The purpose of this module is to introduce the practical concepts which a person working in Accounts Payable (AP) team handles on a regular basis. In ERP based environment (including SAP), understanding the process and key risks involved is of paramount importance to execute duties effectively.
What is Purchase/Procurement?
B.C. Forbes says “If you don't drive your business, you will be driven out of business”

- It is aptly said that you have to drive the business to run it well. It’s a known fact that a business without effective resource management cannot run profitably in a long run. Lesser profitability means continuity threats. This gives rise to the effective procurement process requirement.

- **Purchase (or Procurement) means** buying required goods and services
  - at a right time,
  - at a right price and
  - in the right quantity

- **Purchase process** starts with material requirement planning and ends once the procurement liabilities are paid off. Week/absent procurement process may lead to many risks like:
  - disruption of operations due to non-availability material,
  - working capital blockage because of excess ordering or
  - loosing of market share due to costly finished goods resulting from procurement at non-competitive prices
Walkthrough of Procurement Process
Walkthrough of Procurement Process

- Procurement activity typically starts with planning in advance to understand the material requirement during a time period to meet production targets.

- Once the requirement is clear,
  - the requisite material is requisitioned and ordered through the vendor; and
  - eventually the payment is made to close the process.

- The entire series of steps involved in procurement cycle can be summarized in the following figure:

1. Procurement Planning
2. Material Requisition
3. Vendor Selection
4. Purchase Orders
5. Receiving Materials/Services and Creating Liabilities
6. Making Payments
Procurement Elements – Meaning, Risks and SAP links
**Procurement Planning – What is it?**

- **Procurement planning** refers to the identification of material requirement for regular and ancillary operations during the planning period.
- A planning process occurs prior to production of goods to determine the required production and material as per predefined Bills of Material.
- Procurement planning **works in reverse order:**
  - Starts with the sales estimation for the planning period; and
  - Ends with the required procurement.

**Procurement Planning – Series of Steps:**

1. **Sales estimation for the planning period**
2. Identify the available FG and compute the required production
3. Identify the material (RM/PM/Spares, etc) required for production and identify what is the available stock situation
4. Compute the required procurement and make the procurement plan for the planning period
An improper procurement planning may lead to various risks. The following is an illustrative list of major risks which may arise due to inadequate planning:

<table>
<thead>
<tr>
<th>Risk</th>
<th>Root Cause</th>
<th>Impact</th>
<th>Recommended Control/Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Under Procurement</strong></td>
<td>1) Lack of defined procurement planning mechanism</td>
<td>1) Risk of disruption of operations</td>
<td>1) Policy, procedure, roles &amp; responsibilities for planning to be defined and rigorously followed</td>
</tr>
<tr>
<td></td>
<td>2) Incorrect planning parameters</td>
<td>2) Last minute purchases at higher prices</td>
<td>2) Correct and complete parameters are used for planning</td>
</tr>
<tr>
<td></td>
<td>3) MRP run is not initiated timely</td>
<td></td>
<td>3) MRP run is initiated timely</td>
</tr>
<tr>
<td><strong>Over procurement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Material expired or expiring during the planning period is not excluded while planning</strong></td>
<td>Improper planning</td>
<td>Shortage of material due to expiry of material</td>
<td>Material expiring before requirement shall not be considered during planning</td>
</tr>
</tbody>
</table>


Material Requisitioning – What is it?

- **Material requisitioning means** a formal request by the person conveying the requirement of any material or service.

- For raising the request a document called **purchase requisition (PR)** is raised.

- Purchase requisition is:
  - a formal request to procurement team
  - for the procurement of material/service required
  - but not available in stock

- A requisition, amongst other, contains the following basic details:
  - the material/service to be procured,
  - required quantity/period, and
  - the date by which material/service is required

- **Practical Insight**: In case of SAP environment, where RPP (Rolling Production plan) based production is done:
  - PR is raised automatically through MRP run (Material Requirement Planning).
  - However for strategic and ad-hoc requirements, PR is to be raised separately.
Material Requisitioning – Key Precautions!!

- Though requisitioning process may appear to be simple, a few precautions need to be taken while requisitioning

- While mentioning expected requirement date:
  - Standard time required for seeking quotation
  - Standard time for raising PO and
  - The lead time required for delivery of goods should be considered

- In case of first time requirement of any material, first the material code with the required specification shall be created and then the same shall be requisitioned

Unless all required details are provided, the procurement process cannot be considered complete.

One must ensure that no gaps are left unplugged to ensure smooth completion
In SAP, PR is raised through transaction code **ME51N** in the Material Management Module.

PR once raised can be amended in case of change in requirement. For amending the requirement, transaction code **ME52N** is used.

For displaying PRs transaction code **ME53N** (for Individual PR) and **ME5A** (for multiple PRs) is used.

