如果你觉得知识点太多太乱，请联系我们报名期末复习班，带你过一遍好过死记硬背一晚上。

FIT5101 知识点总结

Week 1 Introduction to Enterprise Systems

Objective

1. Identify enterprise resource planning (ERP) systems within the wider context of organisations
2. Identify enterprise wide drivers
3. Describe enterprise system characteristics
4. Explain enterprise system benefits
5. Discuss issues with ERP implementations

Definition:

An enterprise system can be defined as “an enterprise-wide, modular process integrated, real time, real time information system using a single database, which is responsible for transaction processing across all main business areas of an organisation.

企业系统可以定义为“使用单个数据库的企业级，模块化，流程集成的实时信息系统，它负责组织的所有主要业务领域的事务处理。

An ERP system enables various departments or operating units such as Accounting and Finance, Human Resources, Production, and Sales and Distribution to coordinate activities, share information, and collaborate with customers, vendors etc. Additionally having access to this information enables management to make timely informed decisions

ERP 系统可实现各种目标 会计和会计等部门或运营单位财务，人力资源，生产，销售和 分配以协调活动，共享信息和 与客户，供应商等合作。另外 访问此信息可使管理层及时做出明智的决定

What is happening in the Australian economy to impact on organisations?（了解）

Australia struggling manufacturing industry 澳大利亚制造业举步维艰

National Australia Bank job cuts 澳大利亚国民银行裁员（Digital Transformation）

Overhaul of supply chain at Target 目标供应链的全面检查改革

The Enterprise of the future

Input date--- processing data(more efficient,)

The Enterprise of the Future is a self-organizing, adaptive, learning network of knowledge entrepreneurs achieving mutual goals.

Such an enterprise is built on a sustainable, four-pillar framework for continuous renewal:

Leading – –

Co-creating new business ecosystems and strategies

共同创造新的商业生态系统和战略

Connecting – –

Building a continually evolving, adaptive infrastructure nexus

建立不断发展的适应性基础设施关系

Co-creating and delivering – –

Designing agile, intelligent systems and processes

设计灵活，智能的系统和流程

Discovering – – Creating work environments for continuous growth and fulfillment

创造持续增长和实现的工作环境

What does an enterprise system do ?(ES 定义)

Brings together previously isolated information systems with the goal of providing a more whole or complete information resource. Integrate all resources (Bring people process system information together.). Achieve a common strategic business goal.

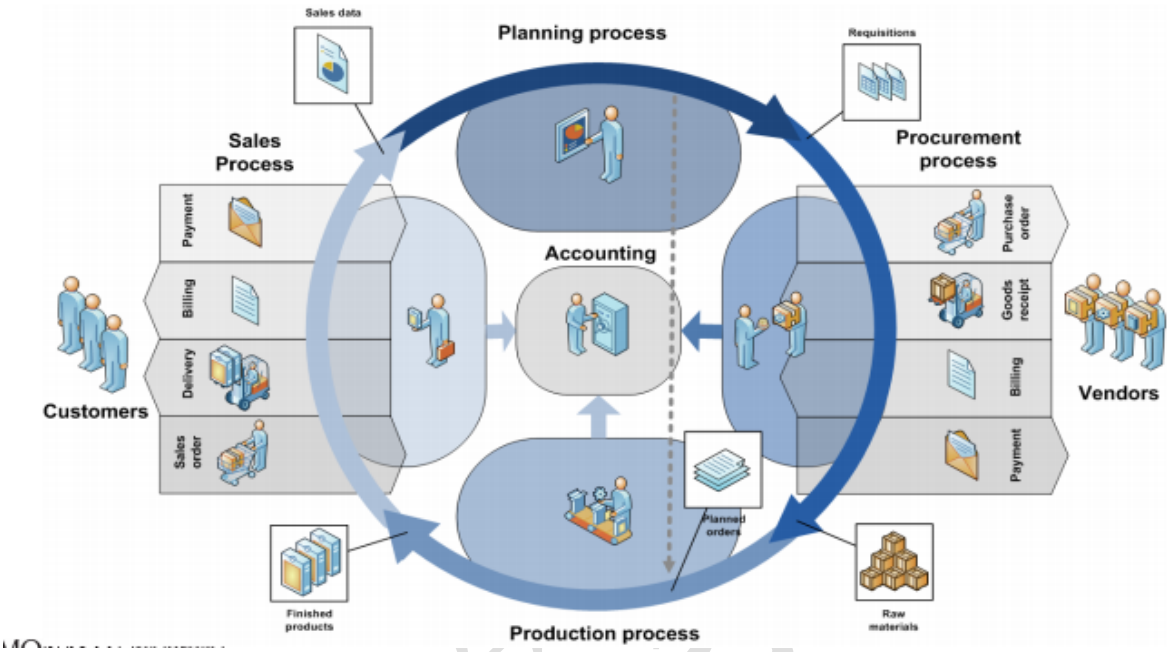
An enterprise system can help you to achieve common strategic business goals? How.....

1. Ebusiness
Enhanced supply chain
link your systems with your vendors
2 .EGlobalisation
Growth of global trading communities and partners
3. Collaboration
Extended Business partners
Customer requirements
4. Company takeovers/mergers acquisitions

Enterprise Systems may include

Enterprise wide systems such as ERP systems
Manufacturing systems
Supply chain and inventory management systems
Customer relationship management systems
Financial information systems
eMarketing and eCommerce applications
Business intelligence (BW)

Enterprise resource planning system



Why implement ERP systems: Drivers for ERP(重点)

streamline and improve business processes 简化和改进业务流程，

integrate business processes eliminate unproductive processes 整合业务流程消除非生产性流程

Use best practice business processes 使用最佳实践业务流程

better manage information systems expenditure 更好地管理信息系统支出

competitive pressures to become a low cost producer 成为低成本生产商的竞争压力

increased responsiveness to customers and their needs 提高对客户及其需求的响应能力

provide a common platform and better data visibility 提供通用平台和更好的数据可见性

Act as a strategic tool for the move towards digital transformation 作为实现数字化转型的战略工具

Integration as a response to mergers and acquisitions and takeovers 整合作为对并购和收购的回应

Better decision making 更好的决策

Top 10 Enterprise system benefits

Improved management decision making 改进管理决策

Improve financial management 改善财务管理

Improved customer service and retention 改善客户服务和保留

Ease of expansion/ growth and increased flexibility 易于扩张/增长并增加灵活性

Faster, more accurate transactions 更快，更准确的交易

Headcount reduction 人数减少

Cycle time reduction 缩短周期时间

Improve inventory/ Asset management 改善库存/资产管理

Fewer physical resources/better logistics 物质资源减少/物流更好

Increased revenue 增加收入

What makes ERP systems unique from other systems?(ERP 特点,为什么用 ERP)

