permanently established at companies where they have previously been contracted to. Nearly one-fourth of the client companies which responded to the survey now have contract employees working permanently in their company. Several companies interviewed use contract labor as the only method to hire new employees. A "try it before we buy it" strategy. The benefits are significant, including reduced 90-day turnover, reduced training and benefit costs, increased first-day productivity and increased productivity metrics. One "Best-In-Class" auto manufacturer only hires employees through their PLS provider.

The contract labor industry is divided into the following sectors:

- *Office and clerical.* Accounts for roughly one-third of the staffing industry's revenue and payroll. It covers secretaries, general office clerks, receptionists, administrative assistants, etc.
- *Professional/Technical.* This combined sector used to be broken into several smaller divisions, including professional, technical, health care and marketing. All these areas have been growing, thanks to shifts in the market as more people with higher skill and education levels look for the flexibility provided by temporary and contract work, and as the demand for these people increases. As in the first two sectors, the professional/technical area now accounts for about one-third of industry revenue and payroll. It covers a wide range of positions, including engineers, scientists, lab technicians, architects, technical writers and illustrators, draftsmen, physicians, dentists, nurses, hygienists, medical technicians, therapists, home health aides, custodial care workers, accountants, bookkeepers, attorneys, paralegals, middle and senior managers, and advertising and marketing executives.
- *Industrial.* Currently, it accounts for one-third of the staffing industry's revenue and payroll and includes the following positions: manual laborer, food handler, cleaners, assemblers, drivers, tradesmen, maintenance workers, etc.

This study focuses primarily in the latter category, in a specialized niche known as "production labor". In the production labor environment, contract workers are often brought in to help close the gap that may arise due to unplanned increases in requirements, seasonal demand, temporary production problems, or other reasons. They may be employed for a period of time and then released, once the "crisis" is over. Most companies use this model now through temporary staffing agencies, such as Manpower, Adecco and others.

We are also finding, that many leading organizations are embracing PLS for another reason entirely: to "lean" out their manufacturing supply chain. Moreover, some organizations are finding that they can keep many of their jobs in the US instead of "off-

shoring” them, by employing a PLS strategy, especially in the area of “semi-skilled” workers. This worker group is often characterized by high turnover, significant on-going supervision and high training and safety expenses. This study confirms when low/semi-skilled functions are outsourced to a PLS provider, managers are free to focus on value-added core competencies that directly impact their business, drive out waste and increase operating margins.

Companies are turning to contracted production labor (temp and PLS) for a variety of needs. The idea driving this trend is simple: bring in people to meet the demand for labor or expertise only when those people are needed. Companies executing this strategy are able to reduce fixed expenses by maintaining a smaller direct (or permanent) staff. When work loads increase, they are able to bring in top quality workers using a human version of a just-in-time inventory system. As an added benefit, the cost of a PLS function is often lower than that of a temp or full-time employee due to the elimination of legacy benefit expenses, direct supervisor costs, training programs and safety risk. The cost savings from PLS is typically 30% to 70% with the same KPIs delivered.

## RESEARCH APPROACH

In order to seek additional insights into the trend of contracting production labor, a series of interviews was carried out on the status of US manufacturing labor for skilled and semi-skilled production workers. Note that specific manufacturing processes that require a high level of quality assurance are typically executed by a skilled worker. Tasks which support the manufacturing processes are typically executed by a semi-skilled worker.

The following questions were explored through our research.

- Are US manufacturers receptive to outsourcing the management of the semi-skilled workforce, thus allowing their plant management to focus on core expertise in quality, efficiencies and production yields?
- Do US manufacturers spend considerable time and effort managing the semi-skilled workforce?
- Are production services unique and highly desirable alternative to off-shoring production and saving US jobs?
- Is there a valid business case for outsourcing semi-skilled production labor?

Based on our exploration of these hypotheses and review of key opinion leader interviews, a number of key insights emerged from the analysis. Our interviews were carried out with executives from multiple manufacturing industries including office furniture, military equipment, energy industry equipment, pharmaceuticals, packaging, textiles, computers, construction equipment, and automotive components. Executives from production outsourcing firms were also interviewed. Responses were coded and captured in a set of quantifiable responses. The project addressed each research question as valid or invalid based on the data to support each conclusion.

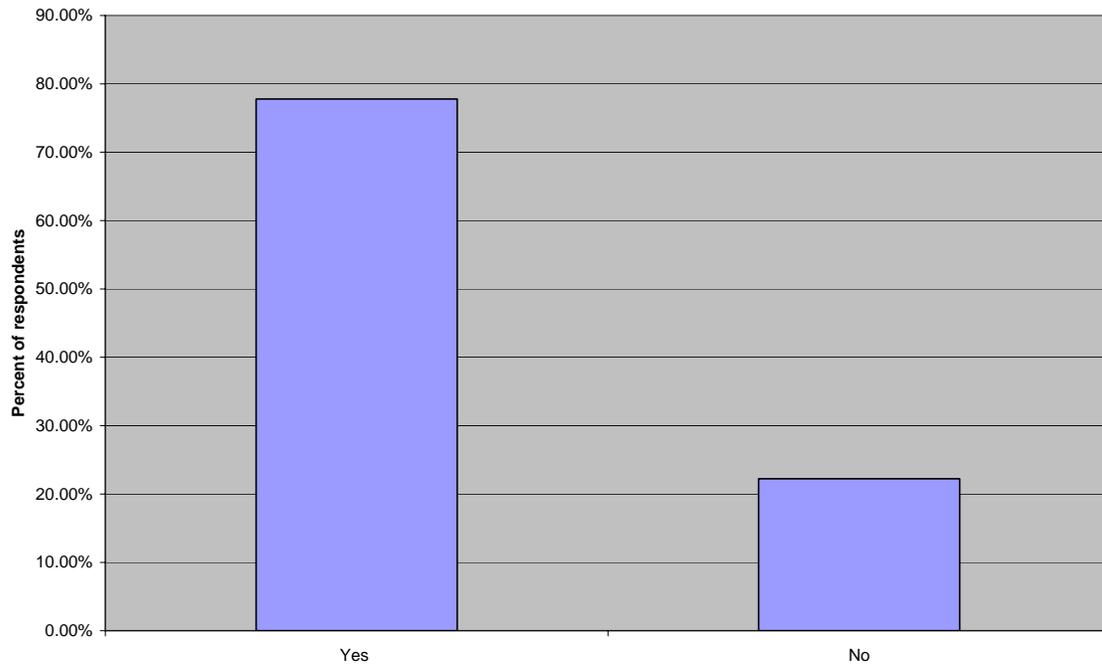
Each of the insights is summarized next.

## RESULTS OF RESEARCH

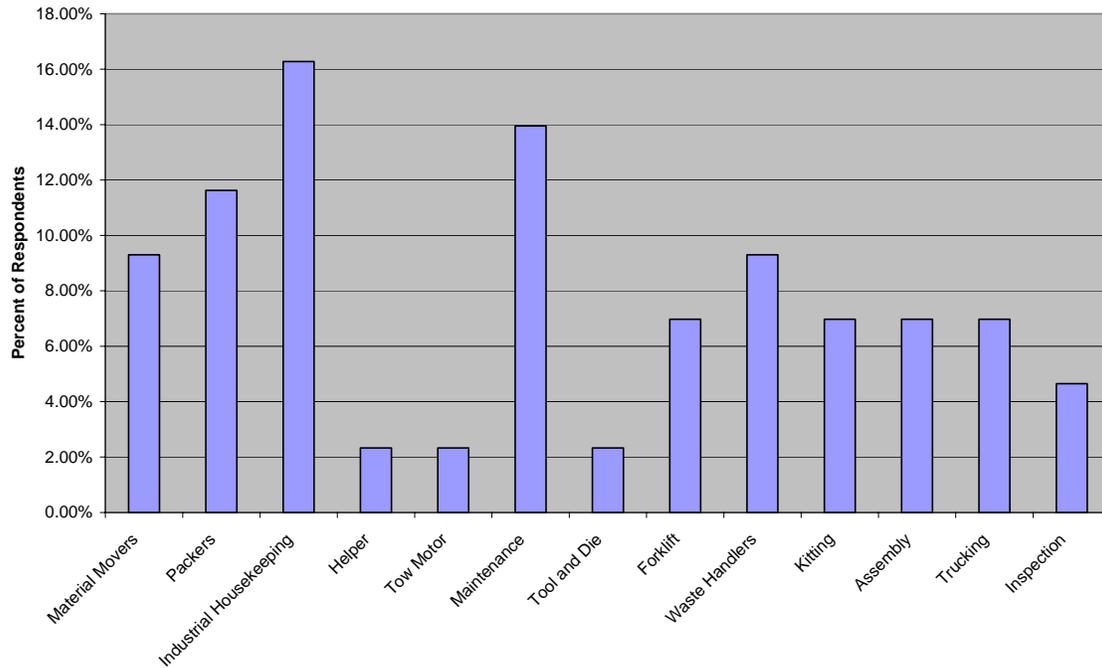
### A MAJORITY OF FIRMS ARE CURRENTLY USING PLS...AD HOC.

