Rood is relevant voor skypesessie 1

**Question 1**

![Diagram showing three directions]

**Uitleg figuur:** De 3 pijlen komen overeen met de drie directions (customer intimacy, operational excellence etc). Als onderneming moet je je focussen op 1 richting, en de andere richtingen ‘handhaven’. Je kan je niet focussen op alle directions want dat zal fout gaan. Survival, succes en prosperity duiden aan hoe de onderneming het zal doen in de markt.

*Different economic and organizational theories contribute to our knowledge of IS strategy.*

*a. Explain the contribution of the Resource Based View to the discussion of IS strategy. How does it differ from the Porter approach?*

The contribution of the RBV to ISS is that this approach can also be used in the discussion of what the strategy should be instead of defining a business strategy with it. So a company should have a look at his current systems and what they are capable of with that systems. Until the 1990’s the approach to defining strategies was based on establishing objectives and then defining how to achieve them. The RBV implies a closer examination of an organization’s assets, skills, knowledge processes, culture etc. More than just the objectives.

The 3 directions are

- Customer intimacy (best service voor de klant).
- Operational Excellence (beste performance, lage kosten).
- Product leadership (beste product).
The same can be said about porters generic strategies. It is developed to create a business strategy, but it can also be used to create a ISS. Porter says you should only pick one of the traits: cost leadership, differentiation or focus, and excel in this. The Tracey and Wiersema’s approach says you should pick one aspect of the following: customer intimacy, operational excellence or product leadership, and excel in it, but still keep the other 2 aspects on an acceptable level.

Based on the Resource Based View, Treacy and Wiersma distinguish three ‘value disciplines’ that are important to acquire a good competitive position.

b. Explain with the help of the figure above how this model can support the IS/IT investment decision making.

When making a new IS/IT investment the position where the company is can be applied to this model in combination with where the company wish it was on this model. The application can be also put on this model, will it increase customer intimacy/operational excellence. If the investment focus on parts that the company don’t want to increase the current level of operating but focusses on a different part of the 3 directions it might not fit with the companies strategy.
Question 2

a. Explain how the Business Balanced Scorecard and Critical Success factors can support Information Systems Strategy. What part of IS strategy will it support in particular?

The BSC and CSF in combination provide a way of obtaining agreement as to the priority of IS investments relevant to achieving the explicit business objectives for the next 6-12 months. P.206

b. Give a detailed analysis how both the BSC and CSF can be combined in one of the value disciplines mentioned in question 1 to support IS strategy.

“The outputs from the construction of the Balanced Scorecard and the CSF analysis can be combined to provide a more comprehensive set of IS requirements. The Balanced Scorecard links measures to business objectives, while CSF analysis identifies what is critical to achieving results. Together, both techniques provide a rigorous assessment of prioritized IS opportunities, given the current business strategy.” (Ward & Peppard, page 213)
One of the key strategy areas for IS/IT is Governance and Administration:
a. In this regard, explain per quadrant in the figure above the intended organizational arrangements
Ways to organize IS demand

- Centralized model: the corporate board decides.
- Decentralized model: the SBUs and functional managers decide.
- Hybrid model: decision rights for the corporate board and for the SBU boards and functional managers.

b. Give an example per quadrant of a typical area of decision-making and motivate why this area belongs to that particular quadrant.

With regard to demand management:

c. Discuss the organization of demand management in a company with multiple lines of business. Give different options and discuss advantages and drawbacks.

Je kan demand management centraal regelen, decentraal en een hybrid.
d. Who should be made responsible for demand management? Give different options and discuss advantages and drawbacks.

Zie antwoord C. Bij centaal is senoir management verantwoordelijk. Bij decentaal zijn het line manager en users. Bij Hybrid is iedereen deels veantwoordelijk.

**Question 4**

*Interoperability and connectivity of information systems are key issues in modern business models. Information sharing within business processes and across multiple lines of business is essential for any business strategy that claims to be customer oriented.*

a. Discuss four solutions that enable information sharing in a business with different IS/IT platforms.

