Chapter 4

Economic inequality is a huge issue. A recent study found that the world's 80 wealthiest individuals own as much as the entire world's poorest 3.5 billion people. The richest 1 percent of the world's population control half of the world's total wealth.[15](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/13_9781337101356_ch4.xhtml#fn4_15) Many individuals, corporations, charities, and government agencies have projects and programs in place to attempt to tackle this and other important global issues such as sustainability, but there are many opportunities to do more.

A grassroots group of college students has decided to work together to do their part in making the world a better place. The students are from many different countries, and several of them met at global conferences, through study abroad experiences, or on various Internet groups. Strategic goals of this group include developing skills for both college students and for needy populations, sharing information on existing products and services that promote economic growth and sustainability, and promoting entrepreneurship. Leaders of this group were reviewing some ideas for projects (all with a significant IT component) that they could do to support their strategic goals:

1. *Global Treps:* Many people are familiar with the television show called *Shark Tank* where entrepreneurs (sometimes called “treps”) present their business ideas to a group of investors or sharks. Several colleges, high schools, and even elementary schools throughout the world hold unique versions of a shark tank like event. You believe that creating a nonprofit organization with one central mobile-friendly website/application to assist groups in organizing these types of events would spark even more entrepreneurs throughout the world. You would plan to hold several shark tank like events during the term of the project  
and create a site and applications to help continue developing more global treps. This site/application would include the following capabilities:

• Provide guidelines and templates for running a shark tank type of event.

• Accept donations from potential investors targeted toward specific schools or organizations wishing to host an event (similar to the popular [**www.donorschoose.org**](http://www.donorschoose.org/) site where people can fund teacher's requests).

• Accept ideas for needed new products or services.

2. Change the Laws Campaign: Launch a global campaign to change laws to reduce further income inequality and promote social responsibility. This project would also involve creating a mobile-friendly website/application that would include information about current and proposed laws, allow discussions of potential ideas to change laws, organize people to contact appropriate lawmakers, etc.

3. Wealthy Unite: Develop a system to enable the richest people in the world to provide their input on how they can make the world a better place. Provide information on what several people are currently doing (i.e., Bill Gates, Warren Buffet, famous celebrities, etc.) to promote philanthropy. Allow others to donate to suggested causes and recommend other ways to reduce economic inequality.

4. Global Smart Shoppers: Develop a mobile app and website that recommends products and services produced by organizations that promote social responsibility. Customize the app so it works in any country in the user's desired language. Work with large companies that do not currently sell products or services in certain countries to expand to regions in need. Allow small companies to easily add their products and services to the shopping network.

Tasks

1. Summarize each of the proposed projects using a simple table format suitable for presentation to top management. Include the name of each project, identify how each one supports business strategies, assess the potential financial benefits and other benefits of each project, and provide your initial assessment of the value of each project. Write your results in a one-to two-page memo to top management, including appropriate back-up information and calculations.

2. Evaluate the four projects by preparing a weighted scoring model using the template provided on the Companion website for this text. Develop at least four criteria, assign weights to each criterion, assign scores, and then calculate the weighted scores. Print the spreadsheet and bar chart with the results. Also write a one-page paper that describes this weighted scoring model and the results.

**198**

3. Prepare a business case for the Global Treps project. Assume that the project will take six months to complete, use many volunteer hours, and cost about $130,000 for hardware, software, travel, and labor. Use the business case template provided on the Companion website for this text. Be sure to research information on the television show and events held by colleges and other groups, which have been sparked by the need for more successful entrepreneurs. Also visit **DonorsChoose.org** to see how that site operates and look into steps for forming a non profit organization.

4. Prepare a draft project charter and an assumption log for the Global Treps project. Assume that the project will take six months to complete and have a budget of $130,000. Use the project charter template provided in this text and the sample project charter provided in [Table 4-1](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/13_9781337101356_ch4.xhtml#tab4-1) as guides. For the assumption log, document at least two assumptions including an assumption ID, date, source, category, description, and status. You will be the project manager, and Dr. K. will be the project sponsor. Other team members will include Bobby, Ashok, Kim, and Alfreda. You plan to hold four shark tank like events plus develop the Global Treps site and application.