In SAP, for controlling the requisitions, maker-checker control known as release strategy can be incorporated. And all PRs will automatically flow based on that strategy for approval before raising PO for that request. In case a PR has not obtained all the approvals as per release strategy, PO can’t be raised for that PR.

Though PR is raised in SAP, however it doesn’t have any impact on the Books/ financials of the company.
A few of the major risks in requisitioning process may include:

<table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Under requisitioning</strong></td>
<td>1) Stating incorrect requirement date in PR</td>
<td>1) Risk of disruption of business operations</td>
<td>1) All PRs and amendments to it shall have maker checker control</td>
</tr>
<tr>
<td></td>
<td>2) Requisitioning of un-required quantity/material</td>
<td>2) Last minute purchases at higher prices</td>
<td>2) PR shall also contain the material in stock and total requirement so that exact requirement can be verified by the approver</td>
</tr>
<tr>
<td><strong>Over requisitioning</strong></td>
<td></td>
<td>1) Working capital blockage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Possible increase in slow/non moving and obsolete items</td>
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</table>
The vendor selection is the most important part of the procurement process.

Procurement team’s major responsibility is to select the vendor who can fulfil organizational requirement:

- At right time, and
- At right price

The selection of right vendor decides the procurement cost and timely delivery of goods to avoid continuity issues

As a standard practice across various industries for procuring any material:

- quotations from atleast three vendors are requested to ensure competitive pricing, and
- then the quotations are compared on the landed cost basis.

Landed cost means per unit cost inclusive of all costs factors, e.g.

- base price,
- taxes,
- freight,
- insurance etc.

The vendors are rated as L1/L2/L3 and so on, L1 being the vendor with lowest landed cost
**Vendor Selection ... contd.**

- **Organizations having huge requirements** may distribute their requirements amongst shortlisted vendor to ensure availability of alternate vendor if any selected vendor defaults.

- On identification of **new vendor**, its database is created known as Vendor Master.

- **Vendor master** contains various details like:
  - Name of the vendor
  - Address & Contact details
  - Bank Details (for making Payments)
  - Master GL A/c (GL in which vendor Sub-Ledger will be linked)
  - Nature of Vendor (i.e. Domestic or Export, Small Scale industry or other. This identification helps in identifying payment terms. In case of small and medium enterprises, payment terms have to be in line with the one defined in the respective Act MSMED Act)
  - Payment terms
  - Incoterm (i.e. conditions) e.g. FOR, CIF, etc.
  - Vendor Classification i.e. ABC categorization of vendor

- **Practical Insight**: In SAP, each vendor is linked with the material for which it has been shortlisted to ensure non procurement of other items for which he is not approved.
Vendor Selection – Key Precautions!!

- While selecting a new vendor, its **manufacturing capacity** should be duly assessed.

- Before selection of vendor, its **manufacturing location** shall be physically visited by a team of experts including Operations and Finance personnel.

- Vendors credit worthiness shall be evaluated and wherever possible **reports from credit rating agencies** shall be obtained and analyzed.

- Once the vendor is selected, it should be **periodically evaluated** for various parameters including:
  - Quality of goods, and
  - Timely delivery of required quantity.

- A continuous effort shall be made in exploring the market to **identify inexpensive and alternate vendors**.
A few of the major risks in vendor selection process are as under:

<table>
<thead>
<tr>
<th>Risk</th>
<th>Root Cause</th>
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<th>Recommended Control/ Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>All possible vendors are not identified</td>
<td>1) Insufficient market reach</td>
<td>1) Procurement at non competitive prices having financial impact</td>
<td>1) At periodic intervals, Vendor master shall be reviewed considering with material master and materials for which alternate vendors are not available, alternate vendors shall be identified</td>
</tr>
<tr>
<td></td>
<td>2) Lack of efforts to identify new / potential vendors</td>
<td>2) Possibility of disruption of operations due to non supply of goods/ services by empanelled vendors</td>
<td>2) Depending upon the level of operations, a portal inviting potential vendors to register themselves for the material manufactured by them can be introduced and the portal can be reviewed to identify vendors meeting organizational requirements</td>
</tr>
</tbody>
</table>
### Vendor Selection – Major Risks... contd.

**Selection of Black listed vendors**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Root Cause</th>
<th>Impact</th>
<th>Recommended Control/ Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Application used for creating vendor database not restricting creation of duplicate material code</td>
<td>1) Possibility of disruption of operations due to non-supply of goods/services</td>
<td>1) System application used for creating vendor master shall provide hints of vendors created earlier</td>
<td></td>
</tr>
<tr>
<td>2) Lack of monitoring of vendor master at the time of creation of new vendor</td>
<td>2) Use of inferior quality RM/PM may impact organizational reputation in market</td>
<td>2) Selected Vendor’s unique documents like TIN No, PAN no, Excise registration no. shall be obtained and checked in system to make sure vendor was not created before.</td>
<td></td>
</tr>
</tbody>
</table>
### Vendor Selection – Major Risks ... contd.