The data suggests that US manufacturers are indeed receptive to PLS, and that many are already sourcing production functions within their manufacturing and supply chain environment. Over three quarters of the respondents are currently sourcing some set of functions, as shown in Figure 2.

**Figure 2 - Are you currently outsourcing semi-skilled workers?**



**Figure 3 - What types of positions are outsourced?**



**A DIVERSE SET OF SEMI-SKILLED FUNCTIONS ARE BEING SOURCED, BUT NOT AS A FOCUSED LEAN MANUFACTURING STRATEGY.**

A variety of functions are being sourced. The most common positions sourced through 3<sup>rd</sup> party companies are: light maintenance, industrial cleaning, packers, and material movers. However, a diverse set of other functions are also being sourced: kitting and assembly, prep and tie-in, logistics, helpers, forklift operators, waste handlers, and others. As shown in Figure 3, all but one of the executives are sourcing using 3<sup>rd</sup> parties. The results suggest that there is no common theme towards how companies select functions sourcing, but that it may be occurring in an opportunistic manner, rather than as a focused strategy for leaning the supply chain. This latter statement is supported by some of the comments from executives below:

- *We went through a significant headcount reduction of 45% between 2001-2004 – so people left have a high level of seniority. We are a non-union shop, but use seniority-based rules. The people that are left have the attitude that “I’m lucky to have a job”.*
- *We outsource freight loading for outbound shipments. We are in the process of rolling out a remote DC freight strategy – using 5-7 DC’s located regionally, which will consolidate all of our orders to dealerships. All of these DC’s will be outsourced. We are also establishing a \$1B logistics service center – to cross dock all of our inbound parts onto service center local trucks for “milk-run” deliveries to our production facilities. We have outsourced the cross docking operation in our DC’s to a 3<sup>rd</sup> party.*
- *We have a specialty metals clause – a prohibition of buying foreign metals – an edict from DoD which applies across our industry. However,*

*we have a lot of outsourcing in the area of production labor. Over the years we have outsourced a lot of janitorial and maintenance. We outsource a lot of maintenance and tool cribs and service of replenishment. A lot of these suppliers used to just sell – and have increased their services programs in this area. A lot of programs focus on point of use such as kitting and putting components directly onto production floor. Our outsource provider functions as a distributor and physically loads materials to the floor.*

- We didn't have anyone in place to manage spend in the contract labor area for a year. In that time, compliance was not good – we had about 170 sites in the US, and one provider had the lion's share – 105. One was a pack center in Richmond which uses about 50% temp labor, and 50% full-time in-house employees. Most of these were packers – taking materials from point A to B, using a lot of dexterity, putting things into a box, but little else. We have some major pack centers, and our outsourced providers excel at it. We want to chase compliance – the need is not as significant in these pack centers. We also outsource housekeeping in some locations*
- We use temp labor for packing, general cleanup on the floor, and to drive port trucks.*
- We are not currently doing a lot of outsourcing of low/semi skilled workers, but a team initiating a six sigma project are exploring this strategy. It is a different proposition that outsourcing all of our forklifts, tool and die, maintenance, etc., but is focused solely on some of their contract workers with low skills and wages. The strategy is continuing to evolve.*
- We recognize the global sourcing model is to ship production to low cost countries, but there is some resistance to this. Moreover, the distances to China will fragment the organization, and prevent improved communication and coordination, so there is a lot of resistance to the prospect of global sourcing from other parts of the organization not associated with global purchasing.*
- We use outsourced labor in "bits and pieces" today. No one at our company is doing it full-time for actual labor. But it is definitely something we would consider. However, I believe that other companies in our industry are also outsourcing maintenance.*
- I believe it is the exact same model as third party contract manufacturing and logistics service providers – both of which we do now. So introducing it would NOT be a radical concept.*

## **BEST-IN-CLASS MANUFACTURING ENTERPRISES ARE INTEGRATING PLS EXTENSIVELY IN THEIR DOMESTIC OPERATIONS TO HOLD OFF THE THREAT OF OFF-SHORING PRODUCTION.**

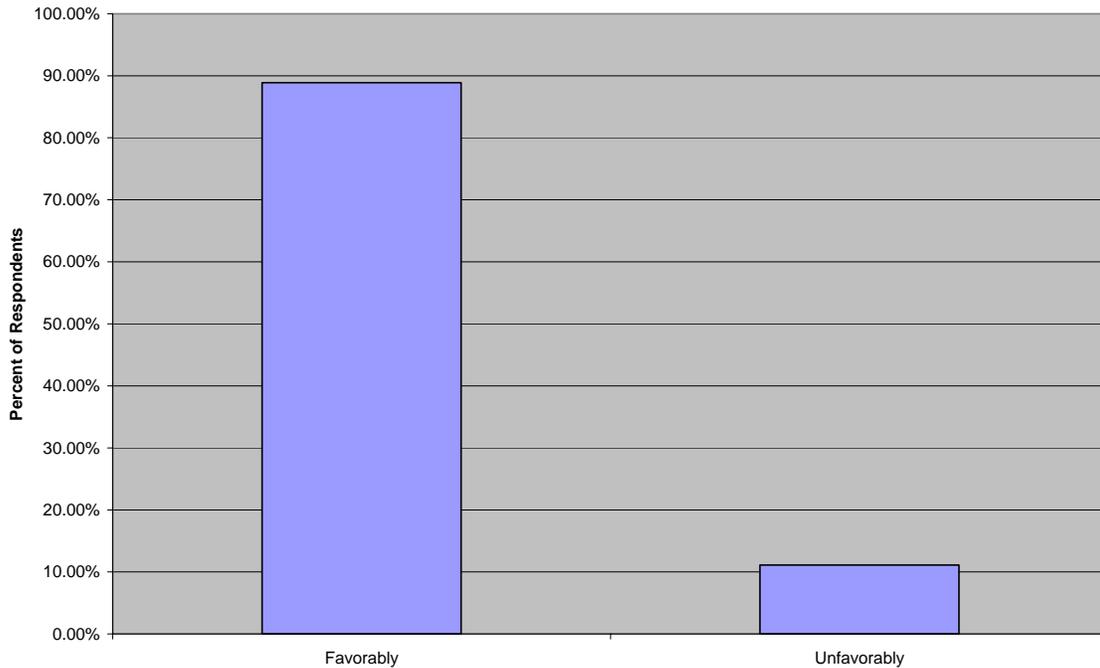
It should be noted that two organizations considered "best in class" have developed very advanced levels of PLS, with a well-thought out model that was integrated into their strategic plan. Both organizations are in highly competitive global industries with very low margins, which had driven them to explore and deploy the PLS.