1. Single vendor solution (vb. SAP)
2. Point to point integration (vb. 2 systemen uit je bedrijf integreren)
3. Data Access (vb. data warehousing/cloud)
4. Integration using middleware (vb. EDI, voor informatie dealing met vendor(s))

b. **Give at least one advantage and disadvantage of each.**

1. It can be one integrated system for example, so all software is connected.
   If the vendor finished, you are fucked. Ook deze oplossingen kan duur zijn (Sap is duur)
2. disadvantage: when you change something in an application than it can be that because of coupling other applications might not work. Advantage: Redelijk makkelijk in te voeren.
3. Advantage: fast access to information. DisAdvantage: High costs because of use of a lot of servers (dion: and more costs because of more security aspects).
4. With an EDI you don’t have to change your own systems, but to configure the right middleware can be time consuming and costly.
   Het duurt wel heel lang om te ontwikkelen.

**There is no question 5 in the exam, probably a mistake that was never corrected.**

**Question 6 – Chapter 1 – figure 1.7 – page 42 (leidraad 57 geeft meer info)**

An application portfolio consists of applications which can be labeled as : strategic, high potential, key operational or support. Strategic is defined as “applications that are critical to sustaining future business strategy”. High potential is defined as “applications that may be important in achieving future success.”

a. **Provide an example of “strategic” application : describe the company and context.**
   For a manufacturing company: CRM system, Direct Marketing and Telesales System

b. **Provide an example of “high potential” application : describe the company and context.**
   Stel dat BMW een applicatie ontwikkeld voor smartphones/tablets om de consument zijn auto te laten starten voordat hij naar zijn werk rijdt, dan is dit voor BMW een high potential applicatie. BMW is er niet van afhankelijk wat betreft de current business performance, maar het kan voor BMW in de toekomst enorme klanttevreden opleveren. Vooral in landen waar het erg koud is en de consument zijn auto dus elke dag moet krabben kan het enorm waardevol zijn voor BMW.

   For a manufacturing company: EDI system, Online customer specification system
Question 7 – Chapter 3 – figure 3.5 – page 142

There are four dimensions of change: defend, rationalize, transform and attack. For rationalization continuous improvement and TQM are characteristics. For attack focused innovation and competitive advantage are characteristics.

a. Describe a company and its context which should implement their IS/IT strategy by “rationalization”. (=rustig geleidelijk veranderen?)

b. Describe a company and its context which should implement their IS/IT strategy by “attack”. (=radicaal ineens veranderen?)

Bedrijven waar het heel slecht gaat zouden een vernieuwde IS/IT strategy moeten implementeren door “attack” omdat ze alles moeten doen om hun business objectives te halen en het risico wel kunnen nemen om een radicale verandering door te voeren.
The information flow in the value chain (from supply, to conversion to product & logistic services to consumption) sometimes causes issues. Please explain the issues by providing 2 examples related to different parts of the value chain.

We nemen aan dat de value chain 2 parts heeft, de interne VC en de externe VC. De interne zien we als een enkele schakel. De externe bestaat uit alle schakels aan een gekoppeld een line of business.

Een extern probleem is dat er onnodig hoge of lage voorraad gehouden wordt doordat schakels in de chain niet weten hoeveel er besteld gaat worden. Dit kan o.a. komen doordat er geen integratie is tussen informatiesystemen (tussen de schakels). Informatie komt te laat binnen, waardoor niet duidelijk is hoeveel voorraad er nodig is.

Een intern probleem kan zijn dat een sales manager een bepaalde verkoop doet voor een te lage prijs omdat aan hem de verkeerde kostprijs van het product is doorgegeven door een medewerker van procurement.
**Question 9 - Chapter 7 – figure 7.5 – page 319**

The application portfolio consists of: strategic, support, key operational and high potential. The generic IS strategies consist of: monopoly, free market, leading edge, scare resources and centrally planned.

a. Explain why the IS strategy “free market” is related to both “high potential” and “support”.

De free market strategie werkt extra goed als een line manager precies weet wat zijn objectives zijn en duidelijke target heeft gesteld. In dit geval lopen de kosten niet uit te hand en is er geen chaos. Als de manager dit goed kan uiten dan zal de applicatie zich ontwikkelen tot high potential. Het nadeel is dat als iedereen dit doet, dan wordt integraatie steeds lastiger en duurder. Daarom werkt het niet als je het altijd toe past.

