***Qn. 1. Describe how purchasing become aware of purchase requirement?***

At some point, however, internal customers identify their need for a product or service and communicate to purchasing exactly what it is they need and when it is required.

Internal users communicate their needs to purchasing in a variety of ways:

* *Purchase requisitions*- from internal users, this is an internal document which a user sent to purchasing, expressing a specific need for material or services.
* *Forecasts and customer orders-* those can cause the need for new material*.*
* *Routine reordering systems*-this is a widely used way of determining need
* *Stock checks*- those involve the physical checking of the inventory, and can result in requests for additional material, if stocks are running low.
* *Material requirements identified during new-product development*.

***Qn.2. Describe the challenges organizations face as they attempt to integrate organizational activities into the supply chain?***

*1 Silo Mentality*

In many instances, firms have not considered the impact of their actions on the supply chain and its long-term competitiveness and profitability. According to Wisner et al (2006), the “I win, you lose” silo mentality manifests itself in the form of using cheaper suppliers, paying little attention to the needs of customers, and assigning few resources to new products and service design. Eventually, these firms will create quality, cost, delivery timing, and other customer service problems that are detrimental to the supply chain. Cachon (2005), in his paper, describes silo mentality as the most significant obstacle to overcome in supply chain management of most companies. Internally, the silo effect can also be present among departments. The transportation manager for instance, may be trying to minimize total annual transportation costs while inadvertently causing safety stocks to be higher, shortages to occur, and customer service levels to deteriorate.

*2 Lack of supply chain visibility*

Lack of information visibility along the supply chain is a common supply chain process integration problem. In a

2002 survey, two-thirds of manufacturers had not yet successfully synchronized their supply chain operations with those of their trading partners (Cachon and Fisher, 2000). Additionally, two-thirds of the respondents said

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108 *ISSN 1833-3850 E-ISSN 1833-8119* they used different supply chain management applications than their partners, which prevented access tovaluable external data, resulting in limited information visibility.

In the absence of supply chain visibility, trading partners have to carve out data from their ERP (enterprise resource planning) or legacy systems and then send it to one another where it then has to be uploaded to other systems prior to the data being shared and evaluated, the time lost can mean lost end customers and higher costs through the supply chain membership.

*3 Lack of trust*

Successful process integration between partners requires trust, as with silo mentality and lack of information visibility, trust is seen as the major stumbling block in supply chain management. Trust occurs over time between supply chain partners, as each participant earns trust while it builds its reputations among the other businesses.

Even though this sounds impossible, relationships employing trust result in win-win or win-win-win for the participants. Spalding Holding collaborates with Wal-Mart, resulting in win-win for both companiesWal-Mart gives Spalding its forecast and point-of-sale data, which allows Spalding to keep its inventory levels down and serve Wal-Mart’s needs better. As a result, Wal-Mart stocks out of Spalding goods less frequently and it now has

a better understanding of Spalding’s capacity and cost (Wisner et al, 2006).

Unfortunately, company practices and human nature will not change overnight. Until parties understand that it is in their own best interest to trust each other and share information, supply chain management success will be an uphill battle. For example, Boeing has been running against a trust barrier with some of its suppliers. Boeing engineers and their suppliers pass design documents back and forth as if they were in the same company. The technology that allows this is causing trust problems for Boeing. The company has been suspecting its suppliers to pass technogly to their close competitors (Lambert, 2008).

*4 Lack of knowledge*

Companies have been moving toward collaboration and process integration for years, and it is just recently that technology has caught up with this vision, allowing the process integration across an extended supply chain. In a survey of 122 executives practicing supply chain management, 43 percent said lack of core supply chain management skills and knowledge was the greatest obstacle within their own organizations, and 54 percent echoed this opinion for their trading partners. Getting the network of firms to work together successfully, though, requires managers to use subtle persuasion and education to get their own firm and their trading partners to do the right things.

The cultural, trust, and process knowledge differences in firms are such that firms successfully managing their supply chain must spend significant amount of time influencing and increasing the capabilities of themselves and their partners. Change and information sharing can be threatening to people; they may fear for their job security, particularly if outsourcing accompanies integration. Additionally, as firms construct their supply chain information infrastructure, they may find themselves with multiple ERP systems, a mainframe manufacturing application, and a desktop analysis and design software that all need to be integrated both internally and externally. Thus, firms must realize that the people to be using the system must be involved earlier on, in terms of purchase decision, the implementation process, and in training. For all organizations, successful supply chain management requires a regiment of ongoing training. When education and training are curtailed, innovation cannot occur, and innovation fuels supply chain competitiveness (Wisner et al, 2006).