- *Our business model is very advanced in terms of outsourcing – we think of it from a different point of view. For any product we produce our systems with our outsource providers will integrate closely. You see the bills of materials and bills structures that look like an hour glass. It has a sameness to it, and it hits an explosion at the other end of the hour glass. We exploit that process as much as possible. All of that product and value, which includes motherboards, power supply chassis, videocards, etc. will be outsourced to one tier one who puts it together for us. The value proposition is that we will ship by water and others to keep it low cost – except if we need it airlifted. It only takes us about a day to build a server, 40 minutes for a desktop, except for accumulations – have large orders with special delivery mechanisms. With all that going on – we really do 60-70% of our manufacturing through other parties. We don't think of it as outsourcing – it is a system of final integration.*
- *We are a tier one automotive manufacturer, which a highly paid powerful union workforce. The union workforce is highly sensitive about any type of discussion around outsourcing of temp work, which would lead to a significant conflict if it were raised. However, this has led to an interesting new strategy. We are effectively creating a new business, staffed by younger people, who are not part of a union, and who can be paid \$10-12 an hour. These individuals cannot actually be INSIDE of one of our plants, so the idea is to remove them and put them inside a separate annex. This strategy is in its infancy, and I am tasked with leading this effort. We are a privately held company, and are facing significant cost challenges, so the family members have delegated this individual to start up and run the company as a trusted manager. We are on JIT replenishment, so the non-union workers can do work such as cycle counts and replenishment that are not value-added, without having to pay high union wages. The union shop would have a mutiny if these people were located in the primary assembly facility. Work completed at the outsourced facility includes overflow inspection work, die cutting to support operations, packing, kit making, and recycling of packaging (regrinding and re-packing to restore it). The operation, although part of the process and supporting it, is envisioned to remain outside of the company, and exempt from union requirements. Eventually, it is foreseen that they may support other businesses not within our own organization as well. The motivation behind this strategy was that we were already supporting a number of local small outsourcing temp agencies in the area – and asked the question (“Why don't we do this ourselves?”). Change is very tough – it is a rustbelt union environment, and this is viewed as an external change that will be an impetus to drive internal change within our enterprise.*

## **EXECUTIVES BELIEVE THAT PLS WILL CONTINUE TO GROW RAPIDLY.**

The respondents indicated a positive view of PLS, and that it is a trend that will continue to occur in the future. Almost 90% of the respondents viewed it favorably. Only one private company did not consider labor outsourcing a viable option at all. This was due to the perceptions of the Founder and CEO of the company, who is vehemently opposed to this trend.

**Figure 4 - What is your relative perception of the outsourcing trend?**



The responses from executives suggest that PLS will increase due to the need to increase competitiveness, focus on core competencies, reduce costs, and keep jobs in the US which would otherwise be shipped off-shore. As the need for flexibility and customer closeness increases, companies will need to find ways to keep jobs in the US to maintain responsiveness and flexibility to US customer requirements, while continuing to drive out costs. Executives' concern over loss of intellectual property in China or India is also top-of-mind as a reason to keep production in the US. These thoughts are captured in the statements below.

- *Our full-time workers on the floor have no animosity towards the temps. Much of the discussion currently takes place at the corporate level. The decision is made primarily on the basis of increasing profitability. Another trend are companies bringing work back from China in furniture manufacturing. They are seeing rapid changes in products and design that are too frequent to be managed in a long lead-time environment. So the work is staying more at home. We outsource items such as casters and locking mechanisms overseas to China, but otherwise use local production.*
- *We have to outsource. My title is Materials Risk Manager – and we are looking at the entire supply chain for opportunities to outsource pieces that we are not good at.*
- *We are outsourcing when appropriate to meet a business need. We have a lot of proprietary stuff – and are very conscious of IP in China and India – so don't outsource a lot. We do not use Indian call centers, because of the fact that when a technical person calls for a technical solution – they need to have someone with the technical background, so it can only be done in-house. However, we outsource things that aren't core to our business.*

- *Outsourcing will definitely increase. Temp labor is double digit growth – 11%, and I only envision that increasing. I look at how unstable the marketplace can be – and we will see tendency of our locations to not want to hire. We will see a lot more temp labor in those areas. Other trend is to “try before you buy” – especially in smaller locations – want to bring people on as temp but may want to convert at some point in the future – have an agreement in place to say after a certain number of hours, can convert at no charge. Temp labor will do recruiting.*

## **BEST IN CLASS COMPANIES ARE TIGHTLY INTEGRATED WITH THEIR PLS PROVIDERS.**

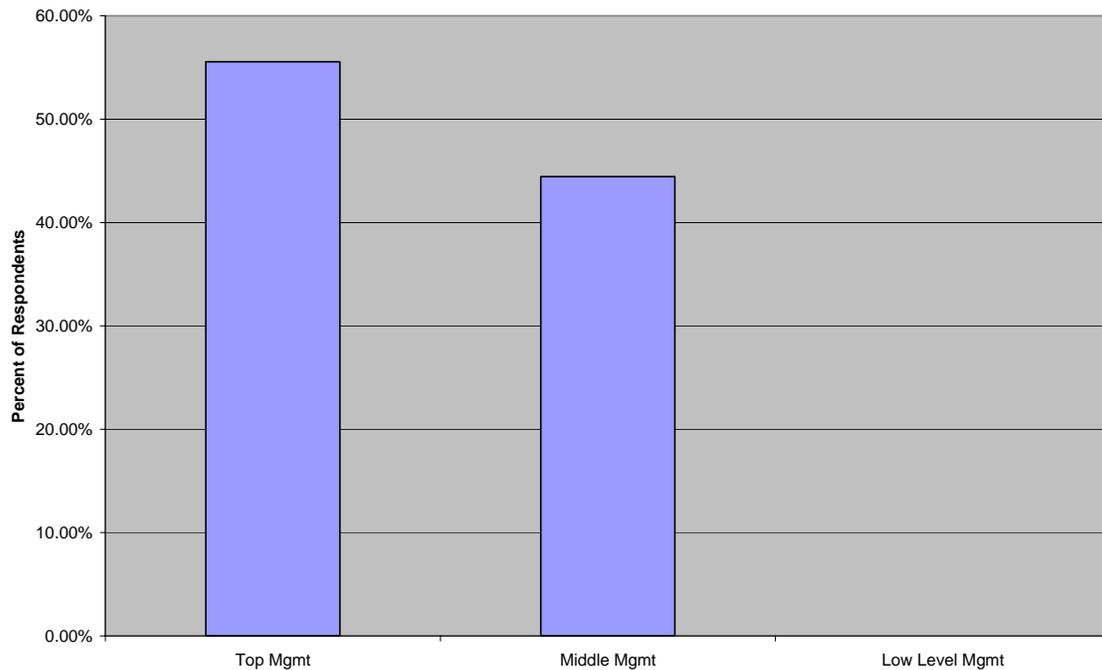
One company we interviewed noted that they have multi-level communication channels to facilitate collaboration with outsource production services suppliers.

- *It takes a team of IE's, of product engineers, of supplier quality engineers, procurement, and logistics people that will wrap around an outsource– and an equivalent of specialists and planning folks from the management team from that supplier – to go in and drive that process. Multiple people from suppliers are in our local facilities, including field application engineers (FAE's) who live in our facilities and they are the feedback mechanism to go back to their company, institute supplier quality processes, failure analysis, and leaning of processes. We have a lot of real-time internet data systems that go between us and the supplier – that we call collaborative and reciprocal information. Databases are used to share updates on what is going on, when material gets here, quality and yield of material as we use it. Achieving this level of integration requires specialists involved in managing the process. But the benefits are that you have moved manufacturing to a lower cost center with higher capability, and are keeping it in the US. And you have moved some of the responsibility in terms of being world class – which is now with the supplier. We almost have stickum – we are that close with our outsource providers. You will see daily performance, weekly performance, quarterly performance reviews between us and suppliers – this is not just in terms of making the product – but also deals with people who are providing service technicians for us, the HR services for us – and our processes are robust as a result.*
- *A contract labor force is a highly appealing model. We will need to outsource molding and assembly to a non-union workforce to be competitive. Outsourcing to low cost countries is not feasible, as the long leadtimes associated with this process are unacceptable, so the work needs to be done locally. The only solution is to have a local non-union workforce do the work. To facilitate this, we have established processes to train workers in constraints management, and have located HR people on the floor. Their quality group sets specifications, and they currently have 7 people who are flexible unskilled workers in their operations. Management is strongly pushing this model, which is in a pilot phase, and which could expand in the near future.*

## **THE DECISION TO OUTSOURCE LABOR IS EVENLY SPLIT.**

About 55% of the companies noted that it was a corporate level decision, while 45% noted that it was not an integrated strategy but the decision was made at the plant level. The latter group noted that there is a need for a sourcing strategy that aligns preferred vendors for outsourcing of production services.

**Figure 5 - Who is responsible for initiating outsourcing decisions?**



Further, the comments suggest that there is not a consistent strategic imperative that is driving the decision across the organization. Building a business case and deploying the strategy without a support function is also a problem. Companies are seeking to find specialized production services companies that can provide a single integrated point of contact across multiple plants, as shown below.