| Table 7.3 Rationale and requirements for generic strategies (source: after Parsons) |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| **Centrally planned** | **Leading edge** | **Free market** | **Monopoly** | **Scare resource** |
| Management rationale | Central coordination of all requirements will produce better decision making | Technology can create business advantages and risks are worth taking | Market makes the best decisions and users are responsible for business results | Information is a corporate good and an integrated resource for users to employ | Information is a limited resource and its development must be clearly justified |
| Organizational requirements | Knowledgeable and involved senior management Integrated planning of IS/IT within the business planning process | Commitment of funds and resources Innovative IS/IT management Strong technical skills | Knowledgeable users Accountability for IS/IT at business or functional level Willingness to duplicate effort Loose IT budget control | User acceptance of the philosophy Policies to force through single sourcing Good forecasting of resource usage | Tight budgetary control control of all IS/IT expenses Policies for controlling IS/IT and users |
| IT role | Provide services to match the business demands by working closely with business managers | Push forward boundaries of technology use on all fronts | Competitive and probably profit centre—intended to achieve a return on its resources | To satisfy users’ requirements as they arise, but non-directive in terms of the uses of IS/IT | Make best use of a limited resource by tight cost control of expenses and projects. Justify capital investment projects |
| Line managers and users role | Identify the potential of IS/IT to meet business needs at all levels of the organization | Use the technology and identify the advantages it offers | Identify, source and control IS/IT developments | Understand needs and present them to central utility to obtain resources | Identify and cost-justify projects Passive unless benefits are identified |

b. Explain why the IS strategy “monopoly” is linked to “key operational.”

Een key operational application moet precies doen wat de manager wilt. Daarom is het goed als er een centraal beleid voor is (monopoly). Zodoende krijg je hoge integratie van je applicaties wat Als je voor elke applicatie een aparte aanpak moet maken, dan wordt het een chaos. Daarom zijn er 5 generieke strategiëen die je moet kiezen om succes te behalen (per applicatie).
In chapter 2 Ward and Peppard describe a strategic framework that encompasses the factors, which have to be taken into account in strategic information systems planning (SISP): 'the external environment', pressure groups and stakeholders', and 'internal business strategizing and planning'.

a. What is meant by 'external environment'? Describe its relevant components and how they can be analyzed in the SISP process. Elaborate one of these components.
PEST analysis. *(Political, economical, social, technological factors)*

**b. What is meant by ‘pressure groups and stakeholders’. What is difference between pressure groups and stakeholders. Give an example how one of these can affect SISP.**

Pressure groups are characterized by making demands of the organization. they require that the enterprise acknowledges their existence and the effect they can have, and they expect appropriate responses from management to satisfy their particular interest.

Stakeholders have a direct financial interest in the organization, and demand a fair share of the wealth created. All expect some form of material and financial benefit from the success of the organization.

Main difference: Expecting financial return.

Effect on SISP: ???

**c. An important decision for ‘internal business strategizing and planning’ is the scope of the planning. What factors have to be weighed to determine the scope of SISP. What are the consequences for the Information Systems Strategy.**

Quote: “in the development and derivation of strategies, it is important to consider both the enterprise as a whole and the individual business units.

**Question 2 (a: 14 points; b: 6 points c: over 9000 punten)**

*The process of SISP starts with fact finding and analysis. One of the subjects to be included concerns the ‘Internal Business Environment’. Describe and explain: a. What is meant by 'Internal Business Environment” and b. what of its elements have to be identified and understood, and c. for each why they need to be part of a SISP process.*

a. Current business strategy, objectives, resources, processes, and the culture and values of the business.
**Question 3** (a: 14 points; b: 6 points)

*a. Discuss and exemplify how the assessment of organisational competences in the dimensions of customer intimacy, operational excellence and product/service leadership, can help ensure IS and IT investments are linked effectively to an organisation's business strategy.*

*How does it differ from the 'Porter Approach'?*

**Question 4** (a: 10 points; b: 10 points)

*Many organizations implement ERP systems.*

*a. Explain in detail how the 'Location of IS/IT decision rights' framework discussed during the lectures relate to ERP.*

Rechtsboven in het IS/IT decision rights framework

*b. Explain for each of the four quadrants what would be the consequence if it would be the dominant perspective for the ERP implementation.*

Decentraal dan verliest ERP zijn waarde aangezien ERP voornamelijk dient om informatie centraal te regelen. Dit geldt voor business decentraal en IT/IS decentraal.