Links all business processes automatically
Transactions occur one time at the source
Maintains an audit trail of all transactions
Utilises a common database for
– Master data
– Transactional data
– Enabling BI

Utilise a common architecture (Netweaver 集成平台)

Performs internal conversions automatically (tax, foreign currency, legal rules for payroll)
Real time data extraction
Utilises best practice business processes
Most system functionality has a common interface and terminology

Implementation strategies
Big bang – – a new system goes live instantly and all users switch to it;
新系统一上线，用户就马上用

Phased rollout – transition happens in phases, – Different modules are introduced users move step-by-step;
分段进行，用户一步步运用不同模块

Agile – also happens in phases, but under continuous design, testing and deployment of elements until moving to another one;
分段进行，一直持续设计测试直到完全运用新系统·

Parallel – both new and old system are functioning at the same time, while users gradually switch to a new ERP.
新旧系统同时运用

Implementation issues

Complex – configure/modify?
Expensive to buy/to maintain/licenses

Demand highly trained staff
Often very lengthy implementation periods
Inter-module functions least understood by business but high on the list of why to buy Creates internal conflict within organisations
Lack of benefit realisation in the short term
Continuous change: modifications including upgrades/hotpacks, business process changes etc
Licensing issues

Impediments to a successful outcome to an implementation

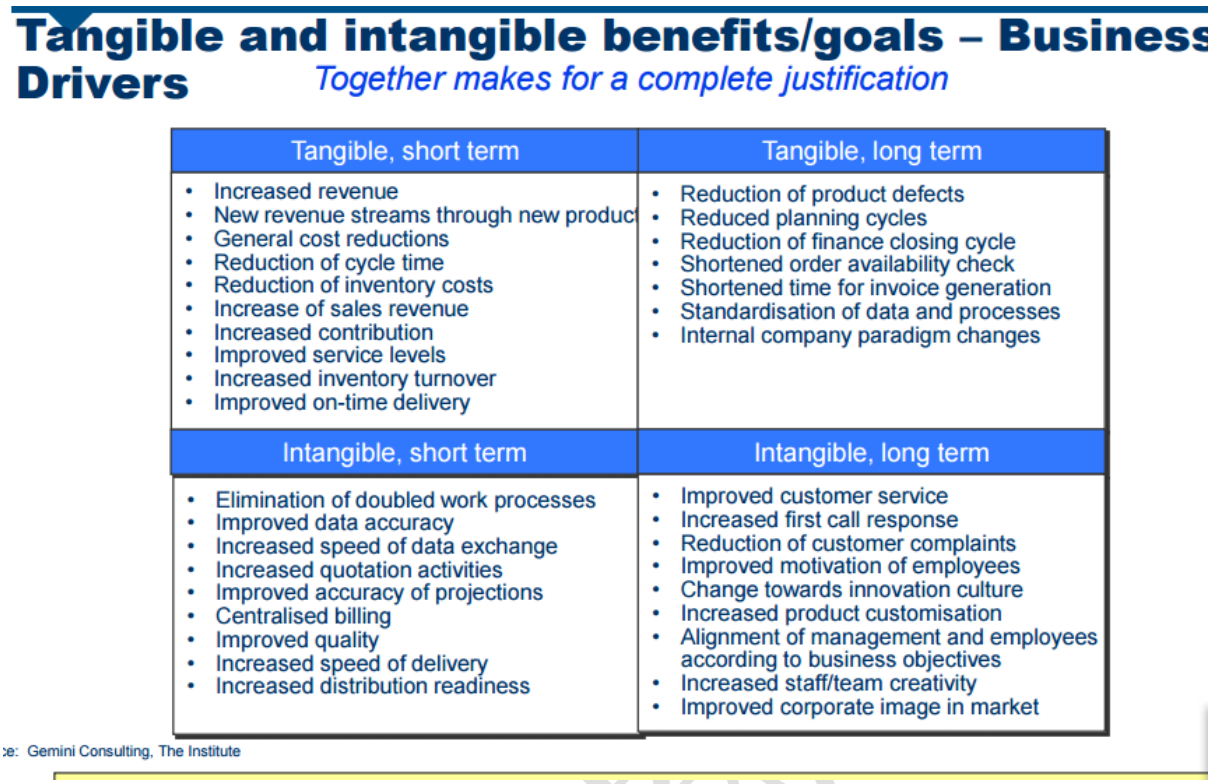
Management do not support the implementation
Lack of leadership support (CSF)
Resistance to change by stakeholders
Stakeholders not ready for the change
Lack of communication and support (CSF)
– SMEs
– Change agents/Leadership support
Lack of user education and training (CSF)
– Train the trainer approach High turnover of key trained personnel Technological problems; – configuration and modification difficulties
– Data integration issues
– Enterprise application integration issues
Cultural issues
Lack of Change management strategy throughout the implementation (CSF)

Application integration reality
Heterogeneous solutions(Many different vendors, custom made solution,p2p integration)
Risking future success(Complex business environment, maintenance nightmare, Multiple dependencies)

Week2

Key Benefits for your Company – when using enterprise systems?

1.Enhance all aspects of key operations across a company's entire back-office
– from planning through execution, management, and control.
– They accomplish this by taking processes and functions that were previously disparate and disjointed, and seamlessly integrating and coordinating them.
2. Facilitate more efficient completion of day-to-day tasks.
3.Reduce redundant and overlapping activities that waste time and money by standardizing core procedures. 标准化核心程序，减少重复，
4.Eliminate data silos by creating a single, centralized repository of timely, accurate business data. 加强各个部门的数据交流
5.Enable more effective resource allocation and management
6.Provide up to the minute data for accurate decision making enabling an agile organisation



CRM: Sales and distribution

•The Web catalogue contains precisely one product catalogue.
•. This function allows customers to configure products using the Internet Pricing and Configurator (IPC) and to order them as they have been configured.
•. When you create an order or an order template, catalogue prices are used.
•Catalogue prices can be list prices or prices calculated by the IPC. This step also checks when the product will be available

SCMS is a business term which refers to a range of software tools or modules used in executing supply chain transactions, managing supplier relationships and controlling associated business processes. SCM is the integration of key business processes from end user through original suppliers that provides products, services and information that add value for customers and stakeholders

SCMS includes: – Customer requirement processing – Purchase order processing – Inventory management – Goods receipt and Warehouse management – Supplier Management/Sourcing

SCM - Why use it?

the ultimate goal of an effective supply chain management system is to
– Reduce inventory (will)
– Reduce costs (will)
– Increase revenue
Supply chain management can be divided into three main flows:
– The product flow

– The information flow
– The finance flow
SAP Business Warehouse (abridge SAP BW) is SAP's Enterprise Data Warehouse product. It can transform and consolidate business information from virtually any source system

