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## OKR – KR<sup>14</sup>

1. What is (are) the essence of the KR of OKR?
  - 1) KR - Key Result, is a quantitative statement
  - 2) KR - Key Result, measures the achievement of a given objective
  - 3) KR - Key Result, is a broad qualitative goal
  - 4) KR - Key Result, is a Task or a KPI
2. What does OKR mean?
  - 1) Operational Knowledge Records

- 2) Operational Key Records
  - 3) Objectives & Key Results
  - 4) Objectives & Key Records
3. An effective KR is:
- 1) Quantitative
  - 2) Specific
  - 3) Connected to performance evaluation and bonuses
  - 4) Not numeric
4. What is the essence of the O of OKR?
- 1) O - Objective, is a broad qualitative goal
  - 2) O - Objective, is a specific quantitative goal
  - 3) O - Operation, is an operational context
  - 4) O - Operation, is a broad company-wide KPI
5. What is the definition(s) of OKR?
- 1) OKR is a system to measure a team's performance
  - 2) OKR is a system to assign tasks and bonuses
  - 3) OKR is a way to create focus in the organization
  - 4) OKR is a system to support the ongoing business of the company.
6. Which ones of the following are amongst the problems solved by OKRs?
- 1) Poor alignment and people engagement
  - 2) Unclear and poorly shared organization strategy
  - 3) Insufficient clarity of roles and internal processes
  - 4) Lack of control
7. Which ones of the following are amongst the benefits of using OKRs?
- 1) Clarity and agile design of the strategy
  - 2) Clarity of roles and internal synergies
  - 3) Efficiency of delivery
  - 4) Empowerment of management
8. How should OKR be designed
- 1- Easy to reach.
  - 2-Transparent.
  - 3- Ambitious.
  - 4-Measurable.
9. How should OKR be designed?
- 1) Measurable
  - 2) Transparent
  - 3) Easy to reach
  - 4) Ambitious.

10. What does OKR mean?

- 1) Open Known Records
- 2) Objective and Key Results
- 3) Obvious Key Rate
- 4) Overall Known Results.

11. What does OKR mean?

- 1) Overall Known Results
- 2) Open Known Records
- 3) Obvious Key Rate
- 4) Objectives & Key Results

12. Which ones of the following are amongst the problems solved by OKRs?

- 1) Task specialization
- 2) Unclear and poorly shared organization strategy
- 3) Lack of control
- 4) Insufficient clarity of roles and internal processes

13. Which ones of the following are amongst the benefits of using OKRs?

- 1) Greater sense and meaning of work at all levels
- 2) Clarity and agile design of the strategy
- 3) Clarity of roles and internal synergies
- 4) Efficiency of delivery

14. What is the definition(s) of OKR?

- 1) OKR is a system to measure a team's performance
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## CO-Creation<sup>6</sup>

1. Co-creation can be:
  - 1) Direct, i.e. customer participation in the innovation process is deliberate (aware) and active.
  - 2) Indirect: innovation occurs by taking advantage of the suggestions, comments, and opinions that customers provide in a variety of ways (call center, corporate site, social media...) without making them explicitly part of the innovation process (and related decision-making tasks).
  - 3) Direct, when companies use the sales force to contact customers.
  - 4) Direct when it is face-to-face.
2. Why should listening be the first step of co-creation initiatives?
  - 1) Because listening can be automated and provided to customers themselves as a service.
  - 2) Because companies should be aware of the spontaneous suggestions, comments, and opinions provided by customers on social media.
  - 3) Because communication should be the first step of co-creation.
  - 4) Because listening can provide indications on all the inputs provided by customers that can be useful for product/service innovation.
3. Please tick the correct statement(s) on co-creation
  - 1) Co-creation can be direct or indirect
  - 2) Co-creation is a product/service innovation paradigm based on the cooperation between a supplier and the potential customer product/service
  - 3) Listening can provide indications on all the inputs provided by customers that can be useful for indirect co-creation

4) It is always advisable to start co-creation with a pilot based or direct co-creation

4. Please tick the correct statement(s) on co-creation

1) It is always advisable to start co-creation with a pilot based or direct co-creation

2) Co-creation can be direct or indirect.

3) Co-creation is a product/service innovation paradigm based on the cooperation between a supplier and the potential customer product/service.

4) Listening can provide indications on all the inputs provided by customers that can be useful for indirect co-creation

5. The statement: "It is always wise to start with indirect co-creation before embarking on direct co-creation ." is:

1) Not always false.

2) False

3) Not always true.

4) True

6. The statement: "It is wise to start with indirect co-creation before embarking on direct co-creation." is:

1) Not always false.

2) True

3) False

4) Not always true

# Social-Media – Viral Marketing – Crowdsourcing<sup>20</sup>

1. Please, tick statement(s) that correctly apply to social media.
  - 1) Social media are Web 2)0 sites, i.e., sites that support any form of sharing of user- generated content by leveraging the social relationships among individuals.
  - 2) social media reduce the time frame of social relations (e.g., keeping track of past work relationships with LinkedIn connections)
  - 3) social media reduce the barriers of knowledge sharing (e.g., Slide share) and, thus, reduce the Klout of knowledge holders
  - 4) Social media increases the importance of knowledge holders (called influencers).
2. Tick correct classes of social media:
  - 1) eCommerce sites
  - 2) online auction sites
  - 3) forums
  - 4) content sharing sites
3. What is the correct definition of social media?
  - 1) Social media are Web sites or mobile apps supporting social interactions.
  - 2) Social media represents any technology supporting information exchanges among individuals.
  - 3) Social media are Web 2)0 sites, supporting the sharing of information by leveraging social relationships among individuals.
  - 4) Social media represents Web-based broadcasting channels.
4. What are correct reasons why people trust social media information?
  - 1) People trust social media information as a consequence of the wisdom of the crowd principle
  - 2) People trust social media information because it is produced by peers
  - 3) People trust social media information because they think that if a post is wrong somebody would disconfirm it.
  - 4) People trust social media information because it is produced by experts
5. Please, tick the correct statement(s) on social media.
  - 1) Social media increases the barrier of knowledge sharing.
  - 2) Social media can be effectively used as Web based broadcasting channels.
  - 3) Social media can create new social relationships.
  - 4) Social media can change the time frame of social relations

6. Please, tick the correct statement(s) on social media.
- 1) Social media increases the barrier of knowledge sharing.
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7. What is the correct definition of social media?
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  - 4) Social media represents web-based broadcasting channels
10. Please, tick the correct statement(s) on viral marketing.
- 1) Viral marketing is typical of social media and cannot occur on broadcasting channels
  - 2) On social media, marketing is viral, i.e., it takes advantage of the ability of all users to become broadcaster.
  - 3) Viral marketing occurs on broadcasting channels.
- Which company is a typical example of Staff on Demand adoption.
- 1) Microsoft.
  - 4) The success of viral marketing is based on the ability of a company to understand the difference between broadcasting and communication channels.



11. What is the correct definition of social media?
- 1) Social media are web sites or mobile apps supporting social interactions.
  - 2) Social media represents any technology supporting information exchanges among individuals.
  - 3) Social media are Web 2.0 sites, supporting the sharing of information by leveraging social relationships among individuals.
  - 4) Social media represents web-based broadcasting channels.
12. Please, tick correct differences between social media monitoring and listening platforms.
- 1) Social CRM performs listening through surveys, direct interaction, manual monitoring X (e.g., fan pages). Listening is typically automated.
  - 2) Listening should be broad and include posting from non-members of private-label X networks (e.g., non-fan)
  - 3) Unlike social CRM, listening should not be performed to understand a brand's competitive position.
  - 4) Listening is technically simple, while social CRM is more complex.
13. Why is a multimedia online catalog preferable to a product catalog in pdf?
- 1) Because hyperlinks make it easier to find the right content.
  - 2) Because a pdf must be downloaded and cannot be classified as an online service.
  - 3) Because product information is natively organized as a hypertext.
  - 4) Because browsing across product categories facilitates cross-selling.
14. What is a good estimate of annual text data size for global social media? (e.g., Twitter)
- 1) 5TB
  - 2) 25 TB
  - 3) 1PB
  - 4) 10 PB
15. Please tick the correct statement(s) on crowdsourcing
- 1) Crowdsourcing is synonymous of offshoring
  - 2) Crowdsourcing is the act of sourcing tasks traditionally performed by specific individuals to a group of people or community (crowd) to an open call.
  - 3) Crowdsourcing is powerful because of the wisdom of the crowd
  - 4) Crowdsourcing is a distributed problem-solving and production mode.
16. Please, tick the correct statement(s) on the "wisdom of the crowd"
- 1) The wisdom of the crowd is that makes crowdsourcing so powerful

2) The wisdom of the crowd hypothesizes that a crowd of non-experts can provide an average better estimate of some phenomena than the estimate provided by any expert taken individually

3) The wisdom of the crowd is a distributed problem-solving and production model

4) The wisdom of the crowd is a generally accepted principle stating that the crowd has more knowledge than experts.

17. Please, tick the correct statement(s) on the "wisdom of the crowd".

1) The wisdom of the crowd is a generally accepted principle stating that the crowd has more knowledge than experts.

2) The wisdom of the crowd is what makes crowdsourcing so powerful.

3) The wisdom of the crowd hypothesizes that a crowd of non-experts can provide an average better estimate of some phenomena than the estimate provided by any expert taken individually.

4) The wisdom of the crowd is a distributed problem-solving and production-model.

18. Please, tick statement(s) that correctly apply to the wisdom of the crowds.

1) The wisdom of the crowd has emerged as a consequence of the Web and social media.