5. Start a lessons learned register to document knowledge learned on this project. Include la lessons learned ID, date, source, category, description, impact, recommendations, and proposed actions. Be creative in then making two entries.

6. Prepare a change request for the Global Treps project, using the template provided on the Companion website for this text. Assume that you have decided not to provide an online version of the show as it would be too much work for the initial project. Be creative when making up information.

Chapter 5

You have been selected as the project manager for the Global Treps project. You helped to run a local shark tank like event at your college last year as part of a class project, so you have a general idea of what is involved. The schedule goal is six months, and the budget is $120,000. Your favorite professor, Dr. K., and a few of her associates have agreed to fund the project. Your strengths are your organizational and leadership skills.

You are a senior, live on-campus, and get free room and board by being a resident assistant in your dorm. Bobby, a computer whiz who funded a lot of his college expenses by building websites, will be your main technical guy on the project. He goes to your college and lives off-campus. Three other people will form your core project team: Kim, a new college grad now working for a non profit group in Vietnam; Ashok, a business student in India; and Alfreda, a student in the United States planning to visit her home town in Ethiopia for two months in a few months. You will hold most meetings virtually, but you can meet face-to-face with Bobby and Dr. K. as needed. You have all known each other for at least a year and are excited to make this project a success.

You and your team members will do the work part-time while you finish school or work at other jobs, but you can use up to $50,000 total to pay yourselves. You estimate that you will need another $30,000 for travel expenses, $20,000 for hardware and software, and the other $20,000 will go toward organizing events, consultants, legal/business fees, etc.

Your goal is to develop a fully functioning website and test it by holding four events in four different countries. You'll make improvements to the site after those events, develop plans to scale it up, and recommend how to transition the project results into a successful business.

Recall from [Chapter 4](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/13_9781337101356_ch4.xhtml#ch4) that this system would include the following capabilities:

• Provide guidelines and templates for running a shark tank type event

• Accept donations from potential investors targeted toward specific schools or organizations wishing to host an event (similar to the popular DonorsChoose.org site, where people can fund teachers' requests)

• Accept ideas for needed new products or services

• Provide the ability for organizations to create their own custom site to solicit local participants and sharks, accept applications, and promote the winners as well as losers.

Note that you decided *not* to include the idea of providing an online version of the event as part of the initial project as your sponsor and team decided that physical events would be most effective. You have also decided to limit the scope of this first project to provide the ability for 20 organizations to create their own custom websites. Your team members will screen the organizations and assist people in using the site to plan their events.

You plan to hold four shark tank like events within four months, using your team members abroad to help organize and run those events, plus one at your college. Your semester has just started, so you plan to hold your event at the end of the term. The project will fund refreshments**238**for the events and prizes for the winners, with a budget of $1,000 for each event. You don't think you'll get any donations via the new website before these events, but you'll try to have it set up to accept donations by the last month.

You will create some short videos to show people how to use the site and provide suggestions for holding the events.

After testing the site and getting customer feedback, you will make some changes and document recommendations for a follow-on project. You will also create a business plan recommending how to transition this project into a real business that can make a profit after two years.

Assume that you would pay for a new website and account through an online provider. Bobby would do most of the customization/programming for the site, but you would consider outsourcing or purchasing services to provide some of the capabilities like accepting donations and developing the short videos on the site. You would also buy a new laptop and Internet access for your three team members abroad so that they could share information with their contacts in those countries.

You and Dr. K. want to attend all of the events as part of the project, and you might include a full face-to-face meeting with the whole team if possible.