考点：how do you achieve a competitive advantage（Reason of some companies have poor performance in ERP system）

1 Realize much more value from their system and use them in distinctly different ways.
2 Likely to seek and measure tangible benefit such as reduce cost and increase revenue
3 Emphasis on integrating, optimizing and using analytics to drive improved business performance.强调集成，优化和使用分析以提高业务绩效。
4 Extend system through their organization and implement across a range of functions
5 Integrate the organization and external system of customers and suppliers
6 Aggressively use information and analytics to improve decision making.
7 System used strategically for competitive differentiation
8 Tailor systems to sustain competitive advantages and standardize other area
定制系统以保持竞争优势并标准化其他领域
9 More likely to Implement industry modules
10 Twice as likely to take advantage of SOA

Key Findings: This is important 为什么用 ES 怎么用 ES

Investing resources to implement their ES is merely a first step and do not guarantee results
Some companies get more value from their ES than others
ES are viewed as a significant contribution to distinctive capability
Organization that get more value from their systems and use them for competitive distinction have superior financial performance
Analytical technologies and capability are particularly important to achieve value and high performance

Conclusion：

Enterprise systems change the focus, the structure and the way in which organisations operate.
It is little wonder that organisations have trouble understanding the complexities of such a system.
Issues with understanding the organisational needs, the system complexities often lead to confusion over which system to buy.
Once implemented they require upgrades, modifications and increased functionality

EXAM ：

how do they maintain a competitive edge against their competitors who are in the same market place?

Week3 Level of ERP System

Tier 1 is top level,

The ERP Tier 1 solutions are basically SAP, Oracle, Infor, Microsoft Dynamics.
a ERP Tier 1 allows for several people to be working on a single function. The software can split out the task among multiple users.
ERP Tier 1 solutions generally take a long time to implement and are equipped with a wealth of features at a high price： 结构复杂，实行时间长，价格昂贵需要大量的资金支持

Tier 2 is for Median organisation 为中型企业设计，复杂程度小于 Tier 1
Vendors Epicor, IFS, Sage, ABAS, SAP
Reduce the offering to fit in with the mid-size market
Offer single or multiple locations
– less complex than tier 1
- vertical solution ie developers that focus on the complexity of only one very specialised industry such as: wholesale industry/manufacturing/recycle

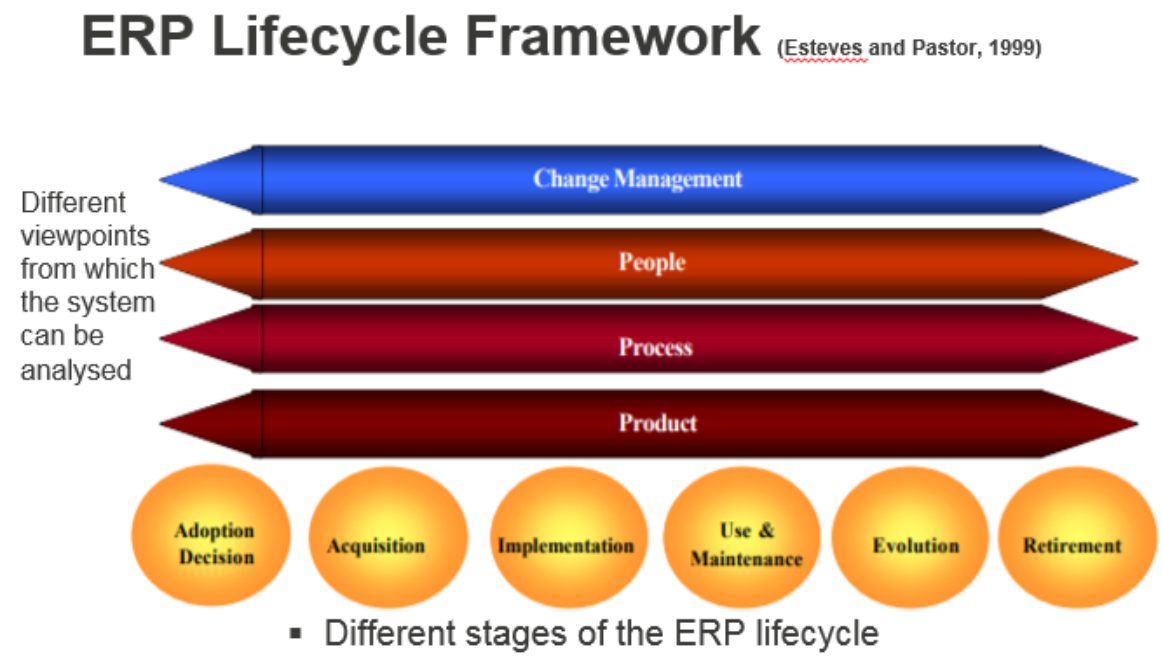
The more vertical the system is the smaller the market
Therefore financially vulnerable and open to takeover by more fully featured ERP vendors

Financially stable, and include third-party enhancements making up for missing complexity out of the box
most popular for midsize companies
Installed and supported by local partners and offer a lower TCO.

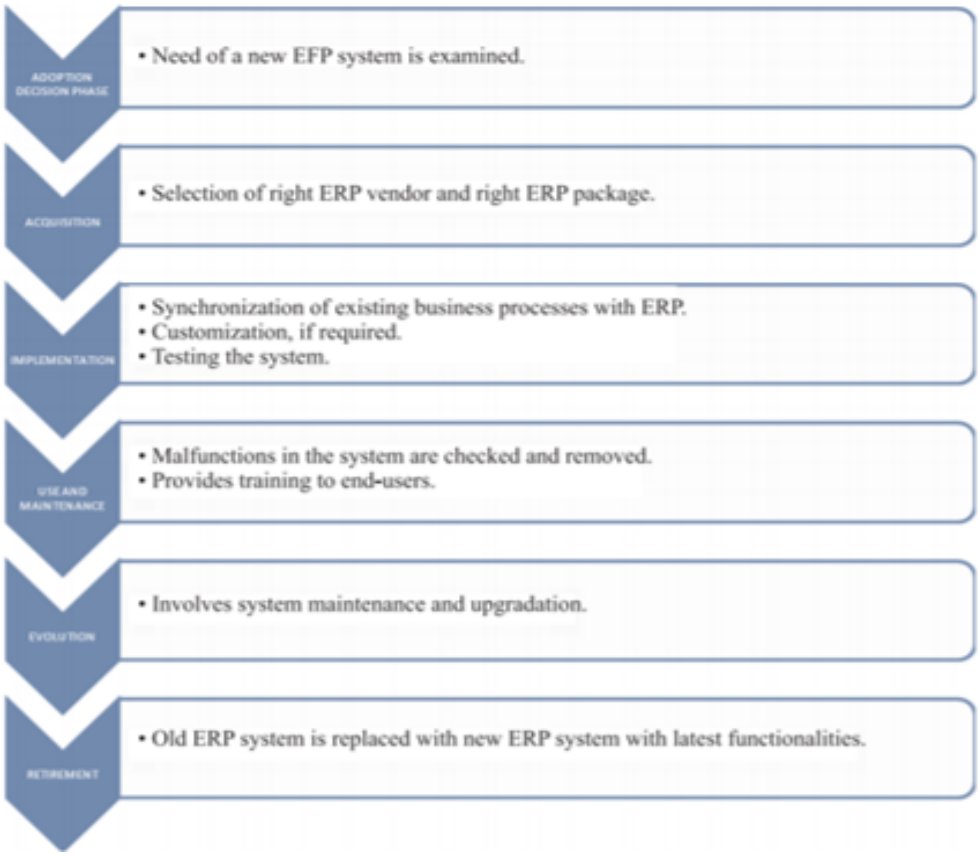
Tier 3 small business 为小型公司设计，并没有向 Tier 1,2 具有多种动能，大部分为 single module.