2) The wisdom of the crowd has been disconfirmed and is no longer valid

3) The wisdom of the crowd principle states that the collective opinion of a group of individuals is better than the opinion of a single expert.

4) The wisdom of the crowd is not generally valid

19. Please tick correct components of social

1) Link rating

2) Smart working

3) File sharing

4) Task management

20. What are the typical drawbacks of social listening platforms?

1) Listening is considered uninteresting since social buzz cannot provide additional insights, given that companies have CRM data

2) The quality of data is low since companies typically use syntactic listening tools

3) Listening is considered a risky activity

4) Using semantic listening tools is difficult since they are not "ready to use" and involve a long set up before providing results

## Project management<sup>5</sup>

1. Which of the project management knowledge areas includes the processes required to ensure that the various elements of the project are properly coordinated?
  - 1) Project Integration Management
  - 2) Project Coordination Management
  - 3) Project Communication Management
  - 4) Project Procurement Management
2. Which of these is NOT a project management knowledge area?
  - 1) Project Efficiency Management
  - 2) Project Production Management
  - 3) Project Time Management
  - 4) Project Procurement Management
3. Project management processes can be organized into five groups of one or more processes each, they are:
  - 1) Initiating, Planning, Executing, Controlling, Closing X
  - 2) Initiation, Planning, Definition, Verification, Change Control
  - 3) Definition, Sequencing, Estimating, Controlling, Closing
  - 4) Estimating, Planning, Executing, Controlling, Closing
4. Waterfall PM:
  - 1) Is a linear approach to soPware development
  - 2) Consists in working on pieces of requirements
  - 3) Is an iterative, team-based approach to development
  - 4) Emphasizes the rapid delivery of an application in complete functional components.
5. Select the PM typical of research and development projects.
  - 1) Traditional PM
  - 2) Waterfall PM
  - 3) Agile PM
  - 4) Extreme PM

## Project<sup>2</sup>

1. Tick the correct definitions.
  - 1) ...
  - 2) A portfolio is a set of projects, ... with the same scope.
  - 3) The start and end of a project are known at the beginning.
  - 4) A project can have a non-fixed scope.

2. Please tick the correct statements about projects
  - 1) A project, differently from a process, has always a beginning and an end, which are always known and fixed when the project starts
  - 2) A portfolio is a set of related projects, programs, sub portfolios, and operations managed as a group to achieve a unique goal
  - 3) A program is a project with a specific goal and a fixed amount of time and resources
  - 4) The scope in a project could be not well defined at the beginning.

## Scheduling<sup>3</sup>

1. Please, tick the correct statements about scheduling development
  - 1) Fast tracking has the goal to shorten the project duration by adding resources on the critical path
  - 2) Crashing may result in increased risk
  - 3) Resource smoothing has the goal to adjust resource usage, but it may not be able to optimize all the resources
  - 4) Fast tracking may result in increased risk
2. Please, tick the correct statements about RACI
  - 1) R stands for resource
  - 2) It is a hierarchical-based tool for organization charts and position descriptions
  - 3) It is a matrix-based tool for organization charts and position descriptions
  - 4) A stand for Authority.
3. Select the tool that helps you to visualize your project schedule containing different tasks and their deadlines.
  - 1) HR Breakdown
  - 2) Gantt Diagram
  - 3) Business Model Canvas
  - 4) Bar Chart

## Collaborative filtering<sup>1</sup>

1. What is collaborative filtering?
  - 1) It is an algorithm that selects recommendations based on past purchasing behaviour of customer segments .
  - 2) Is an approach to design a recommendation system.
  - 3) It is an approach to design a Web catalogue.
  - 4) It is an algorithm that selects recommendations based on each customer's past purchasing behaviour.

## BOT – inversion of paradigm<sup>1</sup>

1. Why are BOTs related to the so-called "inversion of paradigm"?
  - 1) Because the BOT is designed with a no-coding approach.
  - 2) Because the BOT adapts to the user's language as opposed to having the user adapting to a predefined interface.
  - 3) Because the current trend is to develop a mobile app equipped with APIs for BOTs.
  - 4) Because users are reached on the apps that they use most frequently, typically messaging apps such as Messenger or Telegram.

## Algorithm<sup>1</sup>

1. (Question about Algorithm (Frugieuele))
  - 1) lower production costs.
  - 2) Lower error rate stabilizes growth.
  - 3) Easily updated
  - 4) Allow full scalable products & services.

## Business project processes – PMBOK<sup>1</sup>

1. Which are business project processes according to PMBOK?
  - 1) Integration management
  - 2) Risk management
  - 3) Performance management
  - 4) Procurement management.

## Risk management<sup>2</sup>

1. Please, tick the correct statements(s) about risk management
  - 1) One of the main goals of risk score is to drive risk response
  - 2) The risk urgency could be combined with risk score to better assess the risk
  - 3) The main goal of risk management is to avoid the occurrence of any kind of risk through techniques like the probability/impact matrix
  - 4) Risk cannot be accepted in a project.
2. Tick the correct Activity(ies) in Risk Management.
  - 1) Identify risks.
  - 2) Perform qualitative risk analysis.
  - 3) Plan risk response.
  - 4) Perform quantitative risk analysis.

## MPT<sup>2</sup>

1. What does MTP mean?
  - 1) Massive transformative purpose
  - 2) Major transfer price
  - 3) Most tested product
  - 4) Main technology profit.
2. What is content-based filtering?
  - 1) It is an algorithm that selects recommendations based on the similarity of products or product categories.
  - 2) It is an approach to design a Web catalogue.
  - 3) It is an algorithm that selects recommendations based on the complementarity of products or product categories.
  - 4) Is an approach to design a recommendation system.

## N1 priority<sup>1</sup>

1. What's the N1 priority when conducting experimentation
  - 1) Empower branding
  - 2) Best design
  - 3) Cost of product
  - 4) Customers' needs.

## Natural Language Processing(NLP)<sup>2</sup>

1. Why is Natural Language Processing (NLP) still challenging?
  - 1) Because in some applications (e.g., speech to text) input data are low quality and this reduces accuracy.
  - 2) Because NLP involves an ability to manage multiple languages.
  - 3) Because NLP is not scalable.
  - 4) Because some applications require very high precision which is not easy (or economically feasible) to achieve.
2. Why is Natural Language Processing (NLP) still challenging?
  - 1) Because some applications require very high precision which is not easy (or economically feasible) to achieve.
  - 2) Because in some applications (e.g., speech to text) input data are low quality, and this reduces accuracy.
  - 3) Because NLP is not scalable.
  - 4) Because NLP managing multiple languages is still a challenge, especially if acceptable error levels are low.

## Preconditions<sup>1</sup>

1. Which preconditions does interfaces need?
  - 1) Standardized processes to enable automation
  - 2) Skilled personnel.
  - 3) Algorithms.
  - 4) Scalable externalities.

## Demonetization<sup>1</sup>

1. What is demonetization?
  - 1) Absence of cash
  - 2) A Digital Exchange Platform
  - 3) The rise of crypto currencies
  - 4) Marginal costs of supply and services near to zero.

## scope management<sup>1</sup>

1. Which processes among these belong to scope management?
  - 1) Collect requirements.
  - 2) Sequence activities.
  - 3) Create WBS.
  - 4) Scope budget.

## Engagement <sup>1</sup>

2. Which ones are among the key attributes of engagement?
  - 1) Peer pressure
  - 2) Ranking transparency
  - 3) Free scheduled time
  - 4) Fast scalable workforce.

## Campaign<sup>1</sup>

1. What is the main phase(s) of a campaign?
  - 1) Planning and budgeting, execution, evaluation.
  - 2) Planning and budgeting, design, execution, evaluation.
  - 3) Planning and budgeting, design, evaluation.
  - 4) Planning budgeting, execution, evaluation.

## Lean management<sup>4</sup>

1. What's Lean Management
  - 1) It's a management practice that aims to promote continuous improvement
  - 2) It's a management practice derived by 2000's dot.com management discipline
  - 3) It's a Software Development approach
  - 4) It's a management practice derived by 1980's Japanese manufacturing management discipline.

## AI (artificial intelligence)<sup>5</sup>

1. Why should AI be related to business KPIs?
  - 1) Because with AI we embed (or support) «decisions» inside software and decisions should be driven by business KPIs
  - 2) Because AI is pervasive and has a strong impact on all the business processes of an organization
  - 3) Because AI enables analytics which in turn enable better decisions
  - 4) Because AI is associated with big data that enable the extraction of value from data
2. Why should AI be related to business KPIs?
  - 1) Because with AI we embed (or support) «decisions» inside software and decisions should be driven by business KPIs.
  - 2) Because otherwise quantitative evidence almost exclusively comes from suppliers of technology solutions.
  - 3) Because decisions are made to manage exceptions, gain flexibility and, hence, be more competitive. Given that AI automates decision making tasks, it has an impact on competitiveness which should be measured.
  - 4) Because the benefits of AI/machine learning use cases are rarely quantified
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  - 3) Because the benefits of AI/machine learning use cases are rarely quantified.
  - 4) Because with AI we embed (or support) «decisions» inside software and decisions should be driven by business KPIs.
5. What is visual search?
- 1) Visual search is an emerging type of recommendation system.
  - 2) Visual search is a functionality of an e-commerce site that matches an image uploaded by a customer with a retailer's closest image in their catalog.
  - 3) Visual search is based on AI (computer vision and image recognition).
  - 4) Visual search aims at enabling consumers to take a picture of a product in order to search for it online.

