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CHAPTER 2

Project Management and Event Planning

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CHAPTER OBJECTIVES

Upon completion of this chapter, the reader will be able to:

1. Describe the necessity of project management in the management of sport events.
2. Use project management tools to plan a successful event.
3. Outline the phases of project management and planning.

CHAPTER OVERVIEW

This chapter introduces project management concepts and tools to assist the sport event manager in planning and implementing the event. Concepts such as the work breakdown structure, Gantt charts, and other project management tools will be introduced.

IndustryVOICE

Becky Griesmer—Programming and Event Manager, Greater Cleveland Sports Commission

As the Programming and Event Manager for the Greater Cleveland Sports Commission (GCSC), I focus on our Youth Education Through Sports program, as well as the recruitment and management of all volunteers, supporting our mid-career professionals on the Associate Board and working with local hotels and housing for GCSC events. My interest in the sporting industry began in 2010 when I interned with GCSC and was the lead student liaison for the World School Games. I continued my path in this field through internships with the Anthony Muñoz Foundation, Greater Cincinnati Sports Corporation, Greater Cincinnati Independent Business Alliance and Xavier University Athletics Department. After graduating from Xavier University with a degree in Sports Management, I accepted a contracted role with GCSC. The position was supposed to only be for one year, but two months into the Fellowship, a new position was created, and I was hired full time in my current role.

Since 2000, GCSC has been responsible for attracting over 190 sporting events, which have contributed over $570 million in economic activity to Northeast Ohio. Our mission is to positively impact the economy, image, and quality of life in Cleveland by hosting and managing amateur sporting events. We are a non-profit organization and a full-service sports commission with 12 full-time staff members focusing on a variety of tasks, including sponsorships, event logistics, event attraction, community outreach, marketing, communications, and funding.

Two current challenges in this area of the industry include changes in current state legislation and the increased costs it takes to run an event. As state legislation is reformed, our organization is impacted because of the uncertainty that it places on potential funding sources on which we rely for major events. As costs continue to rise, it plays a part in the bids that GCSC prepares for event rights holders. Our goal is to put Cleveland in the best light possible, but as hotel, insurance, venue, and labor fees increase, we need to continue to find unique ways to offset these items in order to remain within the budget set forth for the event. GCSC has been able to do this by offering other resources or services that would benefit the client and offset these potential costs. For example, if labor costs are higher than normal at a venue, we would explore the possibility of utilizing staff and volunteers to work in that specific area instead.

The event industry must continue to find a way to stay current with the increased use of technology and the desire that clients have to experience unique venues. A typical ballroom may not do the trick any longer for a conference, but clients would rather look for more interactive, exclusive setups in a space that is a bit different and out of the box. Technology will continue to play a key role in the success of events, due to the inevitable change that is to come for registration processes, ticket sales, or special effects offered. GCSC has continued to stay current with these trends because we know the success of our events and industry rely on it. From a staff management standpoint, the system that we use to gather sign-ups will come out with updates that help enhance the seasonal staff member's experience. We have the option of implementing this technology, such as text message reminders or user-friendly screens, to help our team recruit, communicate, and manage the season staff's experience from start to finish. In addition, our team continues to maintain a close relationship with unique venues and settings around the Cleveland area, so that we might be able to utilize that partnership if the need comes up. We must always keep the customer in the front of

our mind and continue to highlight our area in a fun and diverse way to all visitors. Our goal is to change the mindset that people have about Cleveland, and offer groups services and the extra effort that they can't get anywhere else.

When hiring someone for an entry-level position, our organization must first establish if that person aligns well with our core values. The passion that someone displays in an interview helps highlight whether they will fit with the culture of the organization. I like to look for someone who asks thoughtful questions, can multitask, has a strong work ethic, and is determined to make a difference. I think that fresh college graduates have the tendency to think too seriously about their dream job and miss the moment that is in front of them. I believe that the skills you learn during an internship or first job are often transferable and can be carried from one role to the next. College graduates often overlook and take for granted the skills that they will learn through volunteer work or informational interviews with professionals already in the field. Many positions within my organization require one to possess the ability to think creatively, work hard, and have the team-first mentality. A winning attitude and scrappy, entrepreneurial spirit are a few of the guiding principles that help lead the team to success.

I would encourage students to become familiar with the many different types of tools that help you to plan and assign roles to various staff members. Depending on the event, we have general volunteers who sign up for a shift or two to assist; volunteer captains, who are more of a higher-end volunteer and looked at as the liaisons between general volunteers and our staff; event crew, who are often individuals who are an extension of our staff and work the event full time; additionally, there are ticket takers, venue staff, union workers, and more. Managing all of these people takes communication and a coordinated effort among all parties (venue, event logistics, event rights holder) in order to pull off a successful event. And to do this, you need to really plan to determine how the staff will impact the overall project—the event. Therefore, it is important not only to plan for the main logistics of the event but also to know how you will assign people during the planning, initiation, execution, and breakdown of the event.

Introduction

"The devil is in the details" expresses the idea that whatever one does, he or she should do it thoroughly—meaning that the details are important. This is an important concept to remember when planning and staging events because there is high pressure and often only one opportunity to "get it right." Therefore, sport event managers must incorporate techniques that offer advantages and support for managing events. Project management techniques offer the sport event manager this advantage by integrating the various objectives from the event units (i.e., marketing, sponsorship, operations, and logistics) into one workable plan for the entire project—the sport event. This chapter examines how project management tools can assist the manager in the planning, staging, and implementation of a sporting event.