At the lowest cost level,
These products do not offer the functionality of Tier 1 and 2 solutions.
basic accounting functionality with these small business tools.
Small businesses or businesses running a vertical line of business

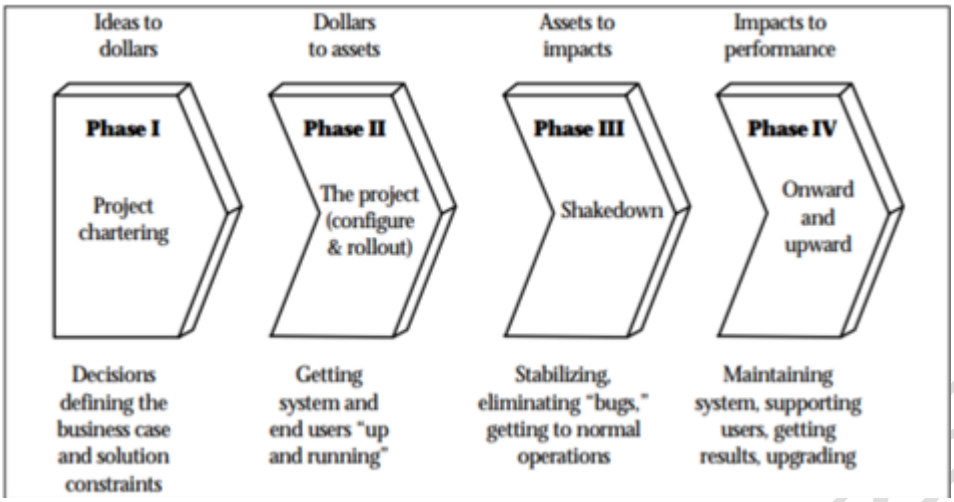
ERP Lifecycle Framework



- Different stages of the ERP lifecycle



Markus and Tanis - Four phase model

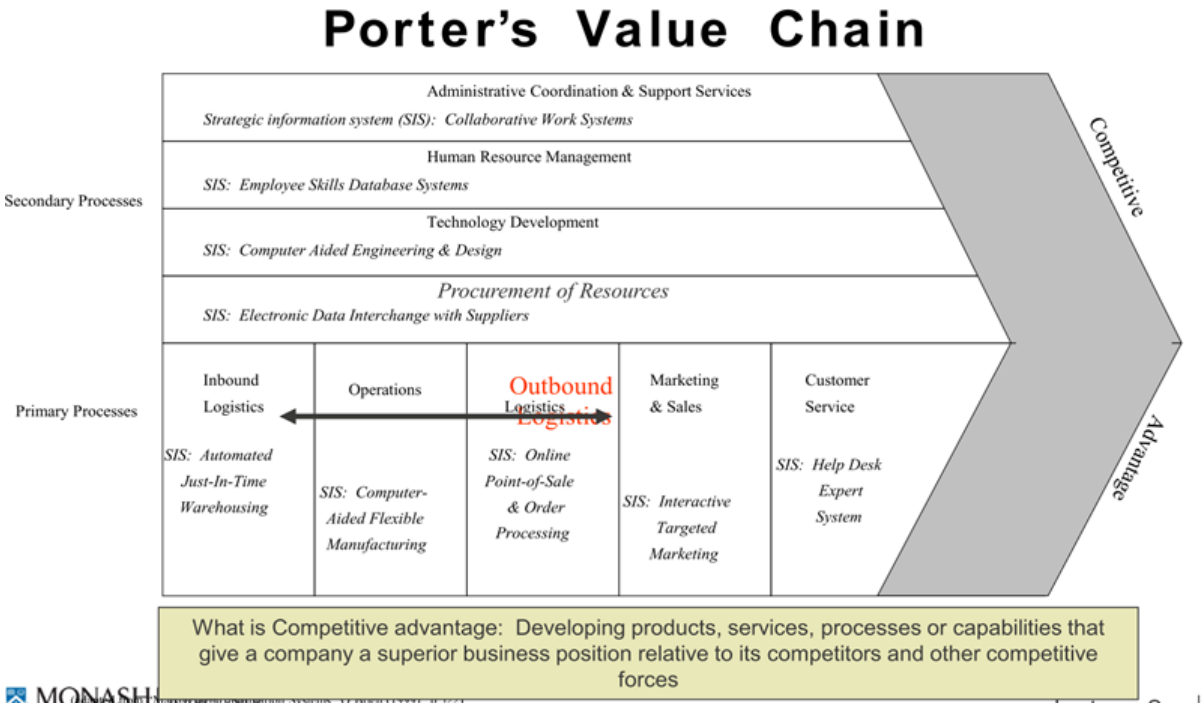


Week4

Porter value chain

波特所指的价值链主要是指针对垂直一体化公司的，强调单个企业的竞争优势。

每一个企业都是在设计、生产、销售、发送和辅助其产品的过程中进行种种活动的集合体。所有这些活动可以用一个价值链来表明

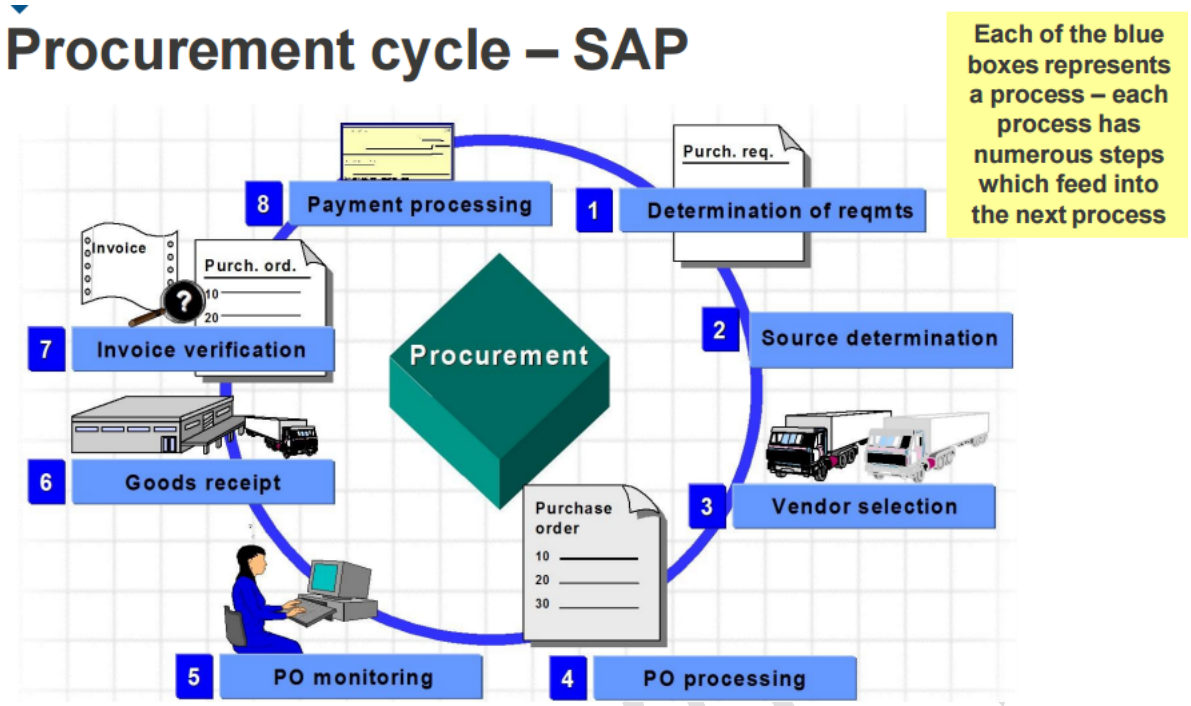


Port's value chain:（增加竞争力)

Value chain is a sequence of activities performed by an organization that add value to the product

Help company identify opportunities for competitive differentiation 竞争差别化

Identify those activity that add value to product ---customer willing to pay for.



考点 Business Process Decomposition definitions

- Business Scenario

A set of processes that define a business task in a comprehensive and self-contained manner at a macro level

- Business Process

A business process describes a sequence of activities or tasks for the creation of goods and services, affecting the success of the company and is driven by a transaction

- Process Step

BPM BPR BPI ?

Business benefits of BP integration(考点)

▪ Companies can integrate all their critical business activities.
▪ Develop process chains
– Links together customers and vendors
– Core processes (finance/production) more efficient and cost effective
– Brings competitive advantage
    • Through reduced costs
    • Faster time to market

- Improved responsiveness to customer requirements etc
- Better decision making
- Greater transparency of data
- Enable agile organisations

The innovation of process management
The innovation is the focus on business process
`increase awareness of process
`Make process explicit, modle processes
`Manage processes actively
`Manage process continuously

Process Modelling is a Business enabler 业务推动者 Why?

it allows organisations to change their processes quickly to respond to different market needs, allows for business agility for example:
– Just in time inventory strategy
– Time to market of new products

Why Business Process Modelling(BI 建模的原因)

Standardize process documentation
Same problem understanding
Transfers Knowledge
Stresses shortcomings of current situation
Allows evaluation on completeness of to-be-process
Support certification and audits
Shows potential of re-engineering

Benefits of BPM

▪ Formalisaton of current processes
▪ Allows for re engineering – – improved process performance
▪ Provides the base for Strategic initiatives
▪ Greater efficiency
▪ Increased productivity
▪ Decreased head count??!!
▪ Traceability of compliance processes