*.5 Activities causing the bullwhip effect*

The variability increases in moving up the supply chain from consumer to grocery store to distribution center to central warehouse to factory is known the *bullwhip effect.* The bullwhip effect has been experienced by many students playing the “Beer Distribution Game.(Chen & Samroengraja (2000). The costs of this variability are high inefficient use of production and warehouse resources, high transportation costs, and high inventory costs, to name a few. In their publication, Lee et al (1997), identified four major causes of bull whip effect, these causes and methods used to counteract them will be discussed in this section for the purpose of getting deep understanding of this obstacle to process integration along the supply chain.

Qn.3. Discuss the key enablers of excellence in purchasing and supply chain management?

**Capable Human Resources**

The key to the success of any company is the quality of its employees. This is certainly true for purchasing. Exhibit 1.5 identifies, from focus group research, the various kinds of

Knowledge and skills demanded of today’s supply chain professional. The knowledge and

Skills that purchasing and supply chain professionals require are different from just a few years ago. Research indicated that the top five knowledge areas for purchasers in 2010 would be (1) supplier relationship management, (2) total cost analysis, (3) purchasing strategies, (4) supplier analysis, and (5) competitive market analysis.

Gaining access to the right skills will require a sound human resources strategy that includes internal development of high-potential individuals, recruiting talent from other functional groups or companies, and hiring promising college graduates. This occurs to satisfy one primary objective—ensuring that qualified participants are available to support purchasing and supply chain requirements.

**Proper Organizational Design**

Organizational design refers to the process of assessing and selecting the structure and formal system of communication, division of labor, coordination, control, authority, and responsibility required to achieve organizational goals and objectives, including supply chain objectives. The use of organizational work teams to support purchasing and supply chain objectives does not guarantee greater effectiveness.

**Real-Time Collaborative Technology**

**Capabilities**

The development of information technology (IT) software and platforms that support an endto- end supply chain have grown rapidly in the twenty-first century, as have identification technologies such as radio frequency identification (RFID) and voice recognition systems.

These technologies allow enhanced collaboration between the parties in the supply chain. Planning software seeks to improve forecast accuracy, optimize production scheduling, reduce working capital costs, shorten cycle times, cut transportation costs, and improve customer service. Execution software helps obtain materials and manage physical flows from suppliers through downstream distribution to ensure that customers receive the right products at the right location, time, and cost. It can be summed up as “lean logistics,”

This may involve transmitting the location of transportation vehicles using global positioning systems (GPSs), using Internet-based systems to transmit material requirements to suppliers, or using bar code technology to monitor the timeliness of receipts from suppliers. RFID tags are being used in more applications to capture real-time data about material and product movement across the supply chain.

Examples regarding the relationship between information technology and supply chain

**Right Measures and Measurement**

**Systems**

The right measures and measurement systems represent the fourth pillar supporting

Purchasing and supply chain excellence. Unfortunately, there are many roadblocks between measurement and improved performance like too many metrics, debate over the correct metrics, constantly changing metrics, and old data.

Overcoming these roadblocks requires that the organization know what it wants to measure, has a process in place to measure it, and has accessibility to the right data. The next step involves taking action on the measurement data. As with any planning system, the targets are revised to reflect the realities of the marketplace, competition, and changing Goals of the organization. Measurement is also an ideal way to communicate requirements to other supply chain members and to promote continuous improvement and change. When suppliers know their performance is being monitored, they are likely to perform better. Many firms use the measurement system not only to improve future supplier performance but also to recognize outstanding performance. Measurement also conveys what is important by linking critical measures to desired Business outcomes. The measurement process also helps determine if new initiatives are producing the desired results. Finally, measurement may be the single best tool to control purchasing and supply chain activities and processes.

Although there is no definitive or prescriptive set of supply chain measures, and there certainly is no one best way to measure supply chain performance, we do know that effective measures and measurement systems satisfy certain criteria.

Qn.4. ***What is the difference between a supply chain and a value chain?***

**A supply chain** is a set of three or more organizations linked directly by one or more of the upstream or downstream flows of products, services, finances, and information from a source to a customer. We should recognize that supply chains are composed of interrelated activities that are internal and external to a firm. These activities are diverse in their scope; the participants who support them are often located across geographic boundaries and often come from diverse cultures.