... *continued*

<table>
<thead>
<tr>
<th>Risk</th>
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<th>Impact</th>
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</tr>
</thead>
</table>
| Vendors incapability in meeting required demand           | Improper analysis of vendors capability to deliver the quality goods in right quantity at right time | 1) Possibility of disruption of operations due to non availability of goods/services             | 1) At the time of selection of vendors, wherever possible, vendor’s manufacturing premises shall be visited to assess its capability to deliver the required quality and quantity  
2) During initial POs only a small quantity shall be procured and its quality shall be checked |
| Absence of Alternative vendors for procuring unmet demand by listed vendors | 1) Over reliance on existing vendors  
2) Reluctant to select new vendors  
3) Collusion with the exiting vendors | 1) Procurement at non competitive prices having financial impact  
2) Possibility of disruption of operations due to non availability of goods/services  
3) Procurement of inferior quality products | Crucial materials shall be identified and alternative vendors shall be identified and empanelled. |
Once the company has selected the vendor, company has to raise a purchase order

A purchase order is a **written request to vendor** to supply the mentioned goods at the agreed rate and by the agreed date

To ensure the receipt of PO by vendor and its acceptance by him, acknowledgement of the PO must be obtained from the Vendor

This PO forms basis for the vendor to raise sales order in his books and initiate the manufacturing/packing process at his end to deliver the goods on time
Purchase Orders – Key Points to Note

- A purchase order is raised in **MM module of SAP**

- At the time of mentioning required **delivery date**, the following should be kept in mind:
  - time required for manufacturing/ packing by vendor, and
  - standard transit time shall be kept in mind

- PO shall be approved as per organization’s financial **Delegation of Authority** (DOA).
  - In SAP environment, the DOA can be fed in SAP and the PO will automatically move as per that DOA.
  - This functionality of SAP is known as ‘release strategy’

- In SAP environment, at the time of raising PO, there is an option to select **unlimited deliveries**. If that option is selected, then at the time of receipt of material in SAP, receipt can be done of any quantity irrespective of the PO quantity. Since it can cause a **procurement fraud**, this option should be suppressed through SAP configuration
### Purchase Orders – Major Risks

<table>
<thead>
<tr>
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</tr>
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</table>
| i) 1) Unauthorized purchase order  
2) PO not authorized as per DOA | Raising PO without approved requisition or actual requirement  
Incorrect release strategy defined in system | 1) Excess procurement  
2) Working capital blockage  
3) Possibility of material obsolescence/increase in non/slow moving inventory | PO shall be raised only against approved PRs  
1) Release strategy should be as per approved DOA  
2) Release strategy should be updated for any changes and verified periodically |
| ii) Acceptance of excess quantity | Overriding purchase tolerance | 1) Working capital blockage  
2) Possibility of material obsolescence/increase in non/slow moving inventory | Tolerance limit for each item shall be defined and linked with the material in the material master itself. Any changes to that shall be duly approved |
| iii) Delay in receipt of material | Delay in raising purchase orders | Production disruptions | At the time of MRP, the tentative date by which PO shall be raised should be identified to avoid delivery delays |
Receiving Materials and Creating Liabilities

- Once the ordered goods are ready at vendor’s end, the same are dispatched.
- Transport is arranged as per agreed terms and goods are dispatched.
- Goods are dispatched along with necessary documents viz.
  - Bill of Lading,
  - Invoice (Excise Invoice in case of excisable goods),
  - Copy of purchase order,
  - Vendor’s quality test certificate (if agreed at the time of ordering), etc.
- Once goods are received, these are recorded in the gate register and documents are stamped with required details, like Vehicle no, Date & Time of receipt, Gate entry no in the gate register.

**Sample Gate Entry Register:**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Date</th>
<th>Time In</th>
<th>PO no</th>
<th>Particulars</th>
<th>Quantity</th>
<th>Remarks</th>
<th>Security Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9-May-14</td>
<td>10.15 AM</td>
<td>4100652780</td>
<td>Item A</td>
<td>100 No</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Item B</td>
<td>2 Sets</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Item C</td>
<td>10 KG</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Item D</td>
<td>50 No</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>11-May-14</td>
<td>2.30 PM</td>
<td>4100649372</td>
<td>Item X</td>
<td>10 Ft</td>
<td>Dents on rod</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Item Y</td>
<td>10 Litres</td>
<td>Seal Open</td>
<td></td>
</tr>
</tbody>
</table>
After updating gate entry register and doing necessary security checks at gate, the stores/warehouse department is informed about receipt of goods

Stores personnel visits the gate and escorts the vehicle to the unloading area

Unloading of goods is done in presence of:

- Stores personnel,
- Security and
- Vehicle driver

The quantity unloaded is physically verified

In case of items that can be counted are counted and in case of items which needs to be weighed are weighed

For weighing, there are two ways:

- Where the goods are in small bags or containers, they are weighed separately
- In case of huge quantity, the difference between the loaded vehicle (called gross weight) and empty vehicle (called as tare weight) is taken as weight of goods

In case of shortage of goods as invoiced and as counted, this is mentioned on the transporters copy of bill of lading
Receiving Materials and Creating Liabilities – SAP links

- Once the goods are received and counted, this is the first time when the purchase transaction hits the financial books of the entity.
- For recording the receipt, a document called **Goods Receipt Note** (GRN) is created.