Een ERP is een key operational application die men koopt va ee leverancier om je eigen business te ondersteunen verbeteren. Dit valt aan de IT supply kant. Het is dus nooit slim omeen ERP te implementeren uit een demand perspective.
Question 5 (a: 10 points; b:10 points)

As discussed in chapter 10 shareability of data is a critical concern of Information Asset Management. Sharing of information may be needed at different organizational levels: functions within a SBU (Strategic Business Unit), between different SBUs, but also on an inter-organizational level between independent companies.

a. Discuss three strategies that make it possible to share information between different Information Systems.

b. Discuss advantages and disadvantages for each strategy
**Question 1 : (figure 1.6)**

*There is a relationship between business, IS and IT strategies. The IS strategy is focusing on "What" is required and the IT strategy is focusing on "How it can be delivered".*

**a. Argue why Chief Information Officers should spend most their time on the IS strategy (two arguments).**

1e argument De IT strategie zorgt ervoor dat de IS strategy kan worden uitgevoerd. In feite gaat de IS strategy de onderneming waarde opleveren en niet de IT strategy. De CIO moet zich dus meer bezig houden met de IS strategy en de alignment met de business strategy. De IT strategy wordt deels bepaald door (IT) mensen dus voor de CIO is het belangrijk wat zijn IT strategy mogelijk maakt. Zodoende kan hij met een goede IS strategy de IT capabilities laten herrijzen uit den doodt.

De IS strategie zegt wat er precies benodigd is en de IT strategy zegt hoe dit moet worden gedaan. De IT strategie is dus zeer afhankelijk van van de IS strategie. Eerst moet er op een IS strategy gefocused worden. De IT strategy volgt dan vrijwel uit de IS strategie.

**b. Argue why there is an information flow in the relationship between business, IS and IT strategies, take into account the bottom up information flow and explain the top down information flow.**
**Question 2** : (figure 3.7)

Relationship and information demand/supply. IT supply consists of applications, information technology, resources and operational methods. The demand is a corporate demand and a business demand.

a. Give two examples of corporate information needs that are no business information needs

Corporate information needs support long-term planning and allocation of resources, and draw on consolidated information from the business units.

- aandelen
- totale omzet, totale kosten, totale winst en andere CSFs voor het hele bedrijf

b. Give two examples of business information needs that are no corporate information needs

- Product sizes (3cm x 3cm x 3cm (e.g. toys))
- Cleaning schedule

![Balanced Scorecard Diagram](image)

**Question 3** : (figure 4.5)

The Balanced Scorecard of Kaplan and Norton include four perspectives: financial perspective, internal business perspective, innovation and learning perspective and customer perspective.

a. Detail two objectives per perspective for an invoicing application of a national utility company
Financial perspective:
- Cost effective  
  Budget opstellen
- meer aandelen  
  aandelen emissie.
- Internal Business Perspective:
  - snelheid  
    snelle applicaties
  - flexibiliteit  
    Gestandaardiseerde data

Innovation and learning perspective
acceptable flexibiliteit
acceptable snelheid

Costumer perspective:
- interface waar je blij van word  
  net als mona  
  Alles van apple, apple is kaki
- Genoeg informatie verstrekend  
  Zo veel mogelijk informatie in pompen

**b. Detail the measures per objective as described under sub question A**
staan er achter.

**Question 4** (figure 8.4)
Hodgkinson describes the "Federal IT Organization". The federal structure is often seen as capturing the benefits of both the centralization and the decentralization. Federal IT Organization includes vision and leadership: themes, group-wide IT strategy for core infrastructure, strategic accountability to stakeholders and synergy/exploitation mechanisms.

*a. When should companies who currently have implemented the centralized model consider transforming into a federal IT organization?*

Je gaat dit doen als de bedrijfsactiviteiten te ver uit éénlopen om alles centraal te doen. Je zou dan kunnen kiezen voor een hybride vorm (federal approach) omdat de onderneming dan de voordelen van een decentrale approach ook kunnen genieten.

*b. When should companies who currently have implemented the decentralized model consider transforming into a federal IT organization?*

Als een bedrijf ook wilt profiteren van de schaalvoordelen die de federal model bied. Dit voorkomt het wiel 2x uitvinden.

**Question 5**: (figure 9.2)
In the portfolio there are four quadrants: strategic, high potential, key operational and support.

a. Explain why in the quadrant key operational the financial justification is easier than in the strategic quadrant

Because a key operational application has a high dependence on the current business performance it is easier to justify financial investment then in the strategic quadrant where the financial reward will only be achieved in the future. There is also more risks with strategic apps.

b. Explain why in the quadrant support the financial justification is easier than in the key operational quadrant.