# Maintenance Process<sup>8</sup>

1. What are the steps of the ideal maintenance process?
  - 1) Contact-visit-KM
  - 2) inbound contact-outbound contact-visit-KM
  - 3) contact-visit-invoice
  - 4) inbound contact-outbound contact-visit
2. What are the most impacted by efficient and effective maintenance processes enabled by WFM functionalities?
  - 1) Customer satisfaction
  - 2) Price competitiveness
  - 3) Customer loyalty
  - 4) Market reach
3. What are the key actions towards the ideal maintenance process?
  - 1) Generate invoices automatically at the end of maintenance activities during the visit to the customer.
  - 2) Integrate the manufacturer's information systems with its customers' information systems to be able to Exchange information electronically.
  - 3) Implement a Knowledge Management process to help call center operators.
  - 4) Implement embedded technologies to help prevent emergency maintenance.
4. Which are the most impacted by efficient and effective maintenance processes enabled by WFM functionalities?
  - 1) Price competitiveness
  - 2) Customer Satisfaction
  - 3) Customer Loyalty
  - 4) Market need
5. Please, tick statement(s) that correctly apply to an emergency maintenance process that is not supported with an ERP.
  - 1) The call center operator does not ask questions that help understand the issue.
  - 2) The workforce does not sell maintenance contracts.
  - 3) The invoice is not prepared and printed by the workforce at the end of the maintenance intervention.
  - 4) Problem is typically fixed with two visits.
6. What are the activities of an ideal (ERP-supported maintenance process?

- 1) Contact, appointment, visit, knowledge management
  - 2) Procurement, intervention, invoicing
  - 3) Contact, visit, knowledge management
  - 4) In-bound call, appointment, visit, invoicing
7. Please, tick statement(s) that correctly apply to an emergency maintenance process that is not supported with an ERP.
- 1) The invoice is not precise and is often wrong.
  - 2) Problem is typically fixed with two visits.
  - 3) The workforce does not sell maintenance contracts.
  - 4) The call center operator does not ask questions that help understand the issue.
8. Why is maintenance costly?
- 1) Because it requires expensive spare parts.
  - 2) A maintenance request is often generic and multiple visits are needed to specify customers' needs.
  - 3) Because it is difficult to support with IT. Only companies with a high-quality core ERP can manage maintenance correctly.
  - 4) Because it is often mismanaged.

## Contact Center<sup>4</sup>

1. What are components of a fully automated contact center?
  - 1) IVR
  - 2) Webchat

- 3) Campaign management
  - 4) Automated leaflets.
2. Please, tick the following statements if they represent advantages of an integrated contact center.
    - 1) The CSR has the ability to serve multiple customers at the same time through the web chat line.
    - 2) Customers can interact with their CSR across multiple channels simultaneously.
    - 3) The customer can participate in loyalty programs with a greater awareness of the benefits.
    - 4) The CSR has real-time access to all customer data, including the latest actions that the customer has performed on the Web IS of the company.
  3. Please, tick the following statements if they represent advantages of an integrated contact center?
    - 1) The customer can participate in loyalty programs with a greater awareness of the benefits
    - 2) The CSR has the ability to serve multiple customers at the same time through the web chat line
    - 3) Customers can interact with their CSR across multiple channels simultaneously
    - 4) The CSR has real-time access to all customer data, including the latest actions that the customer has performed on the Web IS of the company
  4. What are the important features of the IT architecture of the integrated contact center?
    - 1) It integrates the telephone channel with other channels, typically the We2)
    - 2) Multiple channels can be used simultaneously (e.g., Webchat)
    - 3) It is relatively inexpensive.
    - 4) Different groups of operators are used to answer inbound requests and manage outbound communication (campaign management).

## Dutch – Auction<sup>4</sup>

1. How does a Descending (or Dutch) auction work?
  - 1) The vendor sets a minimum price. The product is sold to the last highest offer (with timeout).
  - 2) The vendor sets a maximum price that is decreased by a fixed amount at regular time intervals down to a minimum price. The product is sold to the first client offering to buy at the current price.
  - 3) All customers make an undisclosed offer within a given time frame. The product is sold to the second highest offer.

4) The vendor sets a maximum price that is decreased by a fixed amount at regular time intervals down to a minimum price. The product is sold to the second client offering to buy it at the current price.

2. How does a Dutch (descending) online auction work?

1) The auction starts at a low price. Participants enter their offers one by one in a sequence. Each subsequent offer must be higher than the previous one and, of course, the initial price. The product is sold to the participant making the highest last offer.

2) The auction starts at a low price. Participants enter their offers one by one in a sequence. Each subsequent offer must be higher than the previous one and, of course, the initial price. The product is sold to the participant making the second highest offer.

3) A Dutch type of auction is based on a simultaneous secret offer made by all participants. The product is sold to the second highest offer.

4) The auction starts at a high price. Price is automatically lowered by a fixed amount at fixed time intervals. The first participant stopping the auction gets the product.

3. What are the three main types of online auctions?

1) Dutch, descending and Vickery

2) Ascending, English and Vickery

3) English, descending and Vickery

4) Ascending, descending and Dutch

4. How does a Dutch (descending) type online auction work?

1) The auction starts at a low price. Participants enter their offers one by one in a sequence. Each subsequent offers more than of course the initial price. The product is sold to the participant making the second highest offer.

2) The auction starts at a high price. Price is automatically lowered by a fixed amount at fixed time intervals. The first claiming gets the product.

3) A Dutch type of auction is based on a simultaneous secret offer made by all participants. The product is sold to the highest.

4) The auction starts at a low price. Participants enter their offers one by one in a sequence. Each subsequent offers more than of course the initial price. The product is sold to the participant making the highest last offer.

## Knowledge – Knowledge management<sup>10</sup>

1. Knowledge is:

1) A state of mind

2) A process.

3) A thing to be stored and manipulated

4) A capability.

2. What are typical class(es) of knowledge in knowledge management (KM)?

1) Tacit knowledge

2) Individual knowledge

3) External knowledge

4) Collective knowledge.

3. Why is RBV (the Resource-Based View of the firm) the right theoretical basis for knowledge management (KM)?
  - 1) Because RBV views the organization as a set of resources and knowledge is an organizational resource.
  - 2) Because RBV simplifies knowledge management and helps overcome the barriers of bounded rationality.
  - 3) Because RBV focuses specifically on knowledge.
  - 4) Because knowledge management is a process aimed at improving a company's competitiveness and RBV explains the features that make organizational resources a source of sustained competitive advantage.
4. How can we assess the success of a knowledge management (KM) initiative?
  - 1) Access to incentive systems
  - 2) KM project survival
  - 3) Maturity of KMS
  - 4) Evidence of financial benefits.
5. What are the advantages of buying a knowledge management system in a law firm?
  - 1) Because it can be a huge source of pride to a firm.
  - 2) Because outsourcers provide a higher level of service at a lower cost.
  - 3) Because a system shared across companies is not limited to one company's intellectual property.
  - 4) Because it allows companies to retain control over content.
6. What is the correct definition of modern knowledge management?
  - 1) Modern knowledge management is a continuous learning process on customers and suppliers
  - 2) Modern knowledge management is the process with which information is transformed into useful knowledge that can increase profits
  - 3) Modern knowledge management is a process supporting call center operators when asking questions to customers in different contexts (maintenance, marketing, support, et3))
  - 4) Modern knowledge management is a process that supports innovation by leveraging on the possession of data, on the ability to contextualize information and trying knowledge to action
7. What is the technocratic Knowledge Management strategy?
  - 1) It is a strategy that strongly relies on the adoption of information and management technology.

- 2) It is a strategy that focuses on formal techniques for connecting people who need to share knowledge.
  - 3) It is a strategy that focuses on knowledge bases and related technologies (e.g. Wikis, knowledge repositories, et3))...
  - 4) It is a strategy that focuses on knowledge processes that can strongly benefit from the adoption of Information Technology.
8. What are the three strategies to manage knowledge within organizations:
- 1) Technocratic, organizational, and behavioral
  - 2) Technocratic, social, and behavioral
  - 3) Technocratic, economic, and personal
  - 4) Technocratic, economic, behavioral.
9. Please tick statement(s) on "knowledge" on which there is general substantial agreement in the literature.
- 1) Knowledge comes from the possession of data.
  - 2) Knowledge is strictly tied to creativeness and the ability to contextualize general # advice, expertise, best practices in a given situation.
  - 3) Knowledge is raw data endowed with meaning .
  - 4) Knowledge is strictly tied to "action" (making choices, learning about the environment, innovating,...).
10. What is tactic knowledge?
- 1) Knowledge that cannot be codified, and which resides in the expertise/competences of people and groups of people.
  - 2) Knowledge that resides within the mind and the action of individuals.
  - 3) It represents any kind of organizational knowledge.
  - 4) It represents any kind of individual knowledge.

## WFM<sup>6</sup>

1. Which statement(s) correctly apply to WFM?
  - 1) WFM stands for Work Force Management.
  - 2) WFM supports the work force, that is employees with technical skills who are in charge of maintenance processes
  - 3) WFM is part of CRM
  - 4) WFM is part of extended ERP
2. What are the most impacted by efficient and effective maintenance processes enabled by WFM functionalities?
  - 1) Customer satisfaction
  - 2) Price competitiveness
  - 3) Customer loyalty
  - 4) Market reach.
3. Tick the correct statement(s) on WFM.
  - 1) WFM is the component of Supply Chain Management
  - 2) WFM is a set of functionalities supporting maintenance processes

- 3) The work force represents the employees that are in charge of maintenance processes for products installed at the customer's premises
  - 4) WFM support both routine and emergency maintenance, by reducing routine maintenance in favor of emergency maintenance.
4. Please tick the management issue(s) of OTIS elevators (before the implementation of WFM).
- 1) They experienced a decrease in market share in the maintenance market
  - 2) Lowering prices to a competitive level would make OTIS maintenance processes # non profitable.
  - 3) Urban areas are the most profitable areas for maintenance services and decreasing price would significantly reduce profitability.
  - 4) The decrease in market share was faster in urban areas where smaller competitors provided maintenance services at a lower price.
5. The ideal maintenance process of WFM (work force management) has three steps: contact, visit, KM. Is this correct?
- 1) No, there is also the invoicing step.
  - 2) Yes.
  - 3) Yes, but only for large-scale manufacturing companies.
  - 4) No, there is also the outbound call step.
6. What are enabling technologies of WFM (work force management)?
- 1) Mobile technologies.
  - 2) Embedded technologies.
  - 3) CRM.
  - 4) SCM.