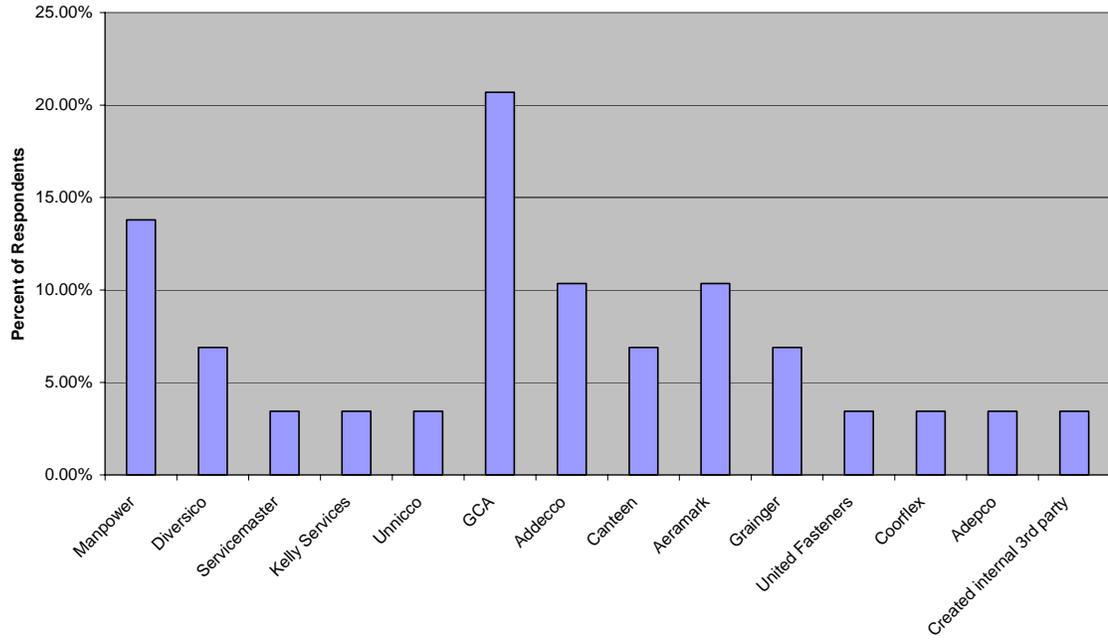
- *The decision is made right now at plant level – but this has changed. We have worked hard to grow procurement's relationship with corporate HR organization, and helping them to understand what temp labor brings to the table. Our usage will only increase. We also need to educate our managers in co-employment, because it is not something that is part of training process when people come in. I have a friend just named as a plant manager – small plant, with 1-2 temp labor positions. But this individual is not training on co-employment, and what you can and cannot do. The fact is, co-employees don't work for you, and there are things you can and cannot do in these situations.*
- *The team is struggling to get good data around modeling and creating the business case. What is the inefficiency rate for using temp workers, versus low cost internal workers. There are many different opinions within our company regarding what should be done or not, and the six sigma team is struggling to get good data around this project to justify a business case. Our plant manager is in favor of outsourcing temp labor, but is struggling.*

## **THE PLS MARKET IS HIGHLY FRAGMENTED.**

As can be seen in the chart below, the production services market is highly fragmented with a wide variety of companies competing for growth. However, it should be noted that these providers were spread over a variety of services. Based on scanning the marketing material for these companies, we believe that there are only a handful of services offering a full suite of lean training, consulting, business case development, and

facilitated deployment. Some of the leaders in this space include GCA, Manpower, Diversco, and Adecco.

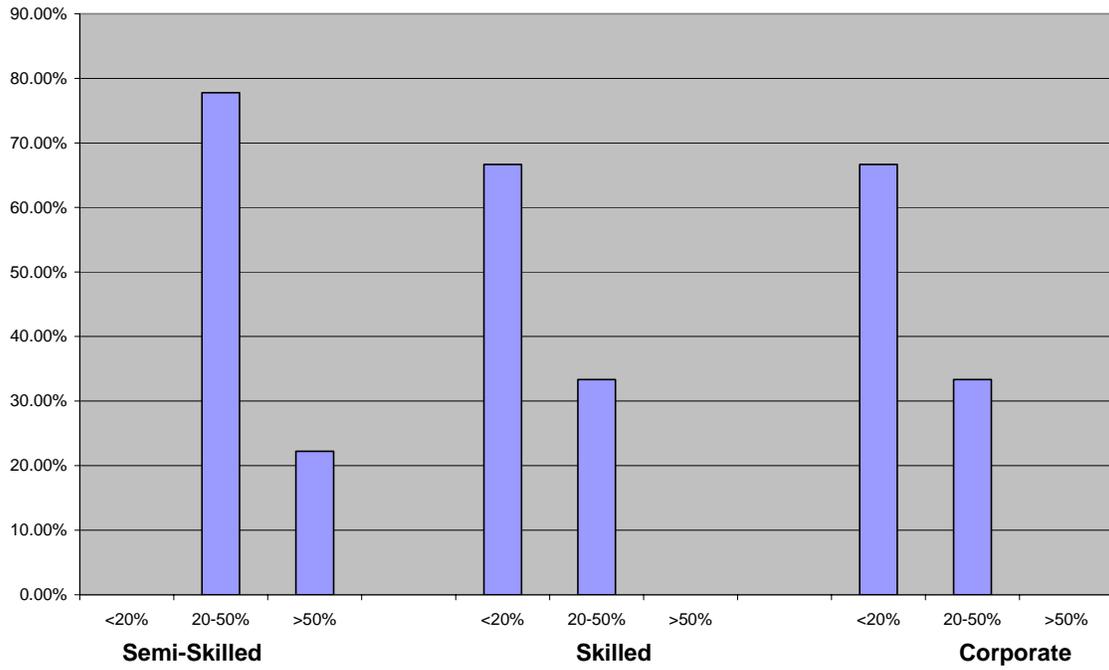
**Figure 6 - Which companies would you consider using for production services outsourcing requirements?**



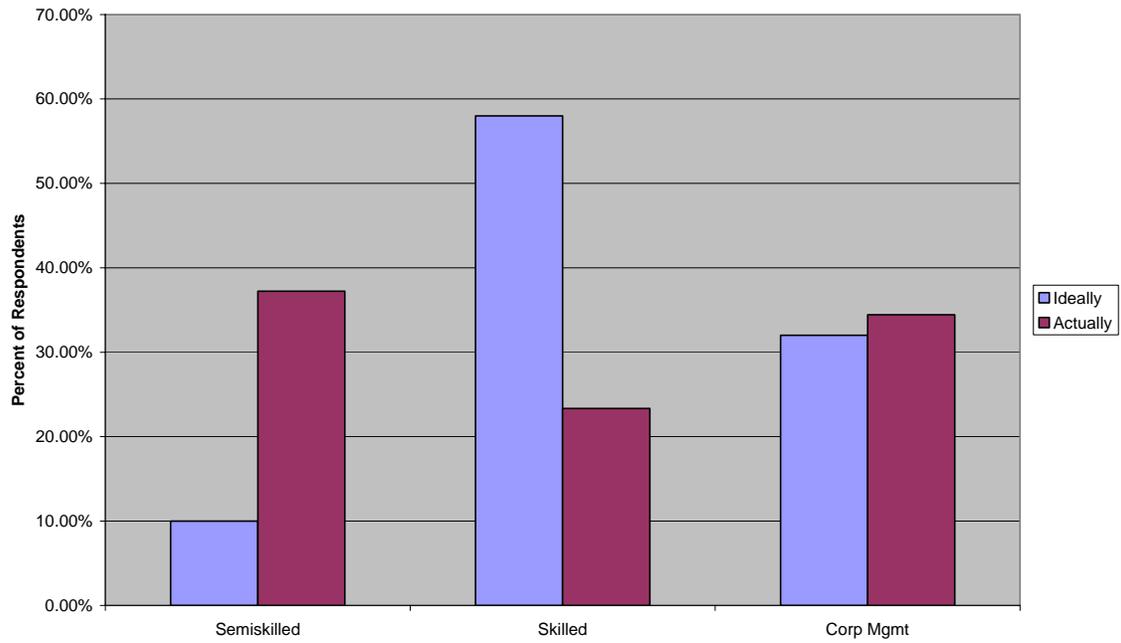
**EXECUTIVES FEEL THAT THEIR MANAGERS SPEND TOO MUCH TIME MANAGING THE LOW/SEMI-SKILLED WORKFORCE.**

As shown Figures 7 and 8 below, executives feel too much time is spent with semi-skilled workers (between 20 and 50%). Further, there is a gap between the ideal and actual amount of time that managers spend on various value-added and non-value-added activities. Executives believe managers spend too much time on supervising non-skilled workers, and not enough on continuous improvement and six sigma projects (Figure 9).