**Value chain** is composed of primary and support activities that can lead to competitive advantage when configured properly. All personnel within an organization are part of a value chain. At an organizational level, the value chain is broader than the supply chain, because it includes all activities in the form of primary and support activities. Furthermore, the original value chain concept focused primarily on internal participants, whereas a supply chain, by definition, is both internally and externally focused.

Qn5. ***Elaborate the functions to be performed in a public warehouse?***

A public warehouse is a specialized business establishment that provides storage facilities to the general public for a certain charge. It may be owned and operated by an individual or a cooperative society. It has to work under a license from the government in accordance with the prescribed rules and regulations.

Public warehouses are very important in the marketing of agricultural products and therefore the government is encouraging the establishment of public warehouses in the cooperative sector. A public warehouse is also known as duty-paid warehouse.

Public warehouses are very useful to the business community. Most of the business enterprises cannot afford to maintain their own warehouses due to huge capital Investment. In many cases the storage facilities required by a business enterprise do not warrant the maintenance of a private warehouse. Such enterprises can meet their storage needs easily and economically by making use of the public warehouses, without heavy investment.

Public warehouses provide storage facilities to small manufacturers and traders at low cost. These warehouses are well constructed and guarded round the clock to ensure safe custody of goods. Public warehouses are generally located near the junctions of railways, highways and waterways.

They provide, therefore, excellent facilities for the easy receipt, despatch, loading and unloading of goods. They also use mechanical devices for the handling of heavy and bulky goods. A public warehouse enables a businessman to serve his customers quickly and economically by carrying regional stocks near the important trading centers or markets of two countries.

Public warehouses provide facilities for the inspection of goods by prospective buyers. They also permit packaging, grading and grading of goods. The public warehouses receipts are good collateral securities for borrowings.

***Qn6. Describe about – cross-docking and its importance?***

The precise definition of cross docking is “a logistics procedure where products from a supplier or manufacturing plant are distributed directly to a customer or retail chain with marginal to no handling or storage time.”

* Cross-docking reduces the square footage needed in your facility. Because little to no storage occurs, only a small amount of space is needed for this activity, significantly reducing the footprint of your facility and the associated costs. Because little to no storage occurs in cross-docking facilities, the costs related to storing inventory is also reduced.
* With cross-docking your facility can assist in managing and improving customer product quality. During the unloading and staging process staff can easily inspect inventory for damage incurred during transit. This can help to reduce the amount of damaged inventory that reaches customers and help improve customer satisfaction rates.
* The reduction of material handling needs leads directly to the labor cost savings associated to these activities. This allows your business to pass on savings to customers, providing additional competitive advantage related to cost.

Because the number of hands on each inventory item is reduced due to lack of storage and minimal handling, the probability of damage to inventory and the costs associated with this are also significantly reduced.

* Utilizing cross-docking also assists in the reduction of delivery times. Typically facilities offering these services are located in geographical areas that are near the final delivery destination. This helps to reduce delivery times by eliminating excess travel.

Cost savings, increased product quality and reduced delivery times due to cross-docking also factor in to help increase customer service satisfaction. This will help to retain current customers and capture additional market share.

* The utilization of cross-docking can help to reduce transportation costs. With optimized routing, less miles are wasted, reducing fuel and associated vehicle service costs.
* Cross-docking provides fixed asset cost savings. Cross-docking requires less facility square footage. These smaller facilities require less cash outlay to operate.

***Qn7. Discuss activity profiling in a warehouse?***

**Warehouse Activity Profiling** is the analysis of historical sales transaction data for the purposes of projecting **warehouse activity** and determining **storage** mode, physical layout, work flow processes, and labor and equipment requirements.

A comprehensive profile based on historical and current data reveals characteristics that allow you to make decisions on storage and handling alternatives, slotting options, pick line requirements, system requirements, pick methods, and order releasing strategies. With more detailed analysis you can even predict how your warehouse will operate, providing you the invaluable opportunity of being able to prepare for the future.

Two main categories of profiles make up a basic warehouse profiling set: customer order profiles and item activity profiles. Customer order profiles represent the outbound activity, i.e., how the customers are ordering the products. Item activity profiles provide insight into viable storing and slotting options for each item within the warehouse.

**Customer Order Profiles**

The three most basic customer order profiles are defined below.