▪ Links to web service powered processes that can communicate with other processes in other companies and are wired for EAI. (Enterprise Application Integration

BPI (business process improvement)vs BPM(Business process management)(考点）

- BPI means the mapping, analysis, and improvement of a single process.

- BPM is continuous. That is, it’s not just a single process improvement initiative, it’s something you do constantly

BPR(Business process re-engineer)vs BPI(Business process improvement) (考点)

No.	BPI	BPR
1	Attempts to make small changes in processes	Radical changes
2	Changes are made over time	Changes are generally made in one attempt
3	Changes are primarily automate and informate in nature	Transformational changes (which shake org. structure and people components)
4	Less risky	Risky and can fail

重点 Business Process Re-engineering (BPR)

BPR is a management approach aimed at improvements by means of elevating efficiency and effectiveness of the processes that exist within and across organizations.

BPR will helps company (为什么要 BPR，怎么 BPR)

- Resist the temptation to automate obsolete processes with modern technology
- Stress the importance of simplicity
- Search for new ways to organize work
- Establish change as a constant of business in today's world
- Recognize and realize the potential of new technology
- Vanilla implementations using software that has best practice processes

- 抵制利用现代技术自动化过时流程的诱惑
- 强调简单的重要性
- 搜索组织工作的新方法
- 将变革视为当今世界的业务常态
- 认识并认识到新技术的潜力
- 使用具有最佳实践流程的软件实现 Vanilla

怎么 reengineering 呢？

SAP Process Management Life Cycle – Analyze phase – Design phase – Implementation phase – Operate phase – Optimize phase
1. Analyze phase (especially useful pre implementation)

– Analyzing the current environment and any current processes that may be in place
– Identifying needs and defining requirements
2. Design phase
– Evaluating potential solutions to meet the identified needs
– Designing the new business process
– Modeling the new business process
3. Implement phase (ASAP method)
– Project preparation
– Blueprinting
– Realization
– Final preparation
– Go live and support
4. Operate phase • Executing or deploying the business process • Monitoring the business process
5.Optimize phase (this phase has now become redundant) SAP states that process optimisation takes place throughout all phases • Measuring the business process • Improving the business process

Business Process Management Life Cycle

Business process life cycle management is the methodology that underlies process optimisation.
▪ This life cycle takes us from the very first identification of a process, through its
▪ description, implementation, ongoing control
▪ and ends up in something that could be referred to as process change management.