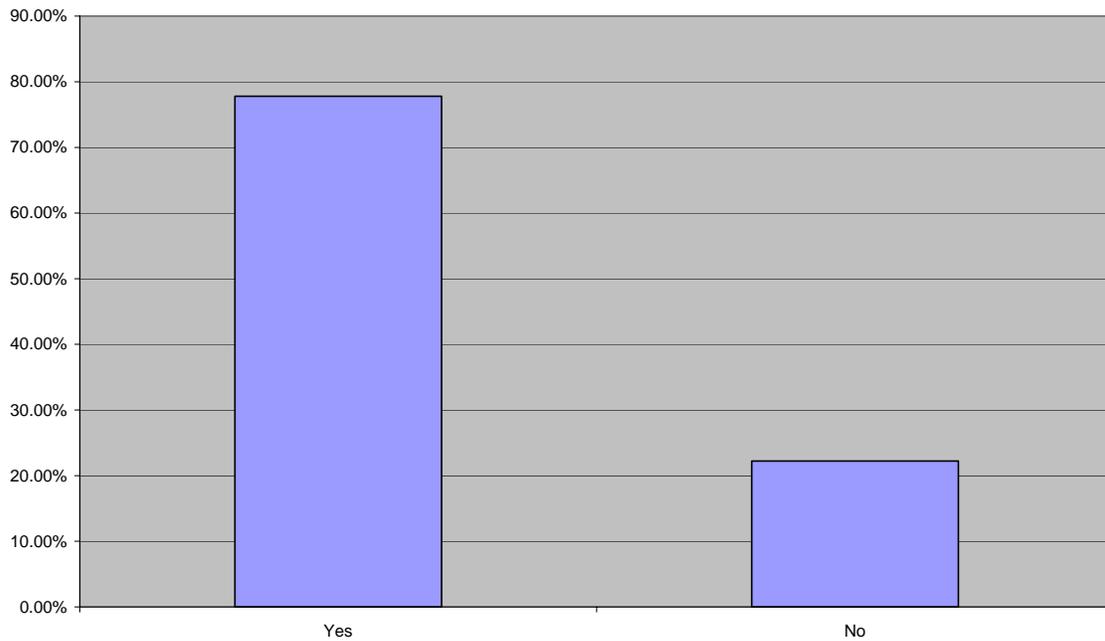
**Figure 7 - What percentage of your time is spent within each category?**



**Figure 8 - How should your managers ideally be spending their time versus today?**



**Figure 9 - Would your supervisors agree that they spend too much time managing semi-skilled workers and not enough on value-adding activities?**



## **BARRIERS TO PLS ARE SIGNIFICANT AND MULTI-FACETED.**

As shown in Figure 10, executives struggle with some key doubts regarding the issues associated with PLS. Number one on the list is the risk of quality problems from high turnover and significant training costs. Seamless integration of “their” workers with our workers, along with “who is the boss” confusion is another key concern expressed. Additional issues on how to identify and justify the value and the business case for outsourcing of semi-skilled workers were common throughout the interviews.

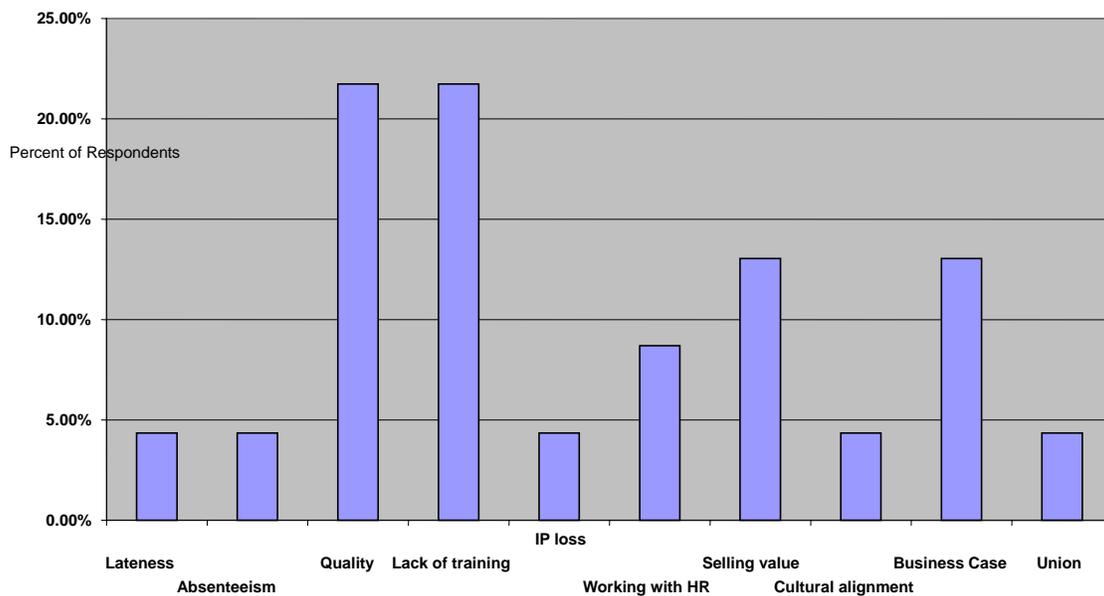
There is a need for production labor providers to document and prove (case studies and like-industry references) the business case, along with a guaranteed methodology that ensures executives the quality and training will be as good as or exceed the current set of semi-skilled workers. This is also reflected in the following comments:

- *When we outsourced to our current provider, we experienced a lot of quality problems, and end up with a lot of product in the repair bay. People put things together backwards, etc. We have had a mixed experience – and have had a lot of unreliability when it comes to people showing up. We have a lot of tardiness and attendance problems, which results in lost production. People may show up for an hour then leave, or work a week then leave. The real problem is that there is a lot of job instruction required, and training is a real problem. How do we train people to perform a quality job? It is a chronic problem. We only pay these folks \$9 an hour. An interesting empirical approach would be to see if there would be any improvement in performance if rates were increased to \$10.40 an hour.*
- *The biggest risk to outsourcing work to temps is the risk of poor quality, associated with high turnover, and having to re-train people due to do the work over and over. This can lead to customer dissatisfaction and costly rework if it is not*

monitored. However, it is difficult to quantify business risk and establish it into a decision-making process such as Six Sigma.

- *The biggest challenge is that the provider has to prove their competency – which means moving towards an audit-type role. Because of tight government FDA regulatory requirements on our product – the provider must be able to prove and ensure that they meet standards – since in the end we are ultimately held accountable for the quality of the product. The competencies that must be met must be acquired through training. The individuals working on site must possess the same set of criteria and competencies as any FDA regulated factory, which includes how they do the job, following Standard Operating Procedures (SOPs), and self-assessments. However, I don't believe this is as difficult as it sounds. The provider could take the outsourced cleaning SOP's, and simply train their people to a new set of SOP's, telling them "that is the way you MUST do it."*
- *We will hire contractors for 3 month periods – they are primarily people who work for us, retired, and want a part-time job. We cannot get someone off the street. Most of what is required is knowledge. People can't put together our equipment without that knowledge, and do not generally have the technical skills.*
- *The buy-in from HR was a big issue. I have buy-in but they do not feel that they have to be involved. Co-employment is something that HR is not aware of, even though as they become part of your organization, they work for a third party and work alongside your people. As that usage increases, the potential for problems increases. I have tried to educate myself on this issue – and realized that there is not a good knowledge base about -employment law. If you give awards to employees for meeting safety milestones, can you do the same thing for temp labor, or are you breaching something in terms of co-employment? A competent production labor outsource company should know all these issues and educate, as well as lead the process.*

**Figure 10 - What are the key problems you experience with Outsourcing labor?**



## EXECUTIVES BELIEVE THERE IS A BUSINESS CASE FOR PLS, BUT LACK THE FRAMEWORK TO CREATE IT.

There is a significant economic benefit associated with outsourcing the semi-skilled workforce. A simple example is discussed below.

Consider the case of a single large manufacturing operation, consisting of 250 workers, of whom 50% (approximately 100) are considered semi-skilled workers.

- Assume a semi-skilled worker (mid-range pay wage of \$17.50) has an annual burden cost of \$50,000. Burden includes health benefits, retirement, other welfare programs, workers' compensation and the like.
- Assume overhead costs associated with maintaining an in-house workforce are accrued, and include HR personnel, payroll, and other fixed costs – which we will assume to be \$300,000 on an annual basis.
- Assume cost of managing this workforce for 100 workers is a linear function, as shown in the black line in Figure 11.