# Web Information Systems(WIS)<sup>11</sup>

1. What are typical issues in WIS design?
  - 1) Design a navigation structure for internal users
  - 2) Retrieve information
  - 3) Constantly update information
  - 4) Graphics.
2. What is statement(s) that correctly apply to WIS?
  - 1) The Internet is a network that has brought connectivity to individuals    companies are connected with their retail customers
  - 2) The Web is a window on a company's processes (and their performance)
  - 3) The Web is the enabling technology of extended ERP
  - 4) The Web is an enabling technology of the call center
3. Please, tick the correct statements on web information systems (WIS).
  - 1) Being competitive on the Web is more difficult than being competitive with traditional (physical) distributions channels.
  - 2) With WIS, for the first time in the history of ISs companies are connected with their retail customers.
  - 3) WIS provide all companies with access to a global customer base and allow    any local company to leverage their local excellence to compete globally.
  - 4) For a company to be competitive, the quality of web sites should be high,    irrespective of the quality and level of integration of the underlying    information system

4. Please, tick the correct definition of Web Information System (WIS)
  - 1) A web information system is an e-commerce or an e-business service
  - 2) A web information system is an information system that includes Web- based functionalities.
  - 3) A web information system is any system where machines communicate through the internet and functionalities can be accessed whit a browser.
  - 4) A web information system is a web site, irrespective of the owner (be it an institution, a company, an individual, .... ).
  
5. Please, tick the correct definition of WIS.
  - 1) A web information system is any system where the machines communicate through the internet and functionalities can be accessed by the browser
  - 2) A web information system is an e-commerce or an e-business service.
  - 3) A web information system is a web site, irrespective of the owner (be it an institution, an individual.)
  - 4) A web information system is an information system that includes web- based functionalities.
  
6. What are the main quality criteria of a WIS?
  - 1) Content, i.e., the quality of the information and services provided by the site (completeness, dependability, et3))
  - 2) Responsiveness, i.e. the ability to contact service representatives (CRS) in real time.
  - 3) Navigation, i.e. the quality of the navigation paths, their intuitiveness, et3)
  - 4) Structure, i.e. the graphical quality of the WIS.
  
7. What advantages of a WIS with so-called federated structure?
  - 1) The quality of information is typically higher
  - 2) Implementation and management costs are lower compared to centralized structure
  - 3) The customer experience is enhanced by a clear perception of the organizational structure
  - 4) Information can be retrieved and updated in different organizational units without need for a centralized structure.
  
8. What advantages of a WIS with so-called federated structure?
  - 1) Implementation and management costs are lower compared to

centralized structure  
 2) The quality of information is typically higher  
 3) The customer experience is enhanced by a clear perception of the organizational structure  
 4) Information can be retrieved and updated in different organizational units without need for a centralized structure

9. What are the advantages of a WIS with a so-called federated structure?
  - 1) Information can be retrieved and updated in different organizational units, without a need for a centralized editorial service.
  - 2) The timeliness of information is typically lower.
  - 3) Implementation and management costs are lower, compared to a centralized structure.
  - 4) The customer experience is enhanced by a clear perception of the organization.
10. What is key innovation(s) with Web Information Systems?
  - 1) The Web is the enabling technology of customer relationship management (CRM) and allows the omni-channel integration of service distribution.
  - 2) The Web has given companies and, particularly, SMEs access to a global customer base.
  - 3) The Web has enabled company growth.
  - 4) The Web is based on the Internet which has brought connectivity to individuals.
11. What are key innovation(s) with Web Information Systems?
  - 1) The Web is the enabling technology of customer relationship management (CRM) and allows the omni-channel integration of service distribution.
  - 2) The Web has enabled company growth.
  - 3) For the first time, the Web has connected companies with their retail customers.
  - 4) The Web has given companies and, particularly, SMEs access to a global customer base.

# Present Value – NPV – PDM – IRR – potential competitor<sup>13</sup>

1. When net present value is less than zero you:
  - 1) Should not invest
  - 2) Should invest
  - 3) Should find new investors
  - 4) Should provide more capital.
2. Please, tick the correct statements on IRR
  - 1) The higher a project's IRR, the more desirable it is to undertake
  - 2) It is the discount rate that makes the net present value of all cash flows equal to zero
  - 3) It is the discount rate that makes the net present value of all cash flows greater than zero
  - 4) The IRR is used to estimate the success probability of a project
3. Please, tick the correct statement(s) on IRR.
  - 1) The IRR is used to estimate the success probability of a project
  - 2) It is the discount rate that makes the net present value of all cash flows equal to zero
  - 3) It is the discount rate that makes the net present value of all cash flows greater than zero
  - 4) The higher a project's IRR, the more desirable it is to undertake
4. Assuming the costs of investment are equal among projects A and B, which is the best?
  - 1) If IRR of A is  $>$  IRR of B, the best is A
  - 2) If NPV of A is  $<$  0, the best is A
  - 3) If IRR of A is  $>$  IRR of B, the best is B
  - 4) If NPV of A is  $>$  0, the best is A
5. You should invest when:
  - 1)  $NPV > 0$
  - 2)  $NPV = 50\%$  of the investment
  - 3)  $PDM > 0$
  - 4)  $NPV = IRR$
6. You should invest when:
  - 1)  $PDM > 0$
  - 2)  $NPV > 0$
  - 3)  $NPV < 0$
  - 4)  $r = 50\%$

7. Consider an investment of 10.000 in a new product. It is estimated that it will provide a profit of 1)000 each year, for 12 years. Please, tick the correct statement(s).
- 1) According to NPV, if the annual discount rate is low enough, the investment will be profitable.
  - 2) According to NPV, the investment is profitable
  - 3) According to NPV, the investment is not profitable.
  - 4) According to NPV, if the annual discount rate is 20%, the investment will not be profitable.
8. Please tick the correct statement(s) on NPV.
- 1) It evaluates the ability to produce future revenues as projected, factored by the risk in your plan.
  - 2) Generally, an investment with a positive NPV will be profitable, and an investment with a negative NPC will result in a net loss
  - 3) Its value gives an indication regarding the profitability of an investment.
  - 4) NPV takes into account the fact that money in the future is worth more than the same amount in the present
9. Please, tick the correct statements(s) on NPV.
- 1) Generally, an investment with a positive NPV will be profitable, and an investment with a negative NPC will result in a net loss
  - 2) It evaluates the ability to produce future revenues as projected, factored by the risk in your plan.
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  - 4) NPV takes into account the fact that money in the future is worth more than the same amount in the present.
10. Please tick the correct statement(s) on NPV:
- 1) Generally an investor with a positive NPV will be profitable and an investment with a negative NVP will result in a new look
  - 2) NVP takes into account the fact that money in the future is worth more than the same amount in the present plan
  - 3) Its value gives an indication regarding the profitability of an investment
  - 4) It evaluates the ability to produce future revenues as projected, factored by the risk in your
11. A "potential competitor" is:
- 1) Someone who is doing something different - either in terms of market and/or product/service - but could be a competitor with a limited effort
  - 2) Someone who is operating in the same market segment offering your same product/service or something very similar
  - 3) Someone who is doing something similar - either in terms of market and/or product/service - and could be a competitor with a limited effort

4) Someone who is operating in a different market segment offering your same product/service or something very similar

12.PDM:

- 1) Is the sales amount required to cover total costs
- 2) If  $PDM > 0$ , you should do the investment
- 3) If  $PDM < 0$ , you should do the investment
- 4) Is a technique used for constructing a schedule model.

13.PDM:

- 1) If  $PDM < 0$ , you should do the investment
- 2) Is the sales amount required to cover total costs
- 3) If  $PDM > 0$ , you should do the investment
- 4) Includes 4 types of dependencies

## Sales Force Automation(SFA)<sup>6</sup>

1. What are the main goals of sales force automation?

- 1) To provide CRM front-end functionalities to the sales force in both B2C and B2B
- 2) Reduce the costs of customer acquisition.
- 3) Enable customer care through the call center.
- 4) Allow customer care in self-service mode.

2. CRM has originated from integration of two software packages.

- 1) Sales force automation and customer service support.
- 2) Sales force automation and campaign management.

