Chapter 10 Review Questions

1. **What three business is the IS department in, using Hagel and Singer’s framework?**

* Infrastructure Management: The goal is to reduce cost providing necessary infrastructure such as hospital, roads, wireless networks, etc; management focus on efficiency and standards
* Customer Relationship: The goal of the customer relationship business is service, here the goal is scope, by having a lot of custom offering to increase the company’s “wallet share” of each customer
* Product Innovation: The goal is speed, because it provides nimbleness, the key to success is talent, software companies are always on the lookout for talent, and they reward stars generously

1. **According to the Project Management Institute, what are the nine areas of knowledge a project manager needs to know well to successfully manage a project?**
   1. Integration: Which involves ensuring that the various elements of a project are properly coordinated
   2. Scope: Ensuring that the project includes all the work required, and only the work required
   3. Time: Ensuring timely completion of the project
   4. Cost: Ensuring that the project is completed within the approved budget
   5. Quality: Ensuring that the project satisfies the needs for which it was undertaken
   6. Human resources: Making the most effective use of the people involved
   7. Communication: Ensuring timely and appropriate generation, collection, dissemination, storage, and disposition of project information
   8. Risk: Identifying, analyzing, and responding to project risks
   9. Procurement: Acquiring goods and services
2. **What are the six things a project manager needs to do, according to Anderson and Matthew?**

* Setting Up the Project: Each project needs a project document to serve as the one source of truth for the project and the first point of call when there are differences of opinion in the project
* Managing the Schedule: It is the heart of a project because it communicates the activities that need to be completed to achieve the benefits, when they need to be completed, and who needs to complete them
* Managing the Finances: The financial plan describes the project’s cost, who is accountable for them, the expected financial benefits from the project, and the cash flow
* Managing the Benefits: Four benefits can emerge from IT and business projects: profitability, cost reduction, changes to working capital, or adherence to legal or regulatory reform
* Managing Risk, Opportunities, and Issues: All possible risk, issues, and opportunities should be listed at the project outset and then analyzed to determine each one’s likelihood and impact, they also need to be monitored
* Soliciting Independent Reviews: Reviews help the project manager and project sponsor assess the “health” of a project; an independent review can identify overlooked opportunities and risks

1. **When Cone is interviewing people, what three things does he keep an ear open for?**

* Use cases: I ask for details of the “typical” user, their job title, their business situation, the query they would run, and the information they would want to retrieve
* Issues: A catch-all term for stuff – important or no. Here is where I carefully capture and document everyone’s pet peeve, favourite feature, annoyance, or beef. Why? The stakeholders need to feel like they have been heard
* Benefits: I listen for potential benefits at every turn, and carefully capture and collate them.

1. **Describe three tools in Cone’s project manager’s toolbox**

* The project manager’s hourglass: Like most of my tools, the hourglass is a conceptual tool. Here is how I visualize it: It consists of two brushed aluminium plates, six inches square, set twelve inches apart by four steel rods threaded and bolted through holes in the corners. Inside the cage of the rods is a blown-glass hourglass, containing about two cups of black basaltic sand. It is a precision tool for a precision job – the job of measuring the end of the analysis phase of a software project.
* The scope axe: Most projects run into trouble at some point, and as the project continues, the options for the project manager are progressively reduced. Most problems stem from unanticipated tasks or complexity. The initial reaction is to add budget and resources to handle this, but the wise project manager will get out his scope axe. Use project creep to have the hard discussions with your users and your sponsors, and chop off some scope. You don’t have to amputate it completely, just restructure the phases to push the particular scope area to a later time.
* The measuring tape: Overall, there are three areas of measurement, corresponding to the golden triangle of project management: time, resources, and functionality. The triangle is used because it is a symbol of balance and stability; change any one side without adjusting the others and you get a distortion. Just so in a real project: change the timeline without adjusting the amount of resources or the functionality or both and you are either smarter now than you were before (when you built the triangle) or you are a masochist

1. **Describe the three types of people involved in a change project, according to ODR**

* The sponsor: it’s the person or group that legitimizes the change. In most cases, this group must contain someone in top management who is highly respected by the business unit because change must be driven from the business unit.
* The changeagent: it’s the person or group who causes the change to happen. This is often the IS staff. They can introduce the change but they cannot enforce its use.
* The target: it’s the person or group who is being expected to change, and at whom the change is aimed.

1. **How did the BOC Group involve middle management?**

To engage middle managers in the nine reengineering projects, BOC established an advisory council for each one. Each advisory council’s job was two-fold, to give feedback on recommended changes by pointing out implementation issues, and to describe the recommendations to employees. The PODD advisory council had members that included drivers, logistics, IM, field people, and managers. They met several times and they had more influence than they realized. Their feedback significantly affected decisions and their communication gave the field people a way to be heard. Through all the advisory councils, BOC created a cascade of influencers, which was a key contributor to their success.

1. **Describe the decision tree that Gibson uses to assess the business risk of a project**

It shows the eight possible combinations of the three factors Leadership, Employee perspective, and project scope & urgency. A + (plus sign) on a factor means “positive support for the business change”; it increases the likelihood of success by reducing the risk. A - (minus sign) on a factor means “negative support for the business change”; it decreases the likelihood of success by increasing the risk. The factor that is the greatest contributor to project success or failure should be placed on the left. In this example, it is leadership, which is often, but not always, the case. On the far right are the eight project management approaches, one for each path through the decision tree.