**Practical Insight - SAP Links:**
- In SAP, GRN is done through transaction code “**MIGO**” (Movement 101).
- Generally there are two practices followed for doing MIGO:

**Approach 1:** On receipt of goods, the same are accepted but are entered in the system only on receipt of all documents like tax invoice, vendor’s quality report, etc.

Once both goods and required documents are received, the following entry is passed:

\[
\text{Inventory Account} \quad \text{Dr.} \\
\text{To Vendor Account}
\]

- Under this approach, both material receipt and Liability booking are done at a same time.
Approach 1 has various **loopholes**, including:

- Unaccounted material lying with the company. This may lead to mishandling/ theft of the material
- Every time at closing of books (be it monthly, quarterly or annually), provision amount has to be computed
- Unless receipt entry is passed in system, the material cannot be tested and used for production. This will also result in expiry of shelf life of the material

**Approach 2**: On receipt of goods, the same are accepted and entered in system by passing the following entry:

\[
\begin{align*}
\text{Inventory Account} & \quad \text{Dr.} \\
\text{To GR/IR Account} & 
\end{align*}
\]

- The GR/IR (Good receipt / Invoice receipt) account is in the nature of provision. Hence at the time of closing of books, there is no need to compute the provision amount.
- Further, material received can be used whether invoice has been received or not. On receipt of all required documents liability is created. For creating liability, the following entry is passed:

\[
\begin{align*}
\text{GR/IR Account} & \quad \text{Dr.} \\
\text{To Vendor Account} & 
\end{align*}
\]
Quality Inspection & Goods Short Received

Quality Inspection:

- Once the goods receipts are recorded, they are sent for quality inspection to ascertain whether the goods specification/quality is as ordered
- Once quality clears the goods, they are made available for production

Treatment of goods short received:

- If the goods are short received, then following steps are taken by the stores personnel:
  - Inform the vendor about the short receipt of material once the shortage is identified. Shortage shall be informed before doing GRN in SAP
  - Mention shortage on transporter’s copy of Bill of Lading and also obtain his acknowledgement for the same
  - Do GRN in SAP with actual quantity received
Case – Goods Short Received

Case Question:

- ABC Ltd ordered 1,000 kg of Limestone to be used in their Effluent Treatment Plant from M/s XYZ Limestone Ltd
- M/s XYZ Limestone Ltd dispatched 100 bags of 10 kg each
- During transit, one bag of 10 kg was lost and ABC Ltd received only 99 bags of 10 kg each

Treatment:

- On receipt of material, stores personnel of ABC Ltd will mention the shortage of material on the transporter’s copy of Bill of Lading
- Store personnel should also inform M/s XYZ Limestone Ltd about the short receipts
- Further, GRN will be made only for 99 bags and payment will be made only for the respective quantity
## Receiving Materials and Creating Liabilities – Major Risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Root Cause</th>
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</thead>
</table>
| **Acceptance of excess quantities**       | Improper three way (PO-GR-IR) match                                       | 1) Working capital blockage  
2) Possibility of increase in slow/ non moving items  
3) Possibility of Slow/ Non moving/ obsolete inventory having financial impact | Three way match (PO-GR-IR) shall be introduced and goods in excess of PO quantity shall not be accepted |
| **Damaged/ short goods are accepted**     | 1) Improper verification of goods received  
2) Collusion with vendor/ transporter  
3) Improper packing by vendor       | Financial cost to the company                                                                 | 1) Goods received are duly verified for any transit damages/ shortages. Any damage/ shortage shall be specified on the transporter’s copy of GR and also recorded in company’s books.  
2) Transit Damages / shortages shall be charged to vendor/ transporter as agreed. |
| **Amount invoiced with excess value**     | 1) Errors on the part of vendor  
2) Collusion with vendor          | Excess outflow of money                                                                  | 1) Three way match of PO-GRN-Invoice shall be done  
2) Maker checker control for Invoicing shall be implemented |
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Goods with incorrect specification received</td>
<td>Incorrect dispatches by vendor</td>
<td>1) Production disruptions</td>
<td>1) Goods received shall duly verified for specification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) Transportation cost due to re deliveries/ returns shall be borne by vendor</td>
<td>2) Transportation cost due to re deliveries/ returns shall be borne by vendor</td>
</tr>
<tr>
<td>Delay in GRN</td>
<td>1) Ignorance on the part of person doing GRN</td>
<td>1) Goods cannot be issued for production causing production disruption</td>
<td>1) Strict timelines for GRN shall be defined</td>
</tr>
<tr>
<td></td>
<td>2) Due to oversight</td>
<td>2) Unaccounted goods lying in premises</td>
<td>2) On monthly basis instances of delay in GRN shall be reviewed and root cause analysis of the same shall be done</td>
</tr>
<tr>
<td>Delay in delivery of goods</td>
<td>Delay on the part of vendor</td>
<td>Production disruptions</td>
<td>1) Vendors not capable of delivering the goods on time shall be blacklisted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2) A penalty clause shall be included in the PO and in case of delays, that shall be enforced</td>
</tr>
</tbody>
</table>
Once goods are received and quality is approved, the payment for the same is made by the finance department.