Business Process Optimisation 业务流程优化

Process reflect time, cost and quality
Process reflect product and services
Process reflect flexibility
Process reflect complexity
Process reflect working styles and culture
Performance relies on business processes

Why Focus on procurement

Major factors contribute to the importance of purchasing as a process to be engineered:

1. Rising Costs
Materials and supplies are costly
2. Advancing Technology
Technical purchasing expertise
3. Need for high quality materials and services

the quality of the input depicts the quality of the
4. Need for Shorter lead times*
JIT (just in time inventory)
Established ongoing relationships with your vendors
5. Link to porter ‘s value

Why Transform Procurement
To lead our business in the development and execution of innovative sourcing and purchasing strategy in and advancing digital world

Question: Explain whether an organisation should model its business processes before the system has been implemented or after? (To gain full marks ensure you clearly identify the reasons.)
Question: Provide five main benefits of reegineering your business processes.
Question: Identify one major business process that might benefit from reengineering in an organisation.
Question: Explain the benefits that may occur from reengineering the business process you identified above.
Question: If you were asked to reengineer a business process; what approach would you take?
Question: Give one working example of a business process

Week5 ERP implementation projects

Consequences of an unsuccessful implementation
Degrade business capability
• Degrade competitive advantage
• Increase operating costs
• Reduce revenue earnings
• Fail to meet critical business requirements
• Poor levels of user satisfaction
– Loss of staff
– Staff will not use the system properly
– Staff not involved in the change
– Leads to Perceived Loss of control

If successful（implementation ERP 好处）

Projects
– Deliver functionality & usability to users
– Achieve business goals
– Realise financial benefits
– Achieve strategic goals
– Satisfy business stakeholders
Project management
– Completes project within budget
– Completes project on time
– Completes project within scope
– Provides project with appropriate quality standards and scope (PMBOK)

The critical factors impeding a successful outcome

Lack of leadership support (CSF)
• Resistance to change by stakeholders
• Management do not support the implementation
• End-users not ready for the change
• Organisational readiness
• Lack of communication and support (CSF) – SMEs – Change agents/Leadership support
• Lack of user education and training (CSF) – Train the trainer approach • High turnover of key trained personnel
• Technological problems; – configuration and modification difficulties
• Cultural issues
• Lack of Change management strategy throughout the implementation (CSF)
• Lack of user involvement

Project implementation problems: business

SAP requires fairly rigid business structures Working practices were adjusted in order to ‘fit’ SAP ultimately changing the way RR did business Internal business process re-engineering BPR programme consisting of four steps: Step 1: draw and map current (as is) processes Step 2: identify any gaps in the current (as is) processes Step 3: apply these issues to a demonstration of SAP Step 4: re-map or modification of the RR processes to ‘fit’ with SAP (tobe process) RR considered that modification to the SAP software would have been expensive in both terms of resources and newer software versions would be difficult to install in a modified system – this is referred to as a VANILLA implementation

Project implementation problems: technology

Technology
• Accuracy of data from the old system to the new system – data migration – Old data had been duplicated and needed to be cleansed – Old data from the legacy systems had to be normalised, screened and stored in the data repository of the new system in a format that the new system can read
• Some of the systems were kept running until they could be phased out by the new system therefore interfaces were built between the systems
• There were nine principal business processes

Establish a change management strategy as part of the implementation approach AND • Conduct a risk management strategy as part of the implementation approach

A summation of responses identified the following best practices:
– • Keeping staff informed by communicating changes and the need for these changes
– • Training staff before during and after implementation
– • Using staff as expert users and trainers (SMEs) > staff could relate to them
  – Train the trainer approach
  – Training manuals which are easy to follow
– • Users of the system form part of the process
– • Employ a variety of change strategies

Two way to change manage

1. Establish an organisational change management strategy

Organisational change management is defined as the process of assisting the organisation in the smooth transition from one defined state to another, by managing and coordinating changes to business processes, systems and people.

Identify key training issues – Risk management strategy >Assess the types of risks impacting on training >Put in controls to manage the risks > Monitor the controls you have put in place

2. Conduct risk management as part of the implementation approach

Cost of Fixing Project risks

Money invested in reducing risk in the early stages of a project is money well invested. • Any risks incurred during the project have to be diagnosed, and fixed. • Using risk control as an iterative process will help to manage major risks and thereby cut cost blowouts

Question Provide five main reasons why organisations might adopt enterprise systems

Week6

Master data represented in the SAP system for our purposes covers the core business objects

Master data is the core data that is essential to operations in a specific business or business unit. It is the primary focus of the discipline of Master Data Management (MDM). Master data is not transactional data as such but is called up from a specific database area to be included in transactional documents; such as purchase orders, sales orders etc.

数据是对特定业务或业务单位中的操作至关重要的核心数据。它是主数据管理（MDM）学科的主要关注点。主数据本身不是事务数据，而是从特定数据库区域调用以包含在事务文档中;例如采购订单，销售订单等

A Master Data object, such as a customer, can be used by more than one module. Each module may only be concerned with different aspects of the Master Data

The reason of implement master data management:(考点）

•Better Partner integration and collaboration

•Global demand and supply chain optimisation

•Privacy and data protection

•Better implement data mining and analytics

•Improved customer insight and interactions

•Better able to manage data

•

Master data management make sure every department has a same view of data(one consistent view of data), other else Master data generated and trapped in silos.

Benefits with implementing SAP:

real time integration,
software modules designed on best practice, configurable to map to an organisation's activities,
workforce with access to information on a real time basis

Additionally:
Expected business benefits:
Cost reductions through increased productivity
Re engineered business processes and improved information flows for decision support
Encouraged teamwork due to seamless integration across different functions

Challenge with implementing all SAP system
Configuration is limited to the SAP way of doing business
– Forcing organisations to change their way of operating rather than adapting the software

SAPs high level of integration made it complex and hard to configure
– Outside help is required from consulting firms to ensure successful implementation
– Consultant help is costly and hard to come by
– Consultants not always good at their job

SAP implementations suffer from time and cost overruns

Which implementation approach to take – Big Bang or phased implementation?

Big Bang approach:risky
同时实行 SAP modules all at the same time 导致同时需要大量的资源,employee resistances.
Phased approach: Less risky to the success of the implementation
公司按照计划更新且实行在有限地方(smaller chunks),因此,Less resistance from staff as only certain departments are affected.但项目时间较长，会导致成本高于 big bang approach

Big Bang approaches are risky
– Requires going live with all newly implemented SAP modules all at the same time
– Significant project number of resources required at one time
– many different projects occurring at same time
– High level of resistance from staff Decided to use the phased approach
– Less risky to the success of the implementation

– Project management easier in smaller chunks
– Less resistance from staff as only certain departments are affected
– Key implementation learnings can be transfer to next phase of the implementation

Phased approach

Slower than Big Bang
– May take years to complete implementation of all the modules More expensive than Big Bang
– reason:
– Interfaces have to be written that connect parts of the existing (soon to be replaced) system with the newly implemented SAP modules
– Some of the configuration in the earlier stages may need to be adjusted or replaced in later stages
– If the implementation takes up to three to five years to complete software that was first implemented may need to be upgraded or new versions implemented before the full implementation complete
– This requires further project resourcing, consultant support and possibility of training
– Thus adding to the cost of the overall implementation

Three phase approaches
Phase 1 – Finance controlling, account receivables, accounts payable, purchasing and essential material modules were implemented (Sept 2006)
Phase 2 – Materials management module, production planning and quality management modules (April 2007)
Phase 3 – Plant maintenance module (Sept 2007) SAP Modules were to have permanent interfaces to several existing systems such as payroll, Leitstand and freight billing NB: Leitstand is a PC based production

Configuring vs customising（考点）

Customization:– Adding new fields/Tables as per client requirements.
– customise or adapt the system to your business requirements, which is the process of mapping SAP to your business process.
– It involves code changes to create functionality that is not available through configuration
– Customization can be costly and can complicate future upgrades to the software because the code changes/modifications may not easily migrate to a newer version.