[**Tasks**](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/07_9781337101356_cont.xhtml#toc-sec5_25)

1. Document your approach for collecting requirements for the project. Include at least five technical requirements and five non technical requirements in a requirements traceability matrix. Also develop a list of at least five questions you would like to ask the project sponsor. Let your instructor answer them for you, if applicable.

2. Develop a first version of a project scope statement for the project. Use the template provided on the Companion website for this text and the example in [Chapter 3](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/12_9781337101356_ch3.xhtml#ch3) as guides. Be as specific as possible in describing product characteristics and requirements, as well as all of the project's deliverables. Be sure to include the Global Treps website, four shark tank like events, a business plan, and outsourced items (laptops, donation acceptance, video creation, etc.) as part of the project scope.

3. Develop a work breakdown structure for the project. Break down the work to Level 3 or Level 4, as appropriate. Use the template on the Companion website and samples in this text as guides. Print the WBS in list form. Be sure the WBS is based on the project charter (created for the [Chapter 4](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/13_9781337101356_ch4.xhtml#ch4) Running Case), the project scope statement created in Task 2 above, and other relevant information.

4. Use the WBS you developed in Task 3 to begin creating a Gantt chart using your choice of software. Do not enter any durations or dependencies. Print the resulting Gantt chart on one page, and be sure to display the entire Task Name column.

5. Develop a strategy for scope validation and change control for this project. Write a short paper summarizing key points of the strategy.

Chapter 6

You are the project manager for the Global Treps Project, sponsored by Dr. K. Team members include Bobby, your IT guy; Kim, a new college grad now working for a non profit group in Vietnam; Ashok, a business student in India; and Alfreda, a student in the United States originally from Ethiopia. You plan to outsource some of the work (e.g., purchasing laptops, developing a website feature for accepting donations, and creating videos for the website). Recall that your schedule and cost goals are to complete the project in six months for under $120,000.

## [Tasks](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/07_9781337101356_cont.xhtml#toc-sec6_32)

 1. Review the WBS and Gantt chart you created for Tasks 3 and 4 in [Chapter 5](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/14_9781337101356_ch5.xhtml#ch5). Propose three to five additional activities that would help you estimate resources and durations. Write a one-page paper describing these new activities.

 2. Identify at least five milestones for the Global Treps Project. Write a short paper describing each milestone using the SMART criteria. Discuss how determining the details of these milestones might add activities or tasks to the Gantt chart. Remember that milestones normally have no duration, so you must have tasks that will lead to completing them.

 3. Using the Gantt chart you created for Task 4 in [Chapter 5](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/14_9781337101356_ch5.xhtml#ch5) and the new activities and milestones you proposed in Tasks 1 and 2 above, create a new Gantt chart using Project 2016 or another tool. Estimate the task durations and enter dependencies as appropriate. Remember that your schedule goal for the project is six months. Print the Gantt chart and network diagram, each on one page.

Chapter 7

You and your team are continuing your work on the Global Treps Project. Your project sponsor, Dr. K., has asked you to refine the existing cost estimate for the project so you can evaluate supplier bids and have a solid cost baseline for evaluating project performance. Recall that your schedule and cost goals are to complete the project in six months for under $120,000. You planned to use up to $50,000 total to pay yourself and your team members, and your initial estimates were $30,000 for travel expenses, $20,000 for hardware and software, and $20,000 for organizing four events, including consultants, legal/business fees, etc.

[**Tasks**](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/07_9781337101356_cont.xhtml#toc-sec7_23)

1. Prepare and print a one-page cost model for the project, similar to the model provided in [Figure 7-2](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/16_9781337101356_ch7.xhtml#fig7-2). Use the following WBS or the WBS you developed in [Chapter 5](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/14_9781337101356_ch5.xhtml#ch5), and be sure to document your assumptions in preparing the cost model. Assume a labor rate of $20/hour for yourself (the project manager) and team members (Kim, Ashok, and Alfreda). You will pay**322**Bobby, your IT guy, $30/hour. The project will fund refreshments for the four shark tank like events and prizes for the winners, at a cost of $1,000 for each event.