Payment is made as per agreed terms of payment.

Organization may make payment based on their payment cycle which may be daily, weekly, fortnightly or monthly.

Once the payment entry is passed, cheques are prepared and signed by designated authority.

- In SAP environment, there is a possibility to print cheques through SAP.
- The cheque stationary can be obtained from bank.

The signed cheques are disbursed to vendors. Once cheques are disbursed, the purchase to pay process ends.
Making Payment – Advances

- An entity may have to pay advances to purchase a few goods & avail a few services

- Advance payment may be required for all purchases from a vendor or on case to case basis or for every purchase

- Advances may be made against a PO or on ad-hoc basis

- Advances against a PO are over ad-hoc advances

- Benefits of Advances over PO against ad-hoc advances:
  - In **SAP environment**, at the time of making payment against a PO, advance given against a PO is shown; however, in case of ad-hoc advances one has to manually check whether any advance is pending for adjustment or not
  - Advances adjustment can be tracked easily in case of advances against a PO
Dr. Douglas is an eminent Scientist and working in the Research & Development team of Ananya Private Ltd. He had a discussion about his new research success and had a chat with Mr. John (Head-Operations) and Mr. Anthony (Head-Purchases). Here are the excerpts of discussion:

- **Dr. Douglas**: Sir, we have successfully completed our research and are ready with a new product. We are once again ready to expand our arms in the market.

- **Mr. John**: That’s Great!! Congrats Dr. Douglas. Finally you have done it. Is there any other player in the market offering similar product?

- **Dr. Douglas**: The product is a kind of unique in nature with no competitor yet in the market. We have also taken relevant patents for the product. Now, we have to start the production as soon as possible so that we can make our product available in the market at the earliest.

- **Mr. John**: We have all the production arrangement to start with our operations. Could you please share the ‘recipe' with us? I will arrange for a management meeting today itself.

- **Dr. Douglas**: Sure Mr. John. I am just sending an e-mail to you and Mr. Anthony. I would officially request you to plan the production in consultation with our sales team based on the demand they have estimated for our new product.
Mr. Anthony: Congrats Doctor. It's a great news that we are going to launch a new product. Before starting with the production process, we have to go through the entire procurement process. As soon as we get the Bills of material (BOM), we can start with our process.

Dr. Douglas: Ohh..!! I was not aware that we have to go through some other process apart from production as well. Could you please briefly tell me about what all we would need to do in the procurement process?

Mr. Anthony: Sure Dr. Douglas. I will send you a brief note to explain the intricacies of the entire process involved in this.