Configure: (Preferred method) Selecting specific functionality from a list provided in the software

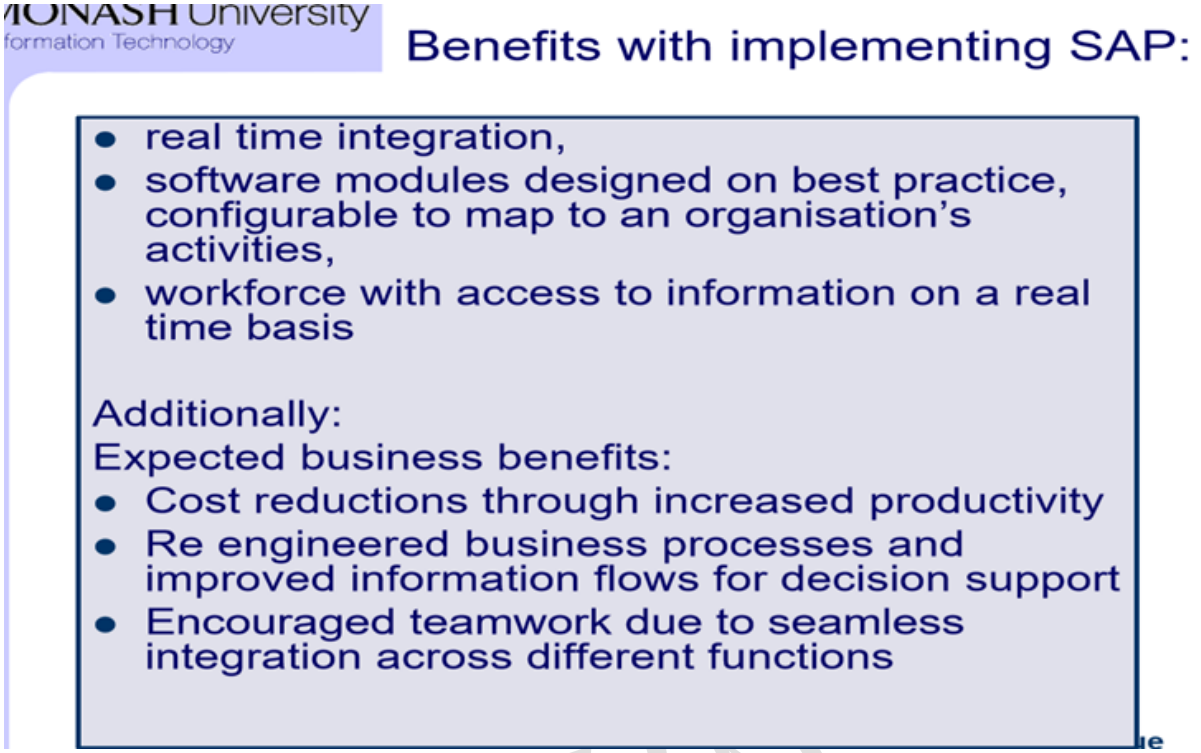
– setting defaults/ use tools in the system to change its behaviour Determines what the system will do and how its parts will interact Does not change code Need to conduct business process analysis

Workflow: Workflows enable the electronic workflow management of structured flows that:

- Cover a sequence of activities
- Always occur in the same or similar form
- Involve several departments or people

Workflows *control the information process flow* according to a predefined model. Workflows are especially suited for structured organizations divided into departments or divisions.

Week7 & 8



MRP

MRP takes the end product requirements from the MPS and breaks them down into their component parts and subassemblies to create a materials plan. •This plan specifies when production and purchase orders must be placed for each part and subassembly to complete the products on schedule.

• The main purposes of an MRP system are:
- Control inventory levels : "order the right quantity of the right part at the right time".
- Assign the correct priorities to items.
- Plan the capacity.

In the MRP there are three major inputs:

•Inventory status

•Stock of materials used in production. It is updated as stock is received from vendors and as stock is sent out to manufacture the final product

•MPS

•Provides a diary showing which jobs will be done, the order in which they will be done, which work group or machine will do the work and when each job should start and end.

•BOM

•Is a listing of all components, including partially assembled pieces and basic parts that make up an end product

Material Master Data

The material master record is the main material data source in the enterprise.

Material data is integrated into one single database object:

Designed to reduce data redundancy

Bill of Material ： 材料清单

is a structured **list of the components** which make up the product or assembly.

The list contains the material code of each component as well as the quantity per and unit of measure.

BOM 会被用在 Material resources planning, procurement 和 producing costing 部分。

Work centre：

is where an **operation or activity is carried out within a production plant**.

The work centre may be a single machine, a group of machines, or an area where a particular type of work is done

Routing:明确生产步骤

contains the steps necessary to convert raw materials into components during production. This includes the operations, their sequence and the work centres that will do the work.

Cost centres:记录生产和采购过程中所花费的费用

Cost Centres are used to collect the actual costs from one or more work centres.

Manager and staff responsible for cost, not for revenue

在公司中，Cost centres 可作为一个部门

Benefit of material planning process for company:

–increasing customer satisfaction,

–increasing productivity and

–decreasing overall operating costs

Inventory 存货： is the stock of any item or resource used in an organization.Inventory 能自己生产也能从外面购买.

production order:

is an order issued to produce a **specific quantity of material within a certain timeframe**.

A production order captures information such as which material is to be processed, at which location, at what time and how much work is required. It also defines which resources are to be used and how the order costs are to be settled.

Procurement Process

1.Requirement planning transfer to purchase order
2.Determine source of supply (货源) and
3.Selection vendor(供应商）
4.Sending purchase order to the vendor
5.Vendor send stock to us(company)
6.We (company) creates a good receipt, company will verity the stock based on purchase order.
7.We(company) receives invoice from vendor and enter invoice detail information
8.We make payment to vendor. The vendor will received payment (注意 accounting module 变化）

The chart of accounts contains master data fields, the content of which applies to all of the company codes assigned to the chart of accounts. These include account number and account name. The company code level contains fields with contents which may differ from company code to company code, for example currency and the open item management fields. You must maintain these fields separately for every company code stored.