**Order Mix Distribution:**

These distributions answer warehouse zoning questions such as “Should my fast, medium, and slow movers be zoned separately in the warehouse?” To answer this question, a distribution of the orders for fast, medium, or slow movers is compared with any combination of the three. If warehouse data indicates that most orders call for a mix of fast and slow movers, zoning the items by velocity will have order consolidation impacts that need to be considered. Order mix profiles are also used to analyze the percentage of order lines for full cartons, broken cartons, or a combination of the two. Analysis of this information provides options on storing full and broken cartons together. The goal is to determine what percentage of your customers is ordering full and broken carton quantities of the same item, before investing time and money in changing the current storage strategy.

**Order Increment Distribution:**

The order line distribution of the percent of a full carton ordered is beneficial when evaluating if the current packaging is in logical increments for the customer. For example, if results indicate that 90% of the customers are ordering ¸ carton quantities, the warehouse can consider effective alternatives. Options could involve first the supplier by changing the carton size, second the warehouse operations by breaking down cartons at receiving in order to save time during picking, and third, the marketing department by encouraging customers to order in full carton quantities.

**Order Lines Distribution:**

This distribution of the number of lines contained on each order is important when evaluating operating strategies. A warehouse with mainly one and two line orders would most likely have a very different picking strategy than a warehouse with many large multi-line orders. If your graph looks like figure 1 and you have a significant number of single-line piece-pick orders you may want to consider batch label picking these orders.

**Item Activity Profiles**

Item Activity Profiles are beneficial when analyzing products’ activities for the purposes of determining storage mode, product slotting, and facility layout options.

There are several types of item profiles, the three most basic are defined next.

Popularity profile- is a ranking of the items based on how often they are ordered or picked (frequency). Volume profile is a ranking of the items based on how much is ordered (cube movement). Finally, the item order completion profile displays the items ranked from most to least popular against the order set. This profile reveals the percentage of the orders that will be completed by a subset of the items and is valuable when conducting cost benefit analysis for improved productivity.

***Qn8. Describe the various storage systems used in a warehouse for different applications?***

## Automated storage system

Automated storage systems enable items to be stored and retrieved by a computer-controlled mechanical arm device. These systems are ideal for easily retrieving smaller items that may take a human picker time to locate.

Archive storage containing thousands of books or documents would benefit from this type of system.

A problem side to automated storage would be the potential for computer or mechanical failure resulting in an inability to access your goods. One positive aspect would be safety as there is no need for a worker to climb to retrieve goods.

1. Pallet racking

Compared to some other systems, pallet racking can be a much cheaper and efficient option. By storing numerous pallets in a framework it is possible to access any particular pallet at any time without the potential failures involved with other systems. Human pickers with ladders or forklift trucks can access stock located anywhere in the warehouse.

Pallets can be stacked as high as is safe which is determined by the racking design and stability.

## Block stacking

Block stacking is the most basic form of storage where either individual items or pallets are placed on the floor and stacked on top of one another. Usually organized in lanes or blocks so that each item can be accessed, this is the simplest and cheapest form of storage as there is no investment in racking and can be operated in any open warehouse floor space.

## Pallet flow

Works on a conveyor belt system, usually within a pallet racking framework. The conveyor belts allow for heavy goods to be more easily moved which means that forklifts, which might normally be required to shift the goods, won’t be needed.

The real benefit of a pallet flow system is that a picker can be stood in one spot to unload goods. Once the first container has been emptied, then next container will automatically travel down the conveyor ready to be picked. The obvious downside is that goods in the middle of the system are much harder to reach.

## Push back storage

Push back storage works within a pallet racking framework but operates more like a vending machine. The next product moves to the front once the first has been removed. This is often on a much larger scale than the pallet flow system and requires the use of forklifts. The downside being that you can’t always access goods in the middle of the system.

This system is best used for goods that will be loaded and unloaded at the same time so that it is unlikely you will ever need to access one container in the middle of the system.

## Picking area

A picking area is set up for the ease of an individual or a team of pickers. Goods may be stored around a central area where they can be easily located. This is ideal for smaller items and is not well suited to large goods or goods that might be stored at an excessive height.

## Spin block

Ideal for items such as pharmaceuticals. Items are stored in a carousel system which is accessed from one place.

The stored products are continuously monitored using the integrated automated system. When a product is required, the entire storage system automatically moves to where this product is.

## Mezzanine

An additional storey of flooring within an existing structure. Within this structure, many of the above systems can be utilized. Depending on the size of the space available, a mezzanines floor can even double the storage space previously available.