Case question: Students are expected to read the above discussion excerpts between Dr. Douglas, Mr. John and Mr. Anthony and educate Dr. Douglas about the series of steps to be followed to get started with production.
<table>
<thead>
<tr>
<th>Steps</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step #1</td>
<td>Sales estimation</td>
<td>• Sales team to estimate the demand for the new product</td>
</tr>
<tr>
<td>Step #2</td>
<td>Production Planning</td>
<td>• Since the product is new in the market, estimated sales will be the estimated production. However, weekly production schedule needs to be prepared</td>
</tr>
<tr>
<td>Step #3</td>
<td>Material Requisitioning</td>
<td>• Based on the Bills of material, Warehouse/ Purchase team (based on company’s structure) will requisition the material.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In case of material being procured for the first time, material master with required specification needs to be created</td>
</tr>
<tr>
<td>Step #4</td>
<td>Vendor Selection</td>
<td>• Purchase team to review the Bills of Material (BOM) and check whether any of the required material is already being procured or not.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In case any material is already being procured, the required material can be procured from the existing vendor. For the items to be procured for the first time, Vendor needs to be explored by the purchase team.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quotation from at least three vendors may be obtained to ensure competitive price. Vendor with the negotiated least landed cost will be selected. Purchase team may divide the business among vendors to ensure continuity of supplies.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Once the vendor is selected, Vendor master will be created with relevant required Information</td>
</tr>
<tr>
<td>Steps</td>
<td>Activity</td>
<td>Impact</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Step #5</td>
<td>Raising Purchase Order</td>
<td>• Once the cost is negotiated and vendor is identified, purchase team will raise the PO.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The PO will be approved as per release strategy defined by the company.</td>
</tr>
<tr>
<td>Step #6</td>
<td>Receiving Material and Booking Liability</td>
<td>• Once the ordered material is received from the vendor, the gate controls will be applied followed by unloading and subsequent GRN (MIGO).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For any shortage, intimation will be sent to vendor and acknowledgement of shortage will be obtained from transporter.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Once GRN is done and all the required documents are available, liability will be booked through MIRO</td>
</tr>
<tr>
<td>Step #7</td>
<td>Quality testing of Material Received</td>
<td>• Once the GRN is done, the material will be sent for quality testing. The material, if approved, will be kept, otherwise it will be returned to the vendor if quality as agreed upon</td>
</tr>
<tr>
<td>Step #8</td>
<td>Issuance of Material for production</td>
<td>• The quality approved material will be issued based on the production requirement</td>
</tr>
<tr>
<td>Step #9</td>
<td>Initiating production process</td>
<td>• Production department will initiate the production activity based on the recipe received from the Research &amp; development department</td>
</tr>
</tbody>
</table>
Purchase Return – Process and Accounting Treatment
Purchase Return – Meaning and Reasons of Return

- Purchase return (or return outwards) means returning goods back to vendor due to
  - Return in As-is Condition
  - In process goods rejection

**Return in As-is condition:**
- This implies returning goods without using it. Goods returned under this condition may be on account of:
  - Goods not as per specification ordered
  - Inferior quality goods

**In Process Goods rejection:**
- In process goods rejection include cases where the quality of goods can’t be checked unless used in production/manufacturing process
- For instance, chipset of any equipment can’t be tested unless that chipset is used in that equipment
Purchase Return – Process

- Once goods are received, GRN for the goods is done after performing gate entry procedures

- As soon as GRN is done, goods are automatically blocked for quality inspection
  - In SAP environment, whenever quality tests need to be performed, the same is selected during master creation
  - Further, the tests required to be performed, sample to be extracted for performing identified tests and desired results are identified by research & development team

- Various tests are performed and results are uploaded in SAP
  - If the actual results are within the desired limits, the goods are moved to unrestricted location and are made available for use
  - However, if the actual results are not within the desired limits, goods are rejected and forms basis of purchase return

- However, in case of online rejections, quality tests are performed only when they are issued to production process
Once the goods are rejected, the purchase entry is reversed in SAP

 Movements for reversal of purchase entry:

 Movement 102: GRN entry is reversed

<table>
<thead>
<tr>
<th>GR/IR A/c</th>
<th>Dr</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Material A/c</td>
<td></td>
</tr>
</tbody>
</table>

 Movement 122: Reversal Entry is Passed. This entry would be passed

 - Before booking Liability i.e. MIRO

<table>
<thead>
<tr>
<th>GR/IR A/c</th>
<th>Dr</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Material A/c</td>
<td></td>
</tr>
</tbody>
</table>

 - After booking Liability i.e. MIRO

<table>
<thead>
<tr>
<th>Vendor A/c</th>
<th>Dr</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Material A/c</td>
<td></td>
</tr>
</tbody>
</table>

 Caution: While passing the return entry, impact of excise shall be considered. In case excise has been taken, the same shall also be reversed
M/s XYZ Limited purchased 1,000 Kg of limestone for Rs.100,000 from M/s Limestone Limited for their Effluent Treatment Plant (ETP) operations

- Quality check, rejection and put to process:
  - 10% goods were outrightly rejected owing to quality issues
  - 90% goods were put to process for ETP Operations

- During the ETP operations, it was identified that limestone was mixed with stones and hence, it was unfit for use. Accordingly, entire batch was returned to supplier

**Case Question:** Identify various transactions in the above case and explain the accounting entries to be passed for each transaction
## Case Solution – Purchase Return

### 1) At the time of receipt of goods (MIGO for doing GRN):

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material A/c</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>To GR/IR A/c</td>
<td>100,000</td>
<td></td>
</tr>
</tbody>
</table>

Movement type 101 will be used.

### 2) For rejecting 10% goods:

- **Case 1 - Using Movement 102 before MIRO:**
  
<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR/IR A/c</td>
<td>10,000</td>
<td>Material A/c 10,000</td>
</tr>
</tbody>
</table>
  
- **Case 2 - Using Movement 102 after MIRO (in case liability has been booked):**
  
<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor A/c</td>
<td>10,000</td>
<td>Material A/c 10,000</td>
</tr>
</tbody>
</table>
  
  If excise credit has been taken, then the same is to be reversed as well.