1.1 Project management

1.2 Hardware (3 laptops and Internet access for Kim, Ashok, and Alfreda)

1.3 Software

1.3.1 Outsourced

1.3.1.1 Domain name and site hosting

1.3.1.2 Donation acceptance feature of website

1.3.1.3 Video creation for website

1.3.2 In-house Development

1.3.2.1 Guidelines and templates for events

1.3.2.2 Acceptance of ideas for needed new products or services

1.3.2.3 Custom site for 20 events

1.3.3 Testing

1.4 Business Plan

1.4.1 Internal labor

1.4.2 Legal information/assistance

1.5 Travel

1.6 Events

1.6.1 Internal labor

1.6.2 Consultant labor

1.6.3 Refreshments

1.6.4 Prizes

2. Using the cost model you created in Task 1, prepare a cost baseline by allocating the costs by WBS for each month of the project.

3. Assume that you have completed three months of the project. The BAC was $120,000 for this six-month project. You can also make the following assumptions:

PV=$60,000EV=$55,000AC=$50,000

a. What is the cost variance, schedule variance, cost performance index (CPI), and schedule performance index (SPI) for the project?

b. How is the project doing? Is it ahead of schedule or behind schedule? Is it under budget or over budget?

c. Use the CPI to calculate the estimate at completion (EAC) for this project. Is the project performing better or worse than planned?

**323**

d. Use the SPI to estimate how long it will take to finish this project.

e. Sketch an earned value chart using the information from your answers to parts a through d. Use [Figure 7-6](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/16_9781337101356_ch7.xhtml#fig7-6) as a guide.

Chapter 8

**Part 5: Project Quality Management**

The Global Treps Project team is working hard to ensure they meet expectations, especially for the people who will be holding and participating in the four events. The team has a detailed scope statement, but you want to make sure you are not forgetting requirements that might affect how people view the quality of the project. You know that the project's sponsor and other key stakeholders are most concerned with getting people to use the new website, having successful events, and helping promote entrepreneurship across the globe. You also know that various geographic and cultural issues will need to be addressed.

[**Tasks**](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/07_9781337101356_cont.xhtml#toc-sec8_39)

1. Develop a list of quality standards or requirements related to meeting the stakeholder expectations described in the running case. Provide a brief description of each requirement. For example, two requirements related to the new website might be that users can read the content in several different languages and that users provide good ratings for the online video training.

2. Based on the list you created for Task 1, determine how you will measure progress on meeting the requirements. For example, you might have people take a survey after they view the online training videos to collect feedback.

3. After analyzing survey information, you decide to create a Pareto chart to see which types of guidelines for running an event generated the most interest. First, create a spreadsheet in Excel using the data in the following table. List the most frequently requested guidelines first. Use the Excel template called pareto\_chart.xls on the text's Companion website and check your entries so the resulting chart looks similar to the one in [Figure 8-7](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/17_9781337101356_ch8.xhtml#fig8-7).

| **Requested Guidelines** | **# of Times Requested** |
| --- | --- |
| How to find good participants | 24 |
| How participants should present their ideas | 20 |
| How to find local sharks | 15 |
| How to select participants | 12 |
| How to manage and engage the audience | 7 |
| How to set up the facilities | 3 |

Chapter 9

Several people working on the Global Treps Project are confused about their responsibilities for providing content for the new website. Recall that the team members include you, the project manager, Bobby, the IT guy, and three people who will run shark-tank-like events in Vietnam, India, and Ethiopia (Kim, Ashok, and Alfreda). Recall that the activities in the WBS for the in-house development include the following:

1.3.2.1 Guidelines and templates for events

1.3.2.2 Acceptance of ideas for needed new products or services

1.3.2.3 Custom site for 20 events

You and your team also need to provide information for the videos that you are outsourcing. Recall that the purpose of these short videos is to show people how to use the site and provide suggestions for holding the events. That activity is 1.3.1.3 Video creation for website in the WBS. You have selected the company that will do the outsourced video creation, and their main contact person is Angela.