- 3) Sales force automation and customer data analytics.
  - 4) Sales force automation and work force management.
3. CRM originated from the integration of two software packages. Please tick the correct names of these two packages.
- 1) Sales Force automation and Customer Service Support
  - 2) Sales Force Automation And campaign management
  - 3) Sales Force Automation and Customer Data Analytics
  - 4) Sales Force Automation and Work Force Management
4. What are the historical packages that have been integrated into CRM principle
- 1) Front end and back end according to multi-channel integration principle
  - 2) Sales force automation and Web information System
  - 3) Sales force automation and customer service support
  - 4) Sales force automation and integrated contact center.
5. Which are correct advantages(s) of integrating SFA (Sales force automation) functionalities into a company's information system?
- 1) Agents can be rewarded with a performance-based incentive system that calculates the agents' benefits based on their efficiency and effectiveness
  - 2) The customer catalog is no longer a "property" of the sales agent
  - 3) The work schedule of the sales agent is stored in the company's operational database, and this facilitates the replacement of agents
  - 4) The supplier catalog is no longer a "property" of the sales agent.
6. What are advantage(s) of SFA (sales force automation)?
- 1) Better governance of the sales force X
  - 2) Stronger sales capabilities
  - 3) Better integration with ERPs
  - 4) Horizontal integration of the operational portfolio

## Company<sup>6</sup>

1. Which company is a typical example of Staff on demand adoption.
  - 1) Accenture
  - 2) Google
  - 3) Microsoft
  - 4) Uber.
2. What's company's purpose
  - 1) It's the goal to remune the shareholders.
  - 2) It's the entrepreneur's internal scope
  - 3) It's their multi-year plan
  - 4) It's the impact the company is willing to have on the world.
3. What's a company's purpose
  - 1) It's the goal to remunerate the shareholders
  - 2) It's the impact the company is willing to have on the world
  - 3) It's the enterpreneur's internal scope
  - 4) It's their multi-year plan.
4. Among the followings, what are the typical information services of a company site?
  - 1) Product configuration (excluding price)
  - 2) Product information such as the product catalog



- 3) Financial information such as the balance sheet
  - 4) Information on the status of customers' orders.
5. Is Amazon a data driven company?
- 1) Yes, they are the only company that have a patent that allows them to ship goods before an order has even been placed
  - 2) Yes, from 2015 onwards.
  - 3) Yes, it has always been the epitome of data-driven company
  - 4) Yes, from 2010 onwards.
6. Which of the following companies introduced cross-departmental transparency:
- 1) Volvo
  - 2) Haier
  - 3) Tesla
  - 4) Zappos

## Moore's Law<sup>2</sup>

- 1. What type of growth is approximately drawn by Moore's Law?
  - 1) A quadratic growth
  - 2) An exponential growth
  - 3) A linear growth
  - 4) A logarithmic growth.
- 2. Why Moore's Law is relevant in Management Practices
  - 1) Because computers are used in every branch of business
  - 2) Because it defines how computer science is deeply affecting business
  - 3) Because companies can save money buying new computers
  - 4) Because fast evolving technologies require new approaches to management.

## Machine learning <sup>2</sup>

- 1. Please, tick correct statement(s) on the concept of "ground truth" in machine learning.
  - 1) The ground may not be available due to the costs of data collection.
  - 2) The ground truth is necessary in supervised learning.
  - 3) The ground truth can be obtained with empirical measurement campaigns.
  - 4) The ground truth is data on the «true» behavior or status of a system.

2. Please, tick correct statement(s) on the concept of "ground truth" in machine learning.
  - 1) The ground truth is data on the «true» behavior or status of a system.
  - 2) The ground truth is not always available.
  - 3) The ground may not be available due to the costs of data collection.
  - 4) The ground truth can be obtained with empirical measurement campaigns.

## Hadoop<sup>1</sup>

1. What is Hadoop designed and optimized for?
  - 1) Hadoop is not optimized for random read performance
  - 2) Hadoop is designed and optimized for transaction processing
  - 3) According to the write-once-read-many model, Hadoop works well for analytics, less so for transaction processing
  - 4) Hadoop is designed and optimized for sequential read performance or files.

## CRM<sup>23</sup>

1. What are functional areas of CRM?
  - 1) Mining
  - 2) Campaign management
  - 3) Executive CRM
  - 4) Legacy CRM
2. Please, tick the correct statement(s) on social CRM.
  - 1) Social CRM is a module of CRM supporting the social interactions among a company's customers.
  - 2) Social CRM's main goal is to support campaign management through social media.
  - 3) Moderation, reputation management, dashboards and reports represent typical administrative functionalities of social CRM.
  - 4) Discussion forums, message boards, surveys, polls and voting represent typical user functionalities of social CRM.
3. What are typical social CRM user functionality(ies)?
  - 1) Surveys
  - 2) Discussion forums
  - 3) Dashboards
  - 4) Reports.
4. The macro-modules of the functional architecture of CRM are:
  - 1) CRM back end, CRM front end, operational CRM
  - 2) Executive CRM, CRM back end, management CRM
  - 3) Executive CRM, CRM back end, Operational CRM
  - 4) Executive CRM, CRM front end, operational CRM.

5. Please, tick the correct definition of "multi-channel integration" in the context of CRM.
- 1) multi-channel integration refers to the integrated Datawarehouse that supports multichannel operations.
  - 2) Multi-channel integration represents an integrated process of product and service delivery that can use multiple distribution channels, such as call center, Web and agents.
  - 3) Multi-channel integration represents an integrated process of product and service delivery that can guarantee service consistency across different distribution channels
  - 4) Multi-channel integration represents an integrated process of product and service delivery that can use multiple distribution channel such that customers have access to exactly the same functionalities across all channels.
6. Please, tick the correct statement(s) on CRM.
- 1) Operational CRM includes the call-center.
  - 2) Operational CRM supports the interaction with customers through multiple channels.
  - 3) Operational CRM supports face to face distribution channels.
  - 4) Operational CRM supports all operational processes of a company.
7. Please, tick the correct statement(s) on CRM.
- 1) CRM is a set of functionalities supporting the management of a company's relationship with its customers.
  - 2) CRM involves a paradigm shift in the management of customer relationships towards one-to-one marketing.
  - 3) CRM is a module of the extended ERP.
  - 4) CRM is a module of the core ERP.
8. Please, tick the correct definition of "multi-channel integration", in the context of CRM.
- 1) Multi-channel integration represents an integrated process of product and service delivery that case use multiple distribution channels, such as call-center, web and agents.
  - 2) Multi-channel integration refers to the integrated Datawarehouse that supports multichannel operations.
  - 3) Multi-channel integration represents an integrated process of product and service delivery that can use multiple distribution channels in such a way that customers have access to exactly the same functionalities across all channels.
  - 4) Multi-channel integration represents an integrated process of product and service delivery that can guarantee service consistency across different distribution channels.
9. Please, tick the correct statement(s) on CRM back en4)
- 1) CRM back end is the set of modules managing the CRM operational D2)
  - 2) CRM back end is synonymous for campaign management.

- 3) The main (but not the only) modules of CRM back end are analytical CRM and campaign management.
  - 4) CRM back end is composed of batch modules only.
10. Please, tick the functionalities that belong to CRM systems.
- 1) multi-channel front end functionalities
  - 2) Customer analytics.
  - 3) Marketing campaign management.
  - 4) Call center.
11. CRM has originated from integration of two software packages.
- 1) Sales force automation and customer service support.
  - 2) Sales force automation and campaign management.
  - 3) Sales force automation and customer data analytics.
  - 4) Sales force automation and work force management.
12. Which of these are activities of the administrator of social CRM?
- 1) Events management.
  - 2) Moderation.
  - 3) Ratings.
  - 4) Polls and voting.
13. Please, tick the correct definition of "multi-channel integration" in the context of CRM.
- 1) Multi-channel integration represents an integrated process of product and service delivery that can use multiple distribution channel such that customers have access to exactly the same functionalities across all channels.
  - 2) Multi-channel integration represents an integrated process of product and service delivery that can use multiple distribution channels, such as call center, Web and agents.
  - 3) Multi-channel integration refers to the integrated Datawarehouse that supports multi-channel operations.
  - 4) Multi-channel integration represents an integrated process of product and service delivery that can guarantee service consistency across different distribution channels.
14. What are typical social CRM administrative functionalities?
- 1) Events management
  - 2) Moderation
  - 3) Polls and voting
  - 4) Ratings
15. What are the typical four phases of campaign management in CRM packages?
- 1) Planning and budgeting, design, execution, and evaluation of the campaign
  - 2) Design, piloting, execution, and evaluation of the campaign
  - 3) Design, piloting, execution, and fine tuning of the campaign

4) Planning and budgeting, execution, evaluation, and fine tuning of the campaign.

16. What is the relationship between Analytic CRM and Executive CRM?

- 1) Analytic CRM is used to identify new KPIs (related to managing the relationship with customers) that can become part of the standard set of KPIs in the Executive CRM only if they are found to be impactful
- 2) Analytic CRM is in charge of reporting for the marketing function
- 3) Analytic CRM is part of the operational CRM
- 4) Analytic CRM is not integrated with ERP, it is the only module of CRM that can be considered a stand-alone package

17. Please, tick typical KPIs of executive CRM.

- 1) Stock levels of raw materials
- 2) Customer acquisition costs.
- 3) Customer service quality.
- 4) Number of customer claims per time unit.

18. The macro-modules of the functional architecture of CRM are: [compare with 4]

- 1) Executive CRM, CRM front end, operational CRM.
- 2) CRM backend, CRM frontend, customer D2)
- 3) Executive CRM, CRM back end, management CRM.
- 4) Executive CRM, CRM front end, management CRM.

19. Please, tick correct statement(s) on multi-channel integration in the context of CRM

- 1) multi-channel integration means integration different distribution channels with analytical CRM functionalities.
- 2) Multi-channel integration is part of the CRM paradigm and is key to Value extraction from customer data with analytic CRM.
- 3) Multi-channel integration ensures cross-channel service consistency.
- 4) Multi-channel integration means integration of the Web, mobile, and social channels.

20. Please, tick correct social CRM user functionality(s). [compare with 12, 14]

- 1) Chat X
- 2) Polls and voting X
- 3) Moderation
- 4) Reputation management.

21. Please, tick the correct statement(s) on social CRM.

- 1) Social CRM is a module of CRM supporting the social interactions among a company's customers.
- 2) Social CRM's main goal is to support campaign management through social media.