## Double Deep Racking

This type of warehouse storage system utilizes vertical height and is ideal for improving pallet density. Pallets are stored two rows deep instead of one so a reach truck or articulated forklift is required to reach the higher pallets.

Double deep racking can improve storage for up to 15% depending on the layout of the warehouse.

## Drive In Racking

This works on a first in, last out rotation basis where pallets are stored back to back. This storage solution is perfect for companies who need to store large quantities of the same stock.

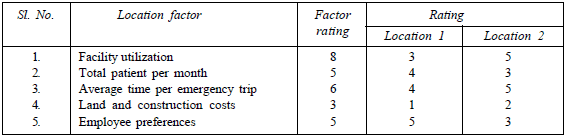
Drive in racking is great for optimizing the space in your warehouse without requiring any specialist handling equipment. The downside can be that the limited space for maneuverings a forklift can increase the time taken to load and unload stock

***Qn9. Describe briefly about the qualitative factor rating method for the selection of location of a warehouse***

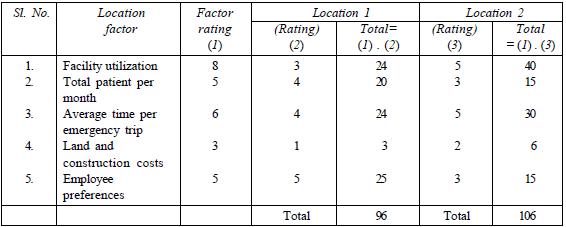
The process of selecting a new facility location involves a series of following steps:

1. Identify the important location factors.
2. Rate each factor according to its relative importance, *i.e*., higher the ratings is indicative of prominent factor.
3. Assign each location according to the merits of the location for each factor.
4. Calculate the rating for each location by multiplying factor assigned to each location with basic factors considered.
5. Find the sum of product calculated for each factor and select best location having highest total score.

***ILLUSTRATION 1:***  
*Let us assume that a new medical facility, Health-care, is to be located in Delhi. The location factors, factor rating and scores for two potential sites are shown in the following table. Which is the best location based on factor rating method?*



Solution:



The total score for location 2 is higher than that of location 1. Hence location 2, is the best choice.

***Qn10. What are the risks associated with backdoor (maverick) purchasing as opposed to open tendering most common in public procurement?***

* ***Purchasing policies and procedures will not be followed.***

Since the employees go and buy from suppliers without an authorization from the purchasing department I an organization, the steps and policies under which the sales are conducted are not followed which undermines the importance and significance of purchasing policies and procedures.

* ***Higher costs due to different prices from suppliers for the same items.***

Prices for suppliers may be varying of the same items. When the employees buy from new suppliers who are not well recognized by the purchasing department of the company, there are higher chances that he/she will incur high costs whether before or after buying the commodities. This will be as a result of avoiding some rules of the purchasing department.

* ***Inability to achieve efficiency and economy of scale by combining like purchase across the company.***

The supplier that is recognized by the purchase department have a common agreement with the company and due to constant buying from him/her, the relationship built leads to some discounts being given to the customer like reduction in prices, economies of scales, reduction of costs incurred in the transaction.

* ***Purchasing is interested in controlling this business practices because it bypasses the control of purchasing authority.***

Due to this, the rules, policies and procedures through which the company and its purchasing operate are not recognized by the employees. This questions the ethical aspect of the company’s purchasing departments operation.

***Qn.11. Discuss the advantages of electronically transactions between a buyer and seller?***

* ***Easy* *to* *Set* *Up*:**

It is easy to set up an electronic business. You can set up an online business even by sitting at home if you have the required software, a device, and the internet.

* ***Cheaper* *than* *Traditional* *Business*:**

Electronic business is much cheaper than [traditional business](https://www.toppr.com/guides/business-studies/nature-and-purpose-of-business/concept-and-characteristics-of-business/). The cost taken to set up an e-business is much higher than the cost required setting up a traditional business. Also, the transaction cost is effectively less.

* ***No* *Geographical* *Boundaries*:**

There are any geographical boundaries for e-business. Anyone can order anything from anywhere at any time. This is one of the benefits of e-business.

* ***Government* *Subsidies*:**

Online businesses get benefits from the government as the government is trying to promote digitalization.

* ***Flexible* *Business* *Hours*:**

Since the internet is always available. E-business breaks down the time barriers that location-based businesses encounter. As long as someone has an Internet connection, you may be able to reach and sell your product or service to these visitors to your business website.