- **Case 3 - Using Movement 122:**
  
<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor A/c</td>
<td>10,000</td>
<td>Material A/c 10,000</td>
</tr>
</tbody>
</table>

### 3) Rejecting remaining goods (90%):

- **If entire quantity is used, then debit note would be raised**
  
<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor A/c</td>
<td>90,000</td>
<td>Online Rejections A/c 90,000</td>
</tr>
</tbody>
</table>

  - Reverse excise credit, if taken
  - Instead of Online Rejections, Cost of inventory can also be credited

- **If entire quantity is not used**
  
<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor A/c</td>
<td>90,000</td>
<td>Material A/c 10,000</td>
</tr>
<tr>
<td>To Online Rejections A/c</td>
<td>80,000</td>
<td></td>
</tr>
</tbody>
</table>

  - Assumed only 100 Kgs were actually used
  - Reverse excise credit, if taken
  - Instead of Online Rejections, Cost of inventory can also be credited
Creditors Ageing Analysis
Creditors Ageing

- Creditors’ ageing analysis is a time based analysis to identify
  - How much time is left in due date, or
  - How much time has passed since due date

- Creditors’ ageing is generally done by the Finance department of any entity

- In ageing analysis, finance team tries to identify how much time is left in making payment so that the entity can be proactive in arranging for required money or identify how much time has passed after due date for making payment to understand the additional charges to be incurred by the entity to settle the dues

- Dual Purpose of Creditor’s Ageing:
  - Arranging funds to make payment in time.
  - Identify the probable penalty (known as liquidation damages) in case of delay in payment

- **Note:** Liquidation damages are to be paid only if agreed at the time of procurement
Accounting Ratios applicable to Accounts Payables
Accounting Ratios applicable to Purchase Payables

- Accounting ratios are used to evaluate any financial parameter relative to another financial parameter(s)

- Ratio analysis is typically done by the finance department of any entity:

- Ratios related to Purchase Payables broadly include:
  - Accounts Payable Turnover Ratio
  - Accounts Payable Days
# Accounts Payable Turnover Ratio

<table>
<thead>
<tr>
<th>Meaning</th>
<th>This ratio gives how many times a company pays off its payables for an accounting period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>Accounts payable turnover ratio = Total Credit purchases / Average accounts payable</td>
</tr>
<tr>
<td></td>
<td>• For computing this ratio, credit purchases are taken into condition. Since the cash purchases tend to be small in quantity and value, total purchases may be taken into consideration for ratio computation</td>
</tr>
<tr>
<td></td>
<td>• Since accounts payables keeps varying throughout the year, average of the opening &amp; Closing Purchases are taken into consideration</td>
</tr>
<tr>
<td>Significance</td>
<td>• If the ratio increases over a period of time, that means company is paying off its debts more frequently that may represent strong cash position of the company</td>
</tr>
</tbody>
</table>

## Accounts Payable Days

<table>
<thead>
<tr>
<th>Meaning</th>
<th>AP turnover ratio gives how many days a company will take to pay off its debts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>AP days = 365 Days / AP Turnover Ratio</td>
</tr>
<tr>
<td>Significance</td>
<td>• If this ratio increases over a period of time, that means company is slow in paying its debts that may represent difficult cash position of the company</td>
</tr>
<tr>
<td></td>
<td>• Other factors for decline in the ratio could be the payment terms. Longer the payment terms, longer is the AP days.</td>
</tr>
</tbody>
</table>
Areas of Variance Analysis
Variance Analysis

- Variance analysis is done by the finance team of any entity. In relation to purchases, ‘price variances’ are computed.

- Process of computing Price Variance:

<table>
<thead>
<tr>
<th>S#</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1  | Finance Team identifies the standard price for all the materials (primarily Class A & B materials) basis:  
- Last year actual prices  
- Last year actual quantity  
- Expected quantity for current year  
- Expected inflation in the current year  
This activity is done before the beginning of the year. |
| 2  | Standard prices are shared with the purchase team and are also **uploaded in SAP** |
| 3  | Purchases may be done at various prices during the year. It may be noted that GRN is made at the prices at which they are procured |
| 4  | Once the GRN is done, **weighted average price is computed by SAP** and goods are issued at this weighted average price |
| 5  | Once the process order against which goods were issued is technically **closed in SAP**, the price variances is computed for each item as under:  
**Price Variance = (Quantity* Standard Price) - (Quantity*Weighted Average Price)** |
Action Plan

- If the Price variance is **unfavourable**, i.e. actual cost is more that standard cost, then reason analysis for the variances is done.
  - Corrective actions are taken if variance is due to controllable factors; and
  - In case of uncontrollable permanent factors, standard needs to be revised

- **Examples of controllable factors:**
  - Single vendor developed charging higher prices,
  - Default by existing vendors resulting in purchase from other vendors at higher price to avoid production stoppage,
  - Improper planning leading to material shortages,
  - Emergency purchases at higher prices, etc.