- 3) Moderation, reputation management, dashboards and reports represent typical administrative functionalities of social CRM.
- 4) Discussion forums, message boards, surveys, polls, and voting represent typical user functionalities of social CRM.

22. What is the starting point of social CRM?

- 1) Hosting and supporting a branded or private-label community and providing the surrounding functions
- 2) Monitoring, listening-to and surveying private-label or independent social networks
- 3) Launching social campaigns
- 4) Co-creation initiatives

23. Anti-dilution rules have been created in order to protect the VC from:

- 1) Decreasing of ownership percentage
- 2) Reduction of voting control
- 3) Increasing of ownership percentage
- 4) Having an aggressive revenue projection.

## Big Data<sup>10</sup>

1. Types of big data are:
  - 1) Traditional customer data
  - 2) IoT data
  - 3) Operational data
  - 4) Executive data.
  
2. What is big data?
  - 1) Big data is «a collection of data from traditional and digital sources inside and outside your company that represents a source for ongoing discovery and analysis.» (Source: Forbes)
  - 2) Big data is any amount of data that raises technical scalability challenges for a given company due to the increasing growth rate of data and a need for continuous analysis.
  - 3) Big data is exa-size data.
  - 4) Big data is tera-size data.
  
3. Is Terabyte the right unit of measurement for big data?
  - 1) It depends on the context and on the type of data. Terabyte is the right unit if we consider traditional structured data and the company owning the data aims at executing advanced analytics.
  - 2) No, Petabyte is a more appropriate unit to measure big data.
  - 3) No, Exabyte is a more appropriate unit to measure big data.
  - 4) Yes, Terabyte represents the typical unit to measure big data.
  
4. What are types of big data?
  - 1) Traditional customer data
  - 2) Large csv files
  - 3) Hadoop HDFS files
  - 4) Conversation text data.
  
5. Please, select big data application(s) that can be classified as "targeting".
  - 1) Couponing engine
  - 2) Online recommendation engine
  - 3) Personalized communication engine
  - 4) Personalized knowledge management.
  
6. What are the correct steps to manage a big data project?
  - 1) Define use cases
  - 2) Define your business priorities
  - 3) Determine the project team
  - 4) Achieve business involvement.
  
7. What is the reason why there is a one-to-one association between big data and data analytics?

- 1) Because companies integrate their data as part of big data projects and this enables better and more insightful analytics.
  - 2) Because at a time of economic crisis companies are interested in quick wins that they can get from analyzing data.
  - 3) Because the main technical challenges are raised by analytics, even with relatively small data sizes.
  - 4) Because most companies rely on large, global consulting companies for analytics and consider data analytics as a strategic lever, especially with big data.
8. Please, tick the correct definition of big data
- 1) Big data is any large data set that must be analyzed in real time
  - 2) Big data is any amount of data that raises technical scalability challenges for a given company due to the increasing growth rate of data
  - 3) Big data is any large data set beyond the terabyte
  - 4) Big data is any large data set of structured and unstructured data
9. What are fundamental issues with big data projects?
- 1) Achieving business impact.
  - 2) Business involvement.
  - 3) Data integration.
  - 4) Technical skill shortage.
10. Are big data "big"?
- 1) YES
  - 2) NO
  - 3) They start small but grow over time and are eventually big.
  - 4) They are big enough to raise technical scalability challenges.

## value proposition<sup>2</sup>

1. A "value proposition" is:
  - 1) The value that we deliver to the customer
  - 2) Is where your company's product offer intersects with your customer's desires
  - 3) The point of contact between the company and its customers
  - 4) Types of relationships your company establishes with specific Customer Segments
2. Please, tick the correct statement(s) about the value proposition canvas
  - 1) It describes a product in terms of features, experience, and



substitutes

- 2) It describes a product in terms of features, benefits, and experience
- 3) It draws a relationship between the product and the customers
- 4) It makes into consideration only objective factors.

## Segmentation<sup>1</sup>

1. Please tick correct example(s) of behavioral data analyses for customer segmentation.
  - 1) Loyalty, from the analysis of their purchasing habits, such as frequency, recency and expenditure.
  - 2) Lifestyle, that is the behavioral orientation of customers towards online shopping vs. visiting physical stores.
  - 3) Price sensitivity, that is the orientation of customer to spend more/less money on different product categories/items.
  - 4) Customer experience, that is customer preferences in terms of distribution channels.

## Elasticity<sup>1</sup>

1. What is elasticity?
  - 1) Price elasticity indicates the expected percent change in margins compared to a percent change in price.
  - 2) The price elasticity of demand indicates the expected percent change in demand for a given product/service compared to a percent change in the price of the same product.
  - 3) Price elasticity indicates the expected percent change in price for a given product/service compared to a percent change in demand of the same product.
  - 4) Price elasticity indicates the expected percent change in sales compared to a percent change in price.

## Net present value<sup>1</sup>

1. When net present value is less than zero you:
  - 1) Should not invest
  - 2) Should invest
  - 3) Should find new investors
  - 4) Should provide more capital.

## WL Gore<sup>1</sup>

1. Which ones of the following are part of the principles that support WL Gore organizational structure?
  - 1) Control
  - 2) Waterfall
  - 3) Waterline
  - 4) Freedom

## Legacy system<sup>1</sup>

1. Which ones of the following are amongst the main problems related to the adoption of a legacy system?
  - 1) Lack of integration
  - 2) Developed and organized by process
  - 3) Dependency on few SW suppliers
  - 4) They allow and support the strategic growth of a company

## Industry 4.0<sup>1</sup>

1. According to the Industry 4.0 paradigm, maintenance has a strategic value for companies, since:
  - 1) Corrective maintenance allows service and repair measures to be undertaken at exactly the right time, just as an item is about to fail.
  - 2) Maintenance involves innovative technologies, such as cloud computing, that can enable cost reductions and make maintenance affordable.
  - 3) Preventive maintenance reduces breakdowns and failures and, therefore, increases reliability.
  - 4) Maintenance contributes to added value by preserving asset value

## Capital - incubator – venture capitalists – angels – startup<sup>4</sup>

1. People that provide capital in exchange for a share of the company and that gives from few k\$ to few M\$ (high risk investment) are:
  - 1) Venture capitalists
  - 2) Business angels
  - 3) Incubators
  - 4) Accelerators.
2. Please, tick the correct statement(s) about startups
  - 1) Incubators focus on jumpstarting economic development in a region and getting small companies to work in their office space
  - 2) Business angels focus on the brand building of the startup
  - 3) Accelerators provide capital in exchange for a share of the

company.

4) An IPO can help in the initial phase of a startup funding further expansion.

3. Companies focused on jumpstarting economic development in a region and getting small companies to work in their office space are called:
  - 1) Incubators
  - 2) Accelerators
  - 3) Venture Capitalists
  - 4) Pitch.
4. Which part of the Business Plan is optional in case of Startups?
  - 1) Business Model
  - 2) Competitors
  - 3) Solution
  - 4) Customers

## SCM - supply chain management – Pareto<sup>12</sup>

1. What is/are the goal/s of spend analysis and strategy in supply chain management (SCM)?
  - 1) To negotiate with suppliers and define a spending strategy according to their response.
  - 2) To define requirements template to be used in subsequent SCM steps.
  - 3) To identify the input materials/services with the highest levels of spending to focus subsequent SCM steps.
  - 4) To perform a market analysis and possibly identify new suppliers.
2. Please, tick statements that apply to SCM.
  - 1) The number of levels in the supply chain is typically 3: buyer, supplier, end customer.
  - 2) The number of levels in the supply chain depends on the structure of the supply chain

- 3) SCM coordinates and integrates all activities along a value chain involving multiple companies.
- 4) Flexibility is a fundamental benefit of SCM.

- 3. **How many levels of suppliers are typically managed by an SCM (supply chain management) system?**
  - 1) Two
  - 2) It depends on the structure of the supply chain
  - 3) As many as needed
  - 4) Three.
- 4. How is Pareto Law applied in Supply Chain Management (SCM)?
  - 1) To select 20% of suppliers that are responsible for 80% of the costs.
  - 2) To select 20% of input materials/spare parts/services that are responsible for 80% of the costs.
  - 3) To select 20% of products that are responsible for 80% of the costs.
  - 4) To select 20% of procurement activities that are responsible for 80% of the costs.
- 5. How is Pareto Law applied in Supply Chain Management (SCM)?
  - 1) To select 20% of procurement activities that are responsible for 80% of the costs.
  - 2) To select 20% of suppliers that are responsible for 80% of the costs.
  - 3) To select 20% of input materials/spare parts/services that are responsible for 80% of the costs.
  - 4) To prioritize SCM optimizations, focusing on the spare parts/services that involve higher costs.
- 6. **How many levels of suppliers are typically managed by an SCM (supply chain management) system?**
  - 1) Two
  - 2) It depends on the structure of the supply chain
  - 3) As many as needed
  - 4) Three.
- 7. What is phase(s) of SCM (supply chain management) continuous learning process?
  - 1) Spend analysis and strategy
  - 2) Campaign management