1. Prepare a RACI chart for the four WBS activities listed. You decide that one person should be accountable for each of these four activities, spreading the work between you, Kim, Ashok, and Alfreda. Bobby will be informed on each activity, and you will be consulted on the ones you are not accountable for. Document key assumptions you make in preparing the chart.

2. You realize that all of your team members have different personality types, and you believe you could work better as a team if you understood each other better. You asked everyone to take an MBTI-based assessment (a free one you found at [***www.humanmetrics.com***](http://www.humanmetrics.com/)). You are an ENTJ, Bobby is an INTJ, Kim is an ISFP, Ashok is an ESTJ, and Alfreda is an ISFJ. Find information about each of these MBTI types and summarize their traits as well as suggestions for improving teamwork.

3. Angela, the person in charge of the company preparing the short videos for you website, has suggested that you work together to prepare a detailed list of resources available to help prepare scripts and edit the videos they will create. You decide to use animations instead of real people in the videos, and Angela's company has a lot of experience in that area. Together, you decide that you will need someone to take on the roles of script writers,**421**script editors, animators, sound experts, content editors, and technical editors. Angela and her team will do all of the animating, sound, and technical work and will provide guidance for you and your team to do the other work. To keep costs down and stay on schedule, you decide to plan for all of the video work to be done in 20 days, using no more than 240 total hours of effort, with about half of the effort from Angela's company. Prepare a resource histogram to estimate the number of hours by role for each of the 20 days. Document key assumptions you make in preparing the histogram.

Chapter 10

Several issues have arisen on the Global Treps Project. Ashok, your team member in India, broke his wrist playing tennis yesterday and cannot work on the project at all for three weeks. His work, which involves helping to edit the videos, starts in one week, so you need to reassign it to others.

**461**

Bobby suggests you use kanban boards to list all of the tasks for editing the videos and to track where they are in the work flow. Bobby, a techie and not known for being a good communicator, is the only person who's ever used kanban boards. You have not yet broken down the tasks into much detail and need more information from Angela, the contractor in charge of creating the videos.

Alfreda is having difficulties communicating with her main contact in Ethiopia, Dr. B. He is very busy all the time and does not use texting, Alfreda's preferred communications medium. He has also not communicated key information with students who could be candidates for their event, which is only a month away. Alfreda is not sure if he booked a room for the event yet.

 1. Describe how you would communicate to Ashok and the rest of the team about Ashok's injury. What actions would you take? What communications medium would you use with different stakeholders?

 2. Prepare a partial communications management plan to address some of the challenges mentioned in Part 7 of the case.

 3. Research free online tools for using kanban boards and choose one to use. Prepare a list of at least 10 tasks that would be done in editing the videos and enter them into your tool of choice. Prepare or find a short guide or video explaining how to use the kanban boards.

 4. Write a one-page paper describing options for communicating with Dr. B. and making sure students at his university get information about your event.

Chapter 11

You and your team identified some risks during the first week of the Global Treps Project. However, you never ranked the risks or developed any response strategies. Because several negative risk events have already occurred (such as Ashok breaking his wrist and poor communications with a key stakeholder in Ethiopia, as described in [Chapter 10](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/19_9781337101356_ch10.xhtml#ch10)), you have decided to be more proactive in managing risks. You also want to address positive risks as well as negative risks.

1. Create a risk register for the project, using [Table 11-4](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/20_9781337101356_ch11.xhtml#tab11-4) and the template called risk register. Identify six potential risks, including risks related to the problems described in the preceding paragraph. Include three negative and three positive risks. Describe the risks using the format: “Because of <one or more causes>, <risk event> might occur, which would lead to <one or more effects>.”