- **Examples of Uncontrollable factors:**
  - Increase in government taxes,
  - Import restrictions, etc.

- If the Price variance is **favourable**, i.e. actual cost is less that standard cost, then standards may be revised provided the favourable variance is not on account of any one time or short term activity.
Preparing for Management Committee Meeting
### What to include in Management Committee Report?

- Management committee needs to be apprised with key developments in procurement field. Typically a meeting happens on quarterly or half-yearly basis depending on scale of organization.

- This report would basically cover the following areas:

<table>
<thead>
<tr>
<th>Areas to be covered</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much procurement is made in a given period under review?</td>
<td>While giving this data, the procurement value should be taken based on GRN done and not on PO value. Both may be given if required by management.</td>
</tr>
<tr>
<td>Working capital blocked in inventory</td>
<td>Purchases done on Just-In Time (JIT) approach basis or not</td>
</tr>
<tr>
<td>Critical items for which strategic purchases need to be done and estimated cost of such purchases</td>
<td>Is there any agreement (for price or quantity or both) entered for critical items? Are substitutes identified or in process of identification?</td>
</tr>
<tr>
<td>Any process gaps identified / fraud incidence identified or probable fraud for which investigation is being done</td>
<td>Frauds could be in nature of indulgence of procurement team in procuring at higher prices for a commission, contracts issuance to related party for benefiting, fake quotations to bypass the vendor selection process, etc.</td>
</tr>
<tr>
<td>Benchmarking for key raw materials</td>
<td>Price trends over a period of time, Available quantity in the market and entity’s share</td>
</tr>
<tr>
<td>Procurement disputes, if any</td>
<td>How vulnerable are they to business continuity? Is any legal action required?</td>
</tr>
</tbody>
</table>

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For the identified issues, a risk matrix is prepared and risks are classified as low, medium or high and accordingly an action plan is prepared.

**Snapshot of Risk Matrix:**

<table>
<thead>
<tr>
<th>S#</th>
<th>Particulars</th>
<th>Risk</th>
<th>Control Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Limited Availability of critical material</td>
<td>• Continuity Issues</td>
<td>• Identify Substitutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Identify other sources for procurement</td>
</tr>
<tr>
<td>2</td>
<td>Spurious products</td>
<td>• Sub standard goods having brand issues</td>
<td>• Brand awareness programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Raids</td>
</tr>
<tr>
<td>3</td>
<td>Non-moving &amp; slow moving goods</td>
<td>• Increased working capital blockage in inventory</td>
<td>• Regular monitoring of slow/ non moving inventory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increase in obsolete inventory</td>
<td>• Transferring slow/non moving inventory to other locations where these goods may be required</td>
</tr>
</tbody>
</table>
**Procurement Process**

1. **Procurement Planning**
2. **Material Requisition**
3. **Vendor Selection**
4. **Purchase Orders**
5. **Receiving Materials and Creating Liabilities**
6. **Making Payments**

**Material Requisitioning** –
- PR is raised through transaction code ME51N in MM Module
- Transaction code ME52N is used for amendment
- Displaying PRs - ME53N (Individual PR) and ME5A (multiple PRs)

**Vendor Selection** –
- Each vendor is linked with material for which it is shortlisted to ensure other items for which he is not approved are not procured

**Purchase Orders** –
- DOA is fed in SAP and PO automatically moves as per that DOA
- Option to select unlimited deliveries is suppressed to avoid fraud

**Receiving Materials and Creating Liabilities** –
- GRN is done through transaction code MIGO

**Making Payments** –
- Cheques may be printed through SAP
- Cheque stationary can be obtained from bank

**Procurement Planning**

1. **Sales estimation for the planning period**
2. **Identify the available FG and compute the required production**
3. **Compute the required procurement and make the procurement plan for the planning period**
4. **Identify the material (RM/PM/Sares, etc) required for production and identify what is the available stock situation**

**SAP Links**

- **Material Requisitioning**
  - PR is raised through transaction code ME51N in MM Module
  - Transaction code ME52N is used for amendment
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**Accounting Ratios applicable to Accounts Payables**

**Accounts Payable Turnover Ratio**

\[
\text{AP turnover ratio} = \frac{\text{Total Credit purchases}}{\text{Average accounts payable}}
\]

**Significance:** If this ratio increases over a period of time, that means company is paying off its debts more frequently that may represent strong cash position of the company

**Accounts Payable Days**

\[
\text{AP days} = \frac{365 \text{ Days}}{\text{AP Turnover Ratio}}
\]

**Significance:** If this ratio increases over a period of time, that means company is slow in paying its debts that may represent difficult cash position of the company

Other factors for decline in the ratio could be the payment terms. Longer the payment terms, longer is the AP days.