Week 9 &10

Sales organization 的功能：
–distributing goods and services
–negotiating sales conditions
–products liability and recourse
A sales organization 会分配给一个 uniquely company code. A company code can have more than one sales organisation
Distribution channel (销售途径)is way of sale material to reach the customers.
Distribution strategy:
•Whole trade
•Retail trade
•Internal trade
A sales organization 必须最少有一个 Distribution channel
Division is way of sale material to reach the customers.
Distribution strategy:
•Whole trade
•Retail trade
•Internal trade
A sales organization 必须最少有一个 Distribution channel.

Plant Location: the place or location keep material.

Plant 会被多个 module 用到，例如：Production planning, Material management, Sales and Distribution module

Master data in Sales and distribution Module

Sales process： When the **goods issue(created in Material management module)** is posted，**MM module and FI module will be involved.**以下活动会被进行**(考点)**

- The **quantity in inventory management** and **delivery requirements** in material planning are updated.
- The **value change in the balance sheet accounts** for inventory accounting is posted (The postings from the relevant accounting documents are based on the cost of the material).
- The system creates further documents for Financial Accounting.
- The billing due list is generated.
- The status in all relevant sales documents is updated.

General Ledger

when good receipt created, an accounting document will be produced.Accounting document 会更新总账(general ledger)中 inventory 的账户.

The General Ledger is a company's set of numbered financial transactional accounts for its accounting record and for taxation purposes.

The ledger holds financial transactional account information that is needed to prepare financial statements and includes accounts for assets, liabilities, owners' equity, revenues and expenses.

Main categories:
Assets
Liabilities
Owner's equity
Revenue
Expense
Supports the items identified in the major financial statements：主要功能：生成以下报表
–Profit and Loss
–Income Statement
–Cash Flow Statement
–Balance Sheet

应收账款应付账款自己了解一下

内部会计控制是企业为鉴别、分析、分类、记录和报告业务经营及其相关活动并对有关资产和负债负责而建立起来的会计方法和措施，是内部控制的核心内容。内部会计控制的基本要求是： 完整的会计记录 (完整性)，及时的会计反映 (及时性)，业务及修改活动的合理描述 (合理分类)，对业务及相关活动适当计量 (恰当估价)，对业务及相关活动的披露和揭示 (充分披露)等

•Controlling provides you with information for management decision-making.

•It facilitates coordination, monitoring and optimization of all processes in an organization.

•This involves recording both the consumption of production factors and the services provided by an organization.

(考试会给你 SAP 的一些截图让你 define 一些名词例如：G/L， master data 等，然后会问有什么用处，好处，类似于 sample 的 section1 里面的题。所以要了解 SAP 里面的一些重点 app 的 function，像 assignment2 的问题一样知道他们是干嘛的）

Week 11 考点

Business intelligence（BI）is the process of gathering information in the field of business. It can be described as the process of enhancing data into information and then into knowledge. Business intelligence is carried out to gain sustainable competitive advantage, and is a valuable core competence in some instances

Purpose of Business intelligence is support better business decision making.
Data is from Data warehouse or Data mart

Data warehouse is the back room database. It use to manages all aspects of data and provides the ability for the data to be transformed into information.

Business intelligence refers to systems and technologies that provide the ability to query, access and analyse and measure meaningful information

The reason of implement master data management:(考点）

- Better Partner integration and collaboration
- Global demand and supply chain optimisation
- Privacy and data protection
- Better implement data mining and analytics
- Improved customer insight and interactions
- Better able to manage data

习题

Explain the importance of “product costing” as related to material management in the ASP S/4 HANA system manufacturing system

ANS： Each material is costed based on the cost of the raw material, work centres and routing either when purchased from the vendor or developed by the company, this cost are accumulated and apportioned to provide the final cost to make final material .this information is located in the material master data. When material cost increase from vendors or offshore these costs have to be updated in the material master data of the material and go to increase the final cost of the product to the customer cia controlling

Another important module in S/4 HANA, as it is in any ERP system, is the accounting module.
A. As you know the accounting module is comprised of two components:
Name the two components
B. Describe the fundamental differences between the two components

Ans
A. Financials & Management controlling
B. financials is for external reporting of ALL financial transactions for legal reporting purposes to the external tax department of the country – financial reports include P&L and Balance sheet/cashflow.
Management controlling: is used for managing expenses and profits for materials and departments within the organisation and these expenses and profits directly flow from financial transaction occurring

Explain the importance and use of transactional documents in the S/4 HANA system. Name one transactional document that you have used in the SAP system.
ANS: Definition: Transactions are application programs which execute business processes in the ECC6 System. The majority of processing that is conducted in the SAP system are the role of transactions which progress the process tasks onto the next process task.
They usually result in creating a range of documents such as a customer order, posting an incoming payment, or approving a leave request.

Fully describe the significance of ‘master data’ in an ERP system.（SAP 里的名词都需要看）

ANS: Master DataSynchronised copies of detailed information about core business entities or objects (such as customers, vendors; materials) ,all application users link to a single core repository of the master data ensuring one version of the truth the data is specifically structured so that the data does not change over time but is kept in the repository and copied as it is needed into company documents

It is often stated that a business process is the ‘heartblood’ of an ERP system. Discuss what is meant by this statement and include in your answer a definition of a business process.
ANS: Business processes are the heart blood of an organisation and ensure the organisation runs efficiently and effectively.

A business process describes a sequence of activities or tasks for the creation of goods and services, affecting the success of the company and is driven by a transaction carrying the data around the organisation via transactional documents.
When BP are not functioning correctly ie too many manual processes, slow process structures where the process runs slow and holds up other steps then costs start to escalate, impacts on the organisation which is not efficient and this degrades competitive advantage ; therefore processes need to be continuously updated and improved to ensure efficiency

why companies implemented ERP systems

Business process 3 个 + Expenditure + Competitive advantage + Customer + Data visibility + Strategy tool + Acquisition + Decision Making

Cloud based:
SAS – pay as you use – no maintenance costs
Upgrades and enhancement packs are included in the monthly fees
So no major IT overheads
Can configure the system if needed
Data saved in the cloud
On premise:
Costly
Need experienced and dedicated IT team to manage the hardware and software system

Hybrid:
A combination of cloud and on premise (see recommendation

Discuss the difference between configuration and customisation

Vanilla implementation 定义

BPR BPI BPM ERP CRM CSM BI 定义 优缺点

digitally transformed 数字转型例子 （滴滴打车 墨尔本送餐）

sample 一定要看