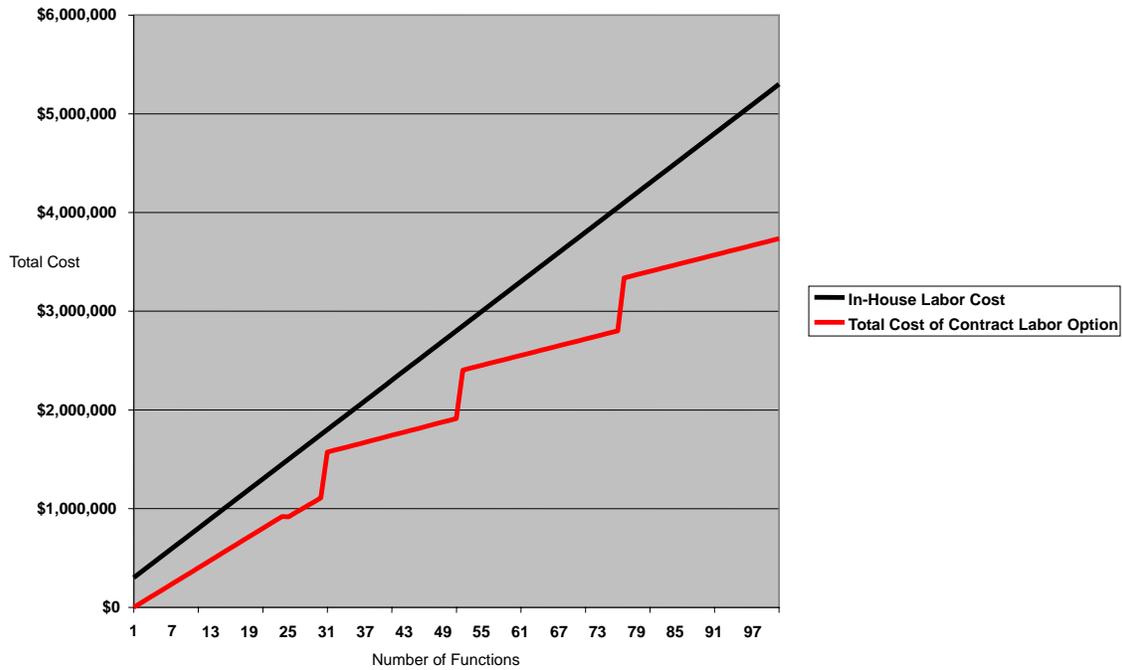
The second model is one that encompasses various levels of production services outsourcing are employed. An outsource provider of production labor services will typically visit the facility, map out the manufacturing processes, and develop a proposal to develop and train a workforce capable of replacing these in-house semi-skilled workers. Note that replacement or headcount reduction is not always required – but in fact, some workers may be asked to move to other areas for training and promotion if they show the right capabilities and are motivated to do so. This will often happen particularly if an organization is in an expansion mode, and this strategy can significantly increase capacity with no additional fixed labor investment. As shown in the red line in Figure 11, the cost savings associated with doing so are significant.

- To begin with, a contract labor force carries a savings of approximately 60% over a fully burdened in-house staff position. This figure is based on interviews with a number of companies and contract staff providers.
- There is often a management fee associated with a production labor provider, which may be a scaled fee of approximately \$3,000 per position per year, which covers additional costs associated with managing, training, safety, insurance, workers compensation, and efficiency experts. When compared to decrease in time required to manage this workforce, the fee is equal to or less than the direct cost savings of redeploying internal managers, supervisors, trainers, HR and safety personnel, along with the reduced financial risks.
- A well designed production labor management program includes a component that seeks to further “lean” out existing production processes to minimize the number of additional temporary workers in an environment, with the savings passed on to the customer. Preliminary research suggests that these savings may drive an additional 10 to 15 percent savings achieved through lean workshops, process re-engineering, and work studies. As the number of outsourced positions increases, this number increases as the potential for re-designing the workflow and achieving efficiencies increases. In one case, the cost savings from production cell efficiencies totally offset the management fee in the first year.

The combined potential savings of an in-house versus outsourced production labor service is shown in Figure 11. The projected savings are significant, especially as the number of outsourced positions increases. Projected savings can be in the order of 20 to 40% (30 percent savings is shown in the illustrated example). Next, we explore the

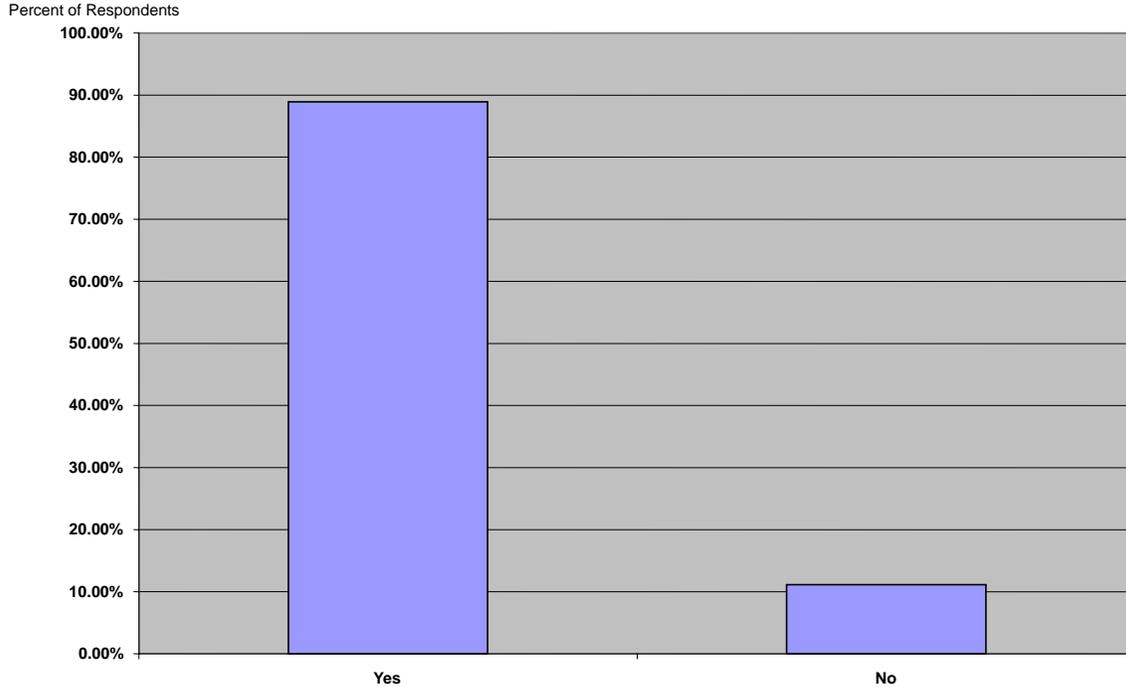
perceptions of manufacturing executives to the possibility of using outsourced production services, given the existing state of the manufacturing landscape in the U.S.

Figure 11 - Projected Savings in a Single Plant Environment



Based on our research, 100 percent of executives noted that having an integrated workforce with a comprehensive training and safety component is unique and highly desirable.

Figure 12 - Is outsourcing of production labor a trend that will grow?



This is also reflected in their comments.