1. **Which does the Boston Consulting Group recommend, replacing or upgrading a legacy system?**

BCG concluded that upgrading made more sense in most cases; they noted that people get seduced by a new technology and want to rush out and replace old systems with it. However, most of the replacement projects that failed could have been upgrade projects

1. **List the seven ways to improve a legacy system**
2. Restructure the system*:* If an application program is basically doing its job, yet it may run inefficiently, or be “fragile” or unmaintainable it may need restructuring.
3. Reengineer the system*:* A step beyond restructuring, reengineering means extracting the data elements from an existing file and the business logic from an existing module and moving them to new platforms.
4. Refurbish the system: If the old system is maintainable and causing no major problems, it may be worthwhile to add some extensions.
5. Rejuvenate the system: Adding enough new functions to a reengineered system to make it more valuable to the firm.
6. Rearchitect the system: A step beyond rejuvenating a system, rearchitecting it is the newest option. This option involves having a to-be architecture for new systems, and using that architecture to upgrade legacy systems.
7. Replace with a package or service: Many old systems built in-house have been replaced by a package developed by a third party. In fact, this alternative has become the norm.
8. Rewrite the system: In some cases, a legacy system may be too far gone to rescue.
9. **How is Amazon.com promoting third-party Web Services offerings that relate to Amazon.com’s Web site?**

In 2002, Amazon.com initiated its Web Services program where anyone can receive a license to access Amazon’s data and content via XML feeds – for free. The licensees must agree, though, to not use any of the logos on Amazon.com’s site nor use any of the restricted or copyrighted material on the site (such as copyrighted reviews). Over 27,000 people have obtained licenses, some for their personal use, some to offer free software to Amazon users, others to build hardware for use with Amazon’s site, and still others to sell software or services related to the site. Amazon is using its data to create an on-line ecosystem of businesses and services that rely on its marketplace and the vast amount of data it collects. In so doing, Amazon seeks to transform itself from a retailer into an e-commerce platform where “buy” buttons on many, many websites take buyers to Amazon.com

1. **What four benefits does IT architecture bring to Toyota Motor Sales?**
2. Rearchitect Legacy Systems: Both the as-is and to-be architectures have proven valuable in remediating legacy systems. Using a system’s as-is architecture, Nocket’s group can give business units alternatives to totally replacing a system. Her architects can show, for instance, how the user interface tier is separate from the data and application tiers. Pieces of code can be remediated, for example, by being rewritten in Java, to migrate the legacy system toward the new architecture, leaving the rest of the system as is.
3. Keep System Designs Robust: Using the new architecture-first approach to building systems, integration between the new system and other systems must be demonstrated in the design stage (rather than uncovered in the final system-integration stage). The new approach forces “design breaks” to appear in the design phase, where they can be fixed by redesign. When such errors are not caught until system integration testing, after the system has been built, the only solution is patching, which often destroys the system’s original design.
4. Deliver Applications Faster: In understanding the “patterns” of applications to create the architecture, Nocket and her group are using the patterns to develop new applications much faster because they have turned silo infrastructure elements into services that can be reused. The global reference architecture thus addresses a major business pain point – applications not being delivered fast enough – thereby demonstrating the architecture group’s value to both business folks and to IT project teams.
5. Permit Future Flexibility: Nocket’s group has successfully architected Toyota’s three e-commerce Web sites – Toyota.com, Lexus.com, and financial.com – using the “UNIX pattern” in its new architecture. Because the three share the same infrastructure, Toyota can easily bring the one hosted outside back in-house, if desired. And the company can more easily integrate other systems in the future, for instance, allowing vehicle owners to manage their own vehicle warranty from the Web site.
6. **How does Wachovia benefit by replacing a system with a service?**

Using the system, the sales reps have at least 30 more hours a month to spend on selling – time they used to spend on administrative work. The system also gives management the data it needs to identify the most valuable clients and their own highest yielding work.

1. **What are the three roles of system, according to Berger?**
2. Help other departments do their job better*:* “support systems” with the goal to increase organizational efficiency.
3. Carry out a business strategy: Examples are CAD systems that customers and suppliers can use together to design custom products. These strategic systems differ from support systems for measurement purposes because they are used directly by customers.
4. As a product or service or as the basis for a product or service: Offering a cash management account that combines a checking account, a cash management account, and an investment account would not be possible without the underlying information system.
5. **What benefits did the trucking company realize at the individual, group, and business levels?**

* At the individual level: they estimated that improved communications from the truck cab would increase driver production time.
* At the work group level: they estimated that improved load truck matching would save deadhead time.
* At the business unit level: they estimated that improved customer service would increase market share

1. **What three decentralized work practices were found at companies with higher market valuation in research by Brynjolfsson, Hitt, and Yang?**

Firms making the highest IT investments not only invest in the information systems but also invest in making organizational changes to complement the new systems. These investments in “organizational capital” generally lead to adopting decentralized work practices. The firms:

* 1. Use teams more often
  2. Give employees broader decision-making authority
  3. Offer more employee training

Firms with these three decentralized work practices had a market value of 8 percent higher than the mean. Companies with the highest market valuations had both the largest IT investments *and* decentralized work practices. The market value of investing in IT is “substantially higher” in firms that use these decentralized practices because each dollar of IT investment is associated with more intangible assets because the IT investments complement the work practices.