***Qn. 12. Describe the challenges involved in implementing e-procurement systems?***

**1 Supplier Enablement**

According to research by Aberdeen group (2007), it was discovered that supplier enablement is one of the top three challenges for e-procurement implementation. Suppliers do not fit into organizational plans or may want to do things their way National e-Procurement Project (2004). This may be because organizational processes and systems do not match those used by most of their other customers or because organizational business is insufficient to justify organization’s investment in the system.

Supplier enablement is becoming a bigger challenge because forcing suppliers to adopt organizational preferred trading method can be problematic, particularly if there are no alternatives readily to hand Filipe(2009). Most suppliers are not E-procurement enabled because they are not ICT compliant. Moreover, complex purchasing cannot be put in place without considerable personal contact between the parties concerned Lysons 2003

**2 System Security Systems**

Security is another challenge that hinders the implementation of e-procurement. The perceived challenges are mainly related to technical issues such as lack of information from the technology provider when new versions of the system - 16 - are launched. Anne, Åsa & Esmail (2008) According to Bell (2001), in 1999, 59% of companies that were interested in adopting e-procurement cited security as the key barrier.

**3 Cost Implications**

The inability to justify costs/benefits as an inhibitor for adoption focuses attention to broader considerations relating to benefits management and value creation in systems development in that benefits do not necessarily reside within the IT domain but incorporate changes in wider organizational activities; requiring changes to be identified and planned for and incorporate varying stakeholder expectations and roles. Tiernan & Peppard 2004; Dhillon (2005)

The challenge is that in a capital-tight environment, cost of acquisition and fielding of e-procurement system can be prohibited software licensing and enterprise findings can run in millions of dollars depending on the size of the organization.

**4 Legal Infrastructures**

According to a Seng and Hwee (2003), Legal issues relating to e-procurement could be categorized mainly into Global Trading, Contract Enforceability, Liability Risks, Security Breaches and Intellectual Properties Protection (IPR).

***Qn. 13. Why is it important to measure and monitor supplier performance improvement over time?***

Collecting basic supplier information and completing initial approval or vetting steps are the start of a successful supplier management program. But these actions are not enough to effectively evaluate an ongoing relationship with suppliers. To realize additional value from your supply base, your organization should consider implementing a robust **Supplier Performance Management (SPM)** program.

If you are not deeply familiar with the third party vendors making up depth visibility into the risk a supplier may pose so you can put measures in place to reduce or eliminate that risk as it relates to your supply chain. it will be difficult to put measures in place to prevent interruptions and reduce the incidence of risk exposure.  Supplier performance management provides in-

* ***Protect and improve brand/reputation***

A number of corporate brands have been tarnished by the actions of their suppliers – think automobile recalls as a common example. SPM can help you track supplier performance against these KPIs which will enable you to enact corrective actions early and keep your brand and reputation strong in the eyes of your customers and partners.

* ***Avoid costs and achieve savings***

There is a variety of cost factors tracked using supplier performance management which affects both hard and soft dollar costs. Lack of timely and accurate vendor information can have huge impact on costs and can prevent you from capturing savings. Not only can you track supplier performance on cost and savings-related KPIs, the information provided by an SPM system can contribute to cost avoidance and savings achievements because it centralizes supplier data into a single source of truth for everyone interacting with vendors.

* ***Segment and rank vendors***

As noted in the point above, supplier performance management is useful beyond the supplier managers in your organization. For example, SPM gives procurement groups visibility into specific groups of suppliers and their overall ability to meet your organizations expectations and requirements. With performance data in hand, procurement can make data-based decisions regarding where to direct spend.

* ***Collaborate with suppliers***

When you collaborate closely with suppliers you create new value for your business. The data collected through a supplier performance management solution can help to start these conversations because it provides the supplier with a view of what is important to your organization. The results are numerous: continuous improvement of the supply base, creation of realistic contracts based on past performance, more communication with suppliers, formation of common goals, and the establishment of trust. Ultimately, SPM drives the creation of meaningful and mutually beneficial relationships with suppliers.

* ***Improve internal processes***

Creating a SPM process is a great step towards optimizing your supplier management program. By utilizing a technology-based solution for SPM, organizations can achieve a standardized and automated approach for creating scorecards, issuing and tracking scorecards for completion, and in-depth reporting and analysis. If you tack this onto an existing supplier information management (registration, onboarding, qualification) process, SPM data will contribute to a complete supplier management lifecycle

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