- 3) Loyalty programs
  - 4) Supplier relationship management.
8. What are the correct phases of supply chain management?
- 1) Spend analysis and strategy, sourcing, requirements management, and supplier relationship management.
  - 2) Spend analysis and strategy, sourcing, cost optimization, and supplier relationship management.
  - 3) Spend analysis and strategy, sourcing, requirements management, and full automation.
  - 4) Product strategy, sourcing, requirements management, and supplier relationships management.
9. Tick the correct statements on Supply Chain Management
- 1) Supply Chain Management can be implemented only by companies that have integrated core ERP functionalities.
  - 2) Supply Chain Management implements a continuous learning process to improve the management of suppliers.
  - 3) Supply Chain Management is a module of the extended ERP.
  - 4) Supply Chain Management is a component of a Web Information System.
10. Which of the following belong to "7QC tools"?
- 1) What-if analysis
  - 2) Pareto diagrams
  - 3) Cause and effect diagrams, also known as "fishbone diagram"
  - 4) Probability and impact matrix.
11. Tick the correct statements on Supply Chain Management
- 1) Supply chain management is a component a Web Information Systems
  - 2) Supply chain management can be implemented only by companies that have integrated core ERP functionalities
  - 3) Supply chain management is a module of the extended ERP
  - 4) Supply chain management implements a continuous learning process to improve the management of suppliers.
12. What is the number of levels (i.e. operators exchanging goods/ services) in a supply chain?
- 1) Three
  - 2) Four
  - 3) At least two, but most often several
  - 4) Eight

## Hierarchical – Bureaucrat<sup>5</sup>

1. Which ones of the following are amongst the main problems of Hierarchical/Bureaucratic organizations?
  - 1) Disengagement
  - 2) Lack of control
  - 3) Autonomy
  - 4) Misalignment
2. Which ones of the following are amongst the pillars of Bureaucracy according to Max Weber?
  - 1) Hierarchical authority
  - 2) Task specialization
  - 3) Formal selection
  - 4) Impersonality and Personal Indifference
3. Which ones of the following are amongst the pillars of Bureaucracy according to Max Weber?
  - 1) Task specialization
  - 2) Autonomy
  - 3) Hierarchical authority
  - 4) Formal selection
4. Which companies are pioneering new ways of organizing that evolve over traditional hierarchical management?
  - 1) Google
  - 2) Haier
  - 3) The Morning Star
  - 4) Amazon.

5. Which is the definition of the Peter's Principle?
  - 1) In a hierarchy every employee can or cannot rise to his level of max competence
  - 2) In a hierarchy every employee tends to rise to his level of max competence
  - 3) In a hierarchy every employee tends to rise to his level of incompetence
  - 4) In a hierarchy every employee's career is a consequence of his performance level.

## E-Commerce – MarketPlace<sup>5</sup>

1. Why were eCommerce sites often implemented by separate teams, often involved in rebranding initiatives (e.g. Bank24 Deutsche Bank)?
  - 1) Because new teams are always separate from established teams.
  - 2) Because developers who are skilled with new technologies are difficult to manage together with groups of developers who maintain legacy systems.
  - 3) Because before the Nov. 2000 stock exchange failure, starting a new brand (the so called "dot coms") was very convenient from a financial point of view.
  - 4) Because rebranding is necessary when innovation is disruptive
2. The term eCommerce refers to:
  - 1) Business customers
  - 2) Retail and institutional customers.
  - 3) Retail customers, with a focus on buying or selling of products (goods or services) on online services
  - 4) Retail customers, mostly using Web services.
3. E-commerce assistance can be a service offered by:
  - 1) Reward-based crowdfunding
  - 2) A business angel
  - 3) Kickstarter
  - 4) An incubator.
4. What is visual search?
  - 1) Visual search is a functionality of an e-commerce site that matches an image uploaded by a customer with a retailer's closest image in their catalog.
  - 2) Visual search aims at enabling consumers to take a picture of a product in order to search for it online.
  - 3) Visual search is an emerging type of recommendation system.

- 4) Visual search is based on AI (computer vision and image recognition).
5. Is eFashion still growing in 2022?
  - 1) Yes, in terms of percentage over total retail sales
  - 2) No, in terms of percentage over total retail sales
  - 3) Yes, in terms of total sales
  - 4) No, in terms of total sales

## Staff on demand<sup>3</sup>

1. Please, tick typical reasons to adopt staff on demand
  - 1) Lack of available skilled people.
  - 2) Quickly evolving technology.
  - 3) Poor management structure.
  - 4) Undefined goals.
2. What advantages have Staff on Demand?
  - 1) Forms stronger bonds among core team
  - 2) Lower cost of labor
  - 3) Enables learning (fresh perspectives)
  - 4) Allow agility and access to excellence.
3. Please, tick the typical reasons to adopt Staff on Demand
  - 1) Poor management structure.
  - 2) Undefined goals.
  - 3) Quick evolving technology.
  - 4) Lack of available skilled people.

## Power interests' grid<sup>1</sup>

1. Please tick the correct statement(s) about the power interests' grid<sup>4</sup>
  - 1) It is a tool employed in human resource management for employee analysis
  - 2) In case of low power and high interests, keep informed should be outcome
  - 3) In case of low power and low interest, manage closely should be the outcome
  - 4) Power and interest are independent variables in this grid.



# Business model – business plan<sup>12</sup>

1. Why are marketplaces a successful business model?
  - 1) Because ERPs provide modules supporting the implementation of a marketplace.
  - 2) Because a marketplace is a must in certain businesses, due to specific industry requirements.
  - 3) Because a marketplace can offer a broader product portfolio which is attractive to prospects.
  - 4) Because companies can share order management and delivery processes, thus reducing costs.
2. Which are the correct statements about business plan and business model?
  - 1) The vision in a business plan is an overview of the competitors in terms of current state of the market.
  - 2) The business plan can be part of a business model
  - 3) The business model describes how you are going to generate revenue with your business
  - 4) The Business Model Canvas is a chart that maps the key things that a business .... to get right to be successful
3. Please, tick the correct statements(s) about cost structure in a business model.
  - 1) Cost structure aims at identifying costs which could be reduced by optimization techniques.
  - 2) Cost structure aims at identifying most expensive key activities.
  - 3) Cost structure aims at identifying most expensive key resources.
  - 4) Cost structure aims at identifying the most important costs for the business model.
4. Please, tick the correct statements(s) about business model and customer.
  - 1) Co-creation is an example of a customer relationship strategy.
  - 2) Even if there are different customer segments, a startup should always interact with them in the same way.
  - 3) The most profitable customers are called leads and drive the development of the product also for the other customers.
  - 4) Describing customer segments, the focus is on the interaction with our customers: how we reach them, the cost-efficiency of each integration.

5. Which of the following(s) belongs to the Business Model Canvas?
- 1) Value proposition.
  - 2) Customer segments.
  - 3) Channels.
  - 4) Customer relationship.
6. Which of the following are part of Business Model Canvas
- 1) Cash Flow
  - 2) Key Proposition
  - 3) Revenue Streams
  - 4) Customer Segments.
7. Select the key resources usually listed in the Business Model Canvas
- 1) Only financial and intellectual resources
  - 2) Intellectual resources
  - 3) Human resources
  - 4) Sales resources.
8. What can we use in order to convince somebody to grant us trust?
- 1) Crowdfunding
  - 2) Apitch
  - 3) An IPO
  - 4) A complete business plan.
9. Which of the listed ones is a section of the Business Model Canvas?
- 1) Value Proposition
  - 2) Vision
  - 3) Customer Relationship
  - 4) Competitors?
10. Which of the listed ones is a section of the Business Model Canvas?
- 1) Customer Relationship
  - 2) Vision
  - 3) Competitors
  - 4) Value Proposition.
11. Which of the listed ones is a main section of the Business Plan?
- 1) Solution
  - 2) Project Management
  - 3) Competitors
  - 4) Business Model.
12. Recommendation strategies should be consistent with business objectives, for example by:
- 1) Increasing sales for high-stock products
  - 2) Reducing churn
  - 3) Promoting new products
  - 4) Helping pure branding initiatives.

## Outsourcing<sup>3</sup>

1. What are the risk(s) of outsourcing maintenance?
  - 1) Lack of IT support.
  - 2) Non-effective maintenance has a negative impact on the company's brand equity.
  - 3) Maintenance is an occasion for cross-selling only if it is not outsourced
  - 4) More difficult service innovation, especially for the low market.
2. What are the risk(s) of outsourcing maintenance?
  - 1) External maintenance providers may focus on the most profitable

maintenance interventions, disregarding other maintenance requests.

2) Non-effective maintenance has a negative impact on the company's brand equity.

3) Maintenance is an occasion for cross-selling only if it is not outsourced

4) Lack of IT support.

3. Is outsourcing maintenance a good idea for a manufacturer?

1) In general, yes, since smaller companies accommodate maintenance with greater efficiency

2) In general, yes, as maintenance is often non profitable, and outsourcing allows companies to reduce costs

3) In general no, since non-effective maintenance has a negative impact on the company's brand equity.

4) In general, yes, since the physical distribution of customers gives an edge to local maintenance services.

## Holacracy<sup>2</sup>

1. Select the correct statement(s) about Holacracy in practice:

1) Everybody can (and has the duty to) correct partners and coworkers behaviours

2) Everybody can select what role to energize

3) Everybody can define the company strategy

4) Everybody can (and has the duty to) contribute to resolve whatever blocks the evolution of the organization.

2. Among the following, select (tick) which are correct features of Holacracy:

1) Integrative Decision Making

2) Defined and explicit rules

3) Unstructured Coordination

4) Command and Control approach.

## SCRUM – Microservice<sup>3</sup>

1. What are the main ceremonies of SCRUM ?

1) Programmed set of status of work meetings

2) Sprint planning, daily meeting, sprint review and retrospection

3) There are no ceremonies.

4) Project briefing and final project review.

2. What are the main roles of SCRUM ?

1) Project office, project manager and developers

2) Product owner, scrum master and developers

3) Project manager, CEO and CIO

4) Multidisciplinary team.