- *We have had no other problems with our other outsource contractors. I think this is a trend that will continue, as organizations continually seek ways of reducing costs. If you don't do it, somebody else will and will take your place in the market.*
- *One private company stated that the CEO was opposed to any form of outsourcing, and wants to control all aspects of production using in-house people, using internal performance measurement systems.*
- *We are actively doing it and will continue to do so.*
- *"There is no question that outsourcing of the semi-skilled labor force is a trend that will shape the industry and which will be required for survival".*
- *Are the skills right? And is there a business case? Yes – it is something we would like to explore.*
- *We do not need skilled support every day, except in the peripheral areas that are not in our core business. It makes sense to do this – as long as it is not too highly tiered.*
- *We used temps to buffer our seasonal spikes in business. Are we getting the quality we are willing to pay for? There is more production work that requires using learning principles. It IS making a difference. The problem is not the temps – but it is part of a temp workforce strategy. It is naive to think that we are not competing with low cost countries who are paying people less.*

- *Interestingly last week, I had a visit from a quality assessment and audit team from Chrysler. They wanted to interview me because of my book "Creating a Lean Culture", in Productivity Press (2005). We were doing an exchange of business cards, and I learned that they are a supplier quality team which visits problem suppliers – a form of "outsourced supplier development" team. They deal a lot with the "yard holds" – cars that have quality problems and need work. They identify the supplier problems, go to suppliers, and solve them – but are all contractors with Kelly Services! They were very serious about their work – middle aged technical professionals. They are part of Chrysler – but not really! An interesting development.*
- *We have a couple of key suppliers that work for us – and we do outsource from time to time the assembly process. It is a skewed opinion – and they might work for us, to have them on someone else's payroll. Results have been very good – but is skewed, since they are trained in our business and working for a key supplier. No real experience outsourcing off the shelf type stuff. With quality checks in place – I suspect that you could make it better. I would imagine has to be a good working relationship with your supplier – and an interaction to ensure our standards are being met. Only make 200 units per year.*
- *Tough area to manage – unlike anything else. You are not sourcing something you can count on to show up – need X number of people – these people have free will and can show up or not – and makes managing a commodity very attractive some days versus managing people. This is like HR without the glamour! HR's red-headed stepchild.*
- *Outsourcing of temp labor is important for us, but building a business case is also difficult. It is a highly emotional subject within our company. We recognize that we need to face it and have launched a six sigma project to explore it further.*
- *Toyota is also actively utilizing this approach. They have developed their own integrator, called Toyota TUSHU, which is essentially a materials company that handles all of Toyota's MRO. They fix product, and sequence inbound shipments for the Toyota assembly operation. They are "joined at the hip" in terms of their information systems, and also outsource all of their low skill manufacturing to TUSHU.*

## CONCLUSIONS:

One element from our research is clear. In the modern era of global competition, the companies that will succeed and continue to lead will be those that have a strong vision for lean manufacturing within the context of a dynamic and integrated supply chain. The core element that defines the winners from the losers will be an ability to leverage the expertise and knowledge of workers within your four walls, and establish collaborative results with external parties that can support your area of focus. Many companies have already depleted other opportunities for cost reduction and value improvement through material cost leveraging, headcount reduction, and process mapping. Most, however, have forgotten to analyze low/semi-skilled functions (labor) as an opportunity to drive out waste.

Production Labor Sourcing remains as one of the last, but also the most critical opportunities to achieving true lean capabilities. Without a commitment to focus on value-added activities and elimination of waste, managers will spend too much time "spinning their wheels" and will be unable to focus on those things they need to work on

to be successful. To gain a competitive advantage, leadership teams will need to actively engage PLS as a competitive weapon in their arsenal. PLS is NOT simply a way to reduce headcount or reduce cost; it is a way of improving economic value and total cost, when other options have been depleted.

To initiate this effort, leaders should engage with PLS providers such as GCA Production Services to initiate a formal study to identify opportunities, build the business case and design a custom PLS program. Companies should begin by assessing potential suppliers for their experience, track record, and knowledge in key manufacturing principles (Lean, Six Sigma, ISO, TQM and the like), as well as prior experience in cost savings and reduction. In depth analysis of these elements and a detailed approach to deployment with the right mix of functions is necessary to obtain optimum results.

PLS providers should be evaluated not just on unit price savings, but on their management capabilities to reduce labor waste and improve the economic value of the entire manufacturing site. Our results show that costs savings of 20-40% are possible using PLS as a strategic initiative. This is an opportunity that remains relatively untapped, and which executives should consider closely as a means for not just survival, but for continued success.

## APPENDIX A: A BRIEF HISTORY OF OUTSOURCING

Since the Industrial Revolution, companies have grappled with how they can exploit their competitive advantage to increase their markets and their profits. The model for most of the 20th century was a large integrated company that can “own, manage, and directly control” its assets (Corbett, 1996, p.14). In the 1950s and 1960s, the rallying cry was diversification to broaden corporate bases and take advantage of economies of scale. By diversifying, companies expected to protect profits, even though expansion required multiple layers of management. Subsequently, organizations attempting to compete globally in the 1970s and 1980s were handicapped by a lack of agility that resulted from bloated management structures. To increase their flexibility and creativity, many large companies developed a new strategy of focusing on their core business, which required identifying critical processes and deciding which could be outsourced.

### Initial Stages of Evolution

Outsourcing was not formally identified as a business strategy until 1989 (Mullin, 1996). However, most organizations were not totally self-sufficient; they outsourced those functions for which they had no competency internally. Publishers, for example, have often purchased composition, printing, and fulfillment services. The use of external suppliers for these essential but ancillary services might be termed the baseline stage in the evolution of outsourcing. Outsourcing support services is the next stage. In the 1990s, as organizations began to focus more on cost-saving measures, they started to outsource those functions necessary to run a company but not related specifically to the core business. Managers contracted with emerging service companies to deliver accounting, human resources, data processing, internal mail distribution, security, plant maintenance, and the like as a matter of “good housekeeping” (Alexander & Young, 1996). Outsourcing components to affect cost savings in key functions is yet another stage as managers seek to improve their finances.

### Strategic Partnerships

The current stage in the evolution of outsourcing is the development of strategic partnerships. Until recently it had been axiomatic that no organization would outsource core competencies, those functions that give the company a strategic advantage or make it unique. Often a core competency is also defined as any function that gets close to customers. In the 1990s, outsourcing some core functions may be good strategy, not anathema. For example, some organizations outsource customer service, precisely because it is so important (Greco, 1997).

Eastman Kodak’s decision to outsource the information technology systems that undergird its business was considered revolutionary in 1989 (Gurbaxani, 1996), but it was actually the result of rethinking what their business was about. They were quickly followed by dozens of major corporations whose managers had determined it was not necessary to own the technology to get access to information they needed. The focus today is less on ownership and more on developing strategic partnerships to bring about enhanced results. Consequently, organizations are likely to select outsourcing more on the basis of who can deliver more effective results for a specific function than on whether the function is core or commodity.

## What is Outsourcing?

Outsourcing can be defined as “the strategic use of outside resources to perform activities traditionally handled by internal staff and resources”. Sometimes known also as “facilities management”, outsourcing is a strategy by which an organization contracts out major functions to specialized and efficient service providers, who become valued business partners. Companies have always hired contractors for particular types of work, or to level-off peaks and troughs in their workload, and have formed long-term relationships with firms whose capabilities complement or supplement their own. However, the difference between simply supplementing resources by “subcontracting” and actual outsourcing, is that the latter involves substantial restructuring of particular business activities including, often, the transfer of staff from a host company to a specialist, usually smaller, company with the required core competencies.

## Why do companies outsource?

Here are some common reasons:

- Reduce and control operating costs
- Improve host company focus
- Gain access to world-class capabilities
- Free internal resources for other purposes
- A function is time-consuming to manage or is out of control
- Insufficient resources are available internally
- Share risks with a partner company

In earlier periods, cost or headcount reduction was the most common reasons to outsource. In today's world the drivers are often more strategic, and focus on carrying out core value-adding activities in-house where an organization can best utilize its own core competencies.

## Main Factors influencing successful Outsourcing

The critical areas for a successful outsourcing program as identified are:

- Understanding company goals and objectives
- A strategic vision and plan
- Selecting the right vendor
- Ongoing management of the relationships
- A properly structured contract
- Open communication with affected individual/groups
- Senior executive support and involvement
- Careful attention to personnel issues
- Short-term financial justification

## Outsourcing Process

There are four main aspects to a typical outsourcing program:

- Program Initiation
- Service Implementation
- Final Agreement
- Program closure

## Program Initiation

At the start of any outsourcing program, there are a variety of ideas and opinions about the purpose and scope of the program, what the final result of the program will be, and how the program will be carried out. The Program Initiation Stage is concerned with taking these ideas and intentions and documenting them to form the basis of a draft contract

## Service Implementation

Service Implementation covers the activities required to take these ideas and intentions and develop them into a formal, planned outsourcing program and to make the transition to the outsourced service. Specifically these activities are:

- Defining the transition project
- Transferring staff
- Defining the Service Level Agreement (SLA)
- Defining service reporting
- Implementing and handing over the service
- Implementing service management procedures

During the hand-over phase it is imperative that continuity of service is maintained at all times, that there is no reduction in the quality of the delivery and that timescales and deadlines are not compromised.

## Final Agreement

The draft contract produced at the Initiation stage is generally amended during negotiations and the final Contract is produced on completion of the negotiation cycle.