2. Plot the six risks on a probability/impact matrix, using [Figure 11-5](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/20_9781337101356_ch11.xhtml#fig11-5) as a guide and the template called probability impact matrix. Also assign a numeric value for the probability that a risk will occur and the impact of each risk on meeting the main project objectives. Use a scale of 1 to 10 to assign the values, with 1 representing the lowest value. For a simple risk factor calculation, multiply the probability score and the impact score. Add a column called Risk Score to your risk register to the right of the impact column. Enter the new data in the risk register. Write your rationale for how you determined the scores for one of the negative risks and one of the positive risks.

3. Develop a response strategy for one of the negative risks and one of the positive risks. Enter the information in the risk register. Also write a separate paragraph describing what specific tasks would be required to implement the strategy. Include time and cost estimates for each strategy as well.

Chapter 12

As described in earlier chapters, your Global Treps team would pay for a new website and account through an online provider. Bobby would do most of the customization and programming for the site, but you would consider outsourcing or purchasing services to provide some of the capabilities like accepting donations and developing the short videos on the site. You would also buy a new laptop and Internet access for your three team members abroad, which they could share with their contacts in those countries. You have budgeted $20,000 for outsourced hardware and software. The activities listed in your WBS for outsourced software development include the following:

1.3.1.1 Domain name and site hosting

1.3.1.2 Donation acceptance feature of website

1.3.1.3 Video creation for website

1. Bobby is very familiar with purchasing domain names and site hosting and has already looked into options for providing the donation acceptance feature. However, you all agree that you need professionals to create the videos for the website. Brainstorm options for this procurement, and research potential suppliers. Summarize your findings in a short paper, and include at least three references.

2. Draft a contract statement of work for creating the videos for the website. Use the outline provided in [Figure 12-3](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/21_9781337101356_ch12.xhtml#fig12-3).

3. Assume that the source selection criteria for creating the videos for the website are as follows:

• Management approach, 15 percent

• Technical approach, 25 percent

• Past performance, 10 percent

• Price, 20 percent

• Sample videos, 30 percent

Using [Figure 12-4](https://texidiumbrowserbooks.blob.core.windows.net/00013418/OEBPS/test/21_9781337101356_ch12.xhtml#fig12-4) and the weighted scoring model template as guides, create a spreadsheet that could be used to enter ratings and calculate scores for each criterion and total weighted scores for three proposals. Enter scores for Proposal 1 as 80, 75, 70, 90, and 85, respectively. Enter scores for Proposal 2 as 90, 50, 95, 80, and 75. Enter scores for Proposal 3 as 80, 90, 95, 80, and 75. Add a paragraph to the spreadsheet that summarizes the results and your recommendation. Print your results on one page.

4. Draft potential clauses that you could include in the contract to provide incentives and/or penalties for on-time and within-budget delivery of high-quality videos that users would enjoy watching. Be creative in your response, and document your ideas in a short paper. Be sure to describe how you will measure if the criteria were met and what the incentives and/or penalties would be.

Chapter 13

Recall that the following people are involved in the Global Treps Project:

• You, the project manager

• Dr. K., the project sponsor

• Bobby, team member/technical specialist

• Alfreda, Kim, and Ashok, team members organizing events in other countries

• Suppliers for the domain name and site hosting, the donation acceptance feature of the website, and the video creation for the website (including Angela, the contact person at the video supplier)

• Instructors at each site helping to organize the events (including Dr. B. in Ethiopia)

1. Prepare a stakeholder register using the preceding information. Make up other information as needed.

2. Create a stakeholder management strategy for the project, focusing on members who are not on the project team, such as Angela and Dr. B. Make up names and personalities for the other two instructor contacts in India and Vietnam. Be creative in developing potential management strategies.

3. Prepare an issue log for the project. Include issues discussed in prior chapters, such as Ashok breaking his wrist, Bobby's desire to use kanban boards, and Alfreda's difficulties communicating with Dr. B. Make up three additional potential issues.