3. Which can be considered strengths of a microservice based application architecture ?
  - 1) Promotes business-oriented APIs
  - 2) Promotes decoupling between components
  - 3) Helps to address different scalability issues
  - 4) Guarantees strong transnationality between microservices.

## Consent-Based Decision-Making process<sup>2</sup>

1. Which one(s) of the following are part of the Consent-Based Decision-Making process?
  - 1) Reactions
  - 2) Voting
  - 3) Objections
  - 4) Integrations
2. What does mean Consent in the context of Consent-Based Decision-Making process?
  - 1) Consent means the absence of objections X
  - 2) Consent means general agreement
  - 3) Consent means majority decides
  - 4) Consent means everybody can stop a decision if they feel like.

## Agile – exponential Organizations (ExOs)<sup>10</sup>

1. Which can be considered goals of a project managed using agile methodologies ?
  - 1) Adapt to change
  - 2) Reduce time to market
  - 3) Have a fixed scope
  - 4) Have a detailed upfront design documentation.
2. What usually characterizes an agile project?
  - 1) Fixed budget and time but flexible scope
  - 2) No fixed scope, time, or budget
  - 3) Fixed scope but estimated time and budget
  - 4) Fixed scope, budget, and time.
3. What's Business Agility
  - 1) It focuses on business clarity, transparency and execution
  - 2) It's a set of tools that aims to maximize a company's ability to meet changes

- 3) It's a discipline that empowers top-down command-chain in enterprises
  - 4) It focuses on self-management.
- 4. 1) Why is Autonomy key to ExOs?
  - 1) Better morale
  - 2) Increased agility
  - 3) Faster reaction and learning times
  - 4) Low costs of management.
- 5. Please tick the correct definition of Experimentation in ExOs:
  - 1) It's about using scientific approach through laboratories
  - 2) It's about implementing a no risk approach to new products or services
  - 3) it's about testing assumptions and constantly experimenting with controlled risk.
  - 4) It's about releasing multiple products at the same tune.
- 6. What are correct definitions of ExOs' Algorithms?
  - 1) Software self-learns how to perform unexpected human tasks
  - 2) Software written to do traditional human repetitive tasks
  - 3) Software to support heavy data-entry activity
  - 4) Software trained to perform more interconnected, nuanced tasks.
- 7. Why Leveraged Assets are key to ExOs?
  - 1) Lower marginal costs of supply
  - 2) Allow Scalable Products
  - 3) Resources are scarce
  - 4) They are useful only for software companies.
- 8. 1) Why leveraged assets are key to ExOs?
  - 1) They are useful only for software companies.
  - 2) Resources are scarce.
  - 3) Allow scalable products.
  - 4) Lower marginal costs of supply.
- 9. Please, tick the correct statement(s) on the exponential Organizations
  - 1) ExO is another name for dot.com
  - 2) ExOs are companies that adopt their organization and management practice to respond to exponential growth
  - 3) ExO it's a list of profitable companies
  - 4) ExOs understand the impact of technology on business practices.
- 10. Which are the 2 main conceptual components of an ExO:
  - 1) Growth and Technology
  - 2) Ideas and Seale
  - 3) Algorithms and Social
  - 4) Internet and Business.

## CPM – Critical Path Method<sup>3</sup>

1. Please, tick the correct statement(s) about CPM.
  - 1) The critical path contains the most risky activities, which could delay the entire project.
  - 2) The critical path is necessarily unique in a project
  - 3) It is not possible to affect the total duration of a project without affecting activities on the critical path.
  - 4) The critical path method allows to calculate the amount of flexibility in the logical network paths
2. A project has a critical path composed by 3 activities which, together, take 10 days to be executed No specific constraints are specified among activities besides consequential relationships. Please, tick the correct statements(s).
  - 1) Necessarily, at least 3 activities must be executed in order to complete the project.
  - 2) Necessarily, each of these 3 activities will have no float.
  - 3) In any case, supposing no delays, the entire project take 10 days to be executed
  - 4) Reducing the time required by one of these 3 activities in the path, the time required by the entire project is automatically reduced
3. Please, tick the correct statement(s) about CPM.
  - 1) The critical path contains the most risky activities, which could delay the entire project.
  - 2) The critical path method allows to calculate the amount of flexibility in the logical network paths.
  - 3) The critical path is necessarily unique in a project.
  - 4) It is not possible to affect the total duration of a project without affecting activities on the critical path.

## Develop a schedule<sup>1</sup>

1. Which are typical techniques to develop a schedule?
  - 1) RAM
  - 2) Simulation
  - 3) CPM
  - 4) Modelling techniques like what-if scenario analysis and simulation.

## customer database<sup>1</sup>

4. Please, tick the correct statement(s) on the customer database
  - 1) The customer database is part of the administrative portfolio, to support invoicing
  - 2) The customer database is a component of the operational database of core ERP
  - 3) The customer database is a database that integrates information on customers
  - 4) The customer database should be shared among all distribution channels.



# Call center<sup>6</sup>

1. What are KPIs measuring the effectiveness of call center operators?
  - 1) Customer churn
  - 2) Average waiting time, that is the time that callers have to wait before an operator answers their call
  - 3) First call resolution, that is the percentage of issues raised by customers that are solved at the first call
  - 4) Average call time.
2. What are KPIs measuring the efficiency of call center operators?
  - 1) Customer churn
  - 2) Average waiting time, that is the time that callers have to wait before an operator answers their call
  - 3) First call resolution, that is the percentage of issues raised by customers that are solved at the first call
  - 4) Average call time.
3. Please tick the correct statements on the process of integration of a call center
  - 1) If the call center is not integrated with the company's ERP, call center representatives can provide a more limited service to customers
  - 2) If the call center is not integrated with the company's ERP, customers are typically served with the first call, as they cannot be recalled due to. of contact information
  - 3) If the call center is integrated with the company's ERP, customers can solve their issues with fewer call to the call center
  - 4) If the call center is integrated with the company's ERP, customer service representatives can manage their professional growth more effectively.
4. What are the criteria for the sizing and operational planning of a call center?
  - 1) Overall level of service to be provided
  - 2) Maximum waiting time for incoming calls
  - 3) Number of incoming calls
  - 4) Average duration of calls.
5. The cost of the call center is a function of:
  - 1) Geographical location

- 2) Number of calls in the time unit
- 3) Target level of service (waiting time and effectiveness in problem solving)
- 4) Technology used to implement and optimize the call center.

6. What are typical KPIs for call center performance monitoring?
  - 1) First call resolution X
  - 2) Average call duration
  - 3) Percentage of calls with waiting time lower than x
  - 4) Call center size

# ERP<sup>9</sup>

1. Which ones of the following are part of the main features of an ERP system?
  - 1) System that performs simulation and make proposal on future actions
  - 2) Open system that allows integration with external application
  - 3) Programs developed "in house"
  - 4) Using of non-shared repositories
2. Which ones of the following is the logical sequence to be applied during an ERP project implementation?
  - 1) 1) Business objectives definition- 2) Implementation- 3) Technical Requirement gathering- 4) Functional Requirement gathering
  - 2) 1) Functional Requirement gathering- 2) Business objectives definition- 3) Technical Requirement gathering 4) Implementation
  - 3) 1) Functional Requirement gathering - 2) Technical Requirement gathering- 3) Business objectives definition- 4) Implementation
  - 4) 1) Business objectives definition- 2) Functional Requirement gathering- 3) Technical Requirement gathering- 4) Implementation
3. Which ones of the following are the main evolutionary line of the ERP systems?
  - 1) Accessibility (eg. Mobility)
  - 2) Synchronization
  - 3) Extension (eg. IOT)
  - 4) Collaboration
4. Which ones of the following are amongst the pillars to be taken in consideration during the ERP selection phase?
  - 1) Processes
  - 2) Industry specificity
  - 3) Functional and technical requirements
  - 4) Resources
5. What are the pillars of the ERP paradigm?
  - 1) Information should be fully integrated, in such a way that all functionalities access the same data at the same time.
  - 2) From an organizational perspective, ERPs are prescriptive, ...
  - 3) From a functional perspective, the system should comply with the execution and modularity principles.
  - 4) The operational portfolio should provide information with a level of detail that enables the estimate of all required KPIs.
6. What are the main pillars of the ERP paradigm?
  - 1) The operational portfolio should provide information with a level of detail that enables the estimate of all requirements.

- 2) Information should be fully integrated, in such a way that all functionalities access the same data at the same time.
  - 3) From a functional perspective, the system should comply with the extension and modularity principles.
  - 4) From an organization perspective, ERPS are prescriptive, that is they embed best practices and organizational \*\*\* with the ERP best practices
7. What Is the fundamental integration step of information systems enable by ERPs?
- 1) ERPs integrate all functionalities of a company's information system.
  - 2) ERPS complete the integration among the three core portfolios, executive, administrative and operational.
  - 3) ERPs represent off-the-shelf packages completing the vertical integration between the operational and executive portfolios.
  - 4) ERPS integrate the administrative and operational portfolios, by enabling better operational control.
8. What are the organizational benefits of ERPs?
- 1) Support the management of human resources, enabling the transaction of implicit information into explicit information
  - 2) Support continuous innovation, since they are continuously updated with new functionalities
  - 3) Increase both organizational efficiency and effectiveness
  - 4) Enable both scale and scope economies
9. What are the pillars of the ERP paradigm:
- 1) Information should be fully integrated, in such a way that all functionalities access the same data at the same time
  - 2) The operational portfolio should provide information with a level of detail that enables the estimate of all requirements.
  - 3) From an organizational perspective, ERPs are prescriptive, that is they embed best practices and organizational .... with the ERP's best practices
  - 4) From a functional perspective, the system should