## Program Closure

In order to gain maximum benefit, the program should go through a formal close down. There is no point in continuing to argue lost causes once irrevocable decisions have been taken. Staff and companies alike need to accept the new situation and move forward. However, there will be a lot of information generated during the life of the program, and this will have been stored with varying degrees of formality by the team members. This information needs to be formally filed away for future reference.

## How to Decide Whether to Outsource?

There are no simple criteria to conduct an outsourcing versus in-house analysis. The benefits associated with outsourcing are numerous, and one should consider each project on its individual merits. Ongoing operational costs that may be avoided by outsourcing are also a consideration. In a nut shell, outsourcing allows organizations to be more efficient, flexible, and effective, while often reducing costs.

Some of the top advantages brought by outsourcing include the following:

- Staffing flexibility
- Acceleration of projects and quicker time to market
- High caliber professionals that hit the ground running
- Ability to tap into best practices
- Knowledge transfer to permanent staff

- Cost-effective and predictable expenditures
- Access to the flexibility and creativity of experienced problem solvers
- Resource and core competency focus

## APPENDIX B

### Current Strategies and Tactics in Staffing

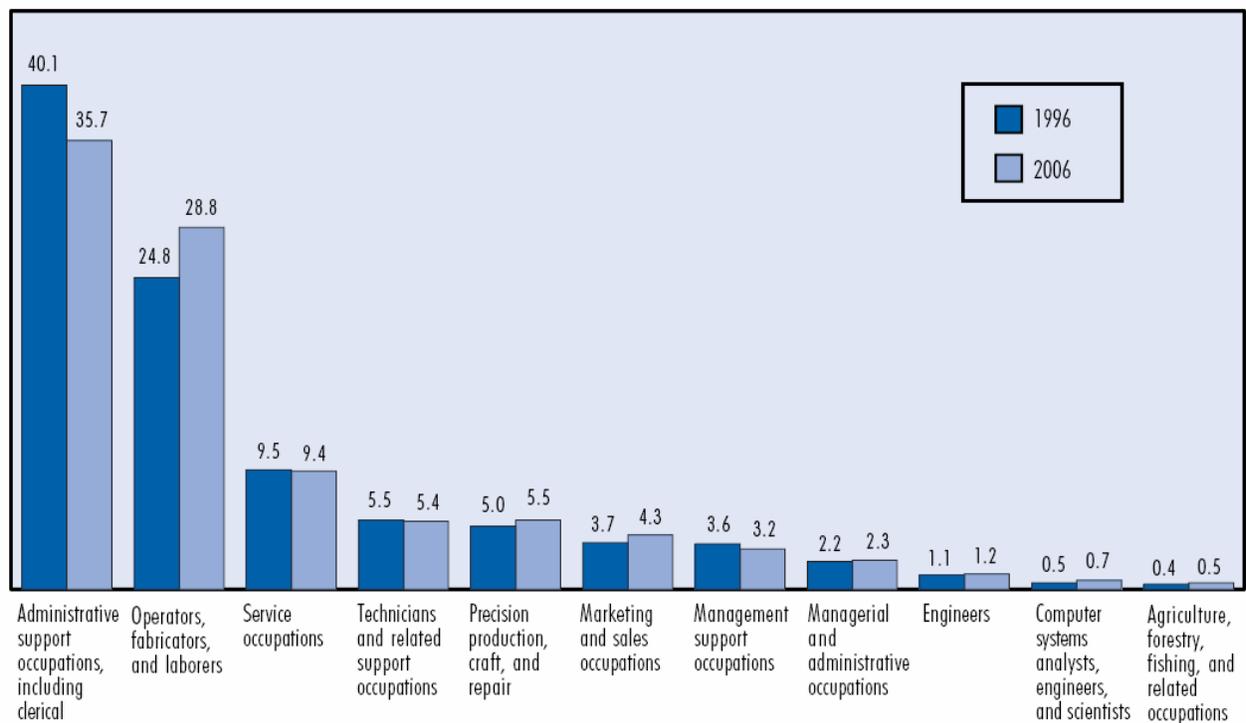
#### Contingent Work Force

Call it downsizing, rightsizing or a layoff. Companies throughout the 90's have been trimming their staffs to eliminate waste and focus on their strengths. These cuts have led to the development of the contingent work force - the people who are called in on a short-term or project basis. While using temporary help is certainly not a new concept, incorporating staffing as a part of an organization's competitive strategy is.

**Chart 2**

**Distribution of occupations in the personnel supply services industry, 1996 and projected 2006**

(percent)



As shown from the graph shown above, agriculture, forestry, fishing, and related occupations are not the common areas that temporary staffing companies cover, though there is expected to be a growth in these areas.

Today's contingent work force crosses all lines of business and areas of functional responsibility. While temporary help used to be thought of as clerical support, the term has now come to encompass industrial, engineering, information technology and

professional positions. In many parts of the country, the fastest-growing category of temporary workers are interim executives - from marketing and financial experts right up through CEOs. The following are the major staffing trends associated with the contingent work force.

Supplemental Help	Fill-in for short-term demand such as a vacation or special projects. Using supplemental help allows existing staff to focus on more pressing business. It frees them from time-consuming tasks that disturb work flow and do not add much value.
Variable Capacity Staffing	Strategic use of temporaries to accommodate workloads which are known to vary in seasons or other cycles. This results in consistency between the amount of work to be done and the available number of employees, keeping direct employees working at peak effectiveness. In some instances, employers have actually developed a shared work force that rotates from one business to another to accommodate each company's unique seasonal needs.
Vendor-on-Premises	The temporary help supplier provides an on-site coordinator for temporary employees at a client company. Typically, these arrangements are made by large volume staffing users to simplify coordination and increase both productivity and quality across a variety of departments or functions.
Facilities Staffing	The temporary help supplier assumes responsibility for staffing certain jobs or departments with disproportionately high turnover, driven by routine or mundane work. Employees are "rotated" into and out of these positions based upon productivity. As a result, performance and quality increase, while the employer's liability and headaches are reduced.

## Hiring Options

The demand for good people is certainly not something new. Business executives commonly complain about the difficulty in finding and hiring producers. To handle this difficulty, many people are taking new approaches to making the hiring decision. An overview of two major tactics being used by hiring authorities follows.

### Behavioral Hiring

According to Ed Ryan, President of MPR Consulting, companies put too much emphasis on education and experience while neglecting two attributes he says earmark a successful candidate: behavioral traits and chemistry.

When filling a position, managers often prepare a description detailing the duties of the job. Unfortunately most people stop here. Missing is a description of the types of behaviors necessary to successfully execute these duties - a behavioral traits profile. To develop a behavioral traits profile for an available job, you must identify the company's top performers in that position. Ask yourself: "What makes these people so good?" The answers will help you uncover the behavioral traits necessary to succeed in this position.

Once a profile of the ideal job candidate has been prepared (and all the traits necessary for success have been identified), the hiring process can begin. Following a behavioral hiring methodology, every candidate must be put through a structured interview. The standard interview questions are designed to determine if a candidate possesses the desired personality traits. Those individuals having the right attitude and behaviors then undergo a review of skills and experience.

A partial list of traits:

Intensity	Very high stamina, endurance and a high level of work orientation.
Values	A solid ethical system, refuses to cut corners or over-promise.
Risk Avoidance	Acts responsibly, avoids breaking rules.
Stress Tolerance	Manages stress well.
Focus of Control	Level of responsibility a person takes for job and his actions.
Independence	Ability to work well with minimal supervision.
Optimism	Positive outlook on situations, ability to learn from mistakes and move on.
Leadership	Skilled at directing and leading others.

## Temp-to-Direct Hire

Temp-to-perm enables companies to test an employee on-the-job before committing to direct employment. This trend has become popular because it alleviates some of an employer's fears of making an incorrect hiring decision.

This strategy is an excellent way to lower the risk associated with the hiring decision. On the downside, however, many of the best applicants for a given job opening may be currently employed. These people are rarely willing to leave their current job for a temporary position even when the opportunity for permanent employment exists.

## REFERENCES

<http://www.businessweek.com/adsections/2003/pdf/0343outsourcing.pdf>

<http://www.sheridanpress.com/assets/pdf/outsourcing.pdf>

<http://spx.org.cn/wenjian/The%20theory%20and%20practice%20of%20outsourcing.pdf>

IMF Balance of Payments Statistics Yearbook, 2003.