Project Management

WHAT IS PROJECT MANAGEMENT?

project management The dynamic process of organizing and managing appropriate resources in a controlled and structured manner to deliver the clearly defined work required to complete a project within the given scope, time, and, often, cost constraints.

project A temporary and one-time venture undertaken to create a unique product with specific outcomes and benefits.

project triple constraint The cost, time, and scope constraints that impact the final quality of an event.

Project management is the dynamic process of organizing and managing appropriate resources in a controlled and structured manner to deliver the clearly defined work required to complete a project within the given scope, time, and, often, cost constraints (Patel, 2008; Young, 2007). Sport events, whether they are one-off, annual, or weekly, are projects. A **project** is a temporary and one-time venture undertaken to create a unique product with specific outcomes and benefits (Patel, 2008)—in this case, the sport event. An important aspect to keep in mind is that the event is a deliverable of the project management process (Allen, O'Toole, Harris, & McDonnell, 2011). The event itself might occur over a few hours, days, or even weeks, but the project management process may take place over many months, or, as in the case of the Olympic Games, many years. A misunderstanding of project management leads individuals to believe that it is merely a scheduling process. However, this is not accurate. Project management integrates all of the management tasks necessary to oversee the work before, during, and after the event has occurred. In other words, it is the planning and controlling of scarce resources to ensure a successful event (Lewis, 1998).

There are two main challenges of project management. The first challenge is to ensure that the event can be delivered within the defined constraints (i.e., time, cost, quality, and scope). Known as the **project triple constraint** (Allen et al., 2011), each constraint cannot be altered without impacting the other sides of the triangle and, in the process, the *quality* of the event (see **Figure 2-1**).

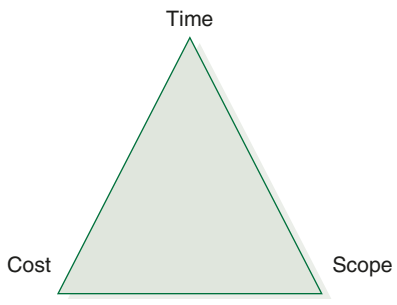

Figure 2-1 The Project Triple Constraint

The *scope* of the project includes **project outputs** necessary to produce the final product (the event). The *time* constraint refers to the amount of time allotted to complete the project. Since sport events are bound by a specific date, when the project runs behind schedule, cost and scope are (often negatively) impacted. The *cost* constraint refers to the amount of money budgeted to complete the project. If the scope of the project falls behind schedule and a sport event manager does not want to affect the event quality in any way, costs will go up considerably. Most sport events are greatly bound by costs, especially in the initial planning stages. This challenge impacts participation sport events that rely on registration fees to finance the event, which can be inconsistent and delayed. Events cannot rely on teams and/or individuals to sign up for the event a year, or even months, in advance. The reality is that many register for events as they draw closer.

project outputs The transformation of resources (human, financial, physical) into new assets through a defined deliverable.

TIP

First-year and one-off event budgets are very difficult to forecast. Do your research early! Call multiple vendors and suppliers of your event equipment and ask for detailed bids. Not only will this provide you with a picture of your expenses but it will also give you an opportunity to negotiate better prices.

Take, for example, a softball tournament. Much of the planning and coordination begins many months (and even a year) before the team registration fees begin trickling in. Therefore, sport event managers must carefully forecast a budget that takes into consideration not only the project outputs but also *when* the money will be accessible. Marketing expenses are frequently required early in the implementation stage. By building relationships with key vendors, event managers can defer payment until after the event in order to avoid up-front expenses. The ability to delay payment is key when the money is not immediately accessible. It requires the building of trust between the event manager and vendor to ensure delayed payment.

Changes to the other two sides of the triangle could be very detrimental to the costs associated with the event. If an event falls behind schedule and containing costs is a concern, scope—and the quality—will be compromised. The scope involves the planning, coordination and implementation of the sport event. Project management tools help to prevent delays that can be costly and impact the quality of the event. Let us return to our softball tournament example. Perhaps in the planning stage the event manager had planned to hire a DJ to entertain the spectators and players in the common area between games. However, the event planning has fallen behind schedule and costs have gone up. The event manager can no longer pay the $1,500 to have the professional DJ perform on the weekend of the tournament.

However, with a little creativity, the event manager is able to secure a university student and amateur DJ for a fraction of the price, $600. This quick thinking allows the event to still provide entertainment, but the quality will be compromised, if we assume that the amateur does not have the skills and expertise of the professional DJ.

The second (and perhaps more ambitious) challenge is the proper allocation and assimilation of the inputs (e.g., people, money, time) needed to meet the objectives of the event (Patel, 2008). Project management tools help the event manager to systematically define the tasks necessary to meet overall objectives, delegate those tasks to the right people, allocate financial resources appropriately, and coordinate when the tasks must be completed. Project management accounts for elements that are not usually found in ongoing management of typical organizations. Events have a specific end date, budget, and deliverable (the event itself) that cannot be improved upon (Allen et al., 2011). While conventional products are continuously updated and improved based on consumer feedback, events do not have that same luxury. An event must produce its best product the first time, especially if it's a one-off sport event.

VIGNETTE 2-1

The 2016 Rio de Janeiro Olympic Games

The 2016 Rio Olympic Games were beset with a number of expensive obstacles throughout the planning and staging phases that nearly compromised the event to the point that the state government of Rio declared a "state of public calamity" just 50 days from the start of the Olympics (Bowater, 2016). Besieged by a fall in oil prices, the country suffered from a major decline in public revenue that threatened Brazil's ability to honor its Olympic commitments. Suffering from severe construction delays, delays in the depollution of competition venues, the failure to secure proper environmental licenses, a rise in tourist crime, disputes between drug traffickers, and a collapsed bicycle path that killed two people, it is a wonder that the Games occurred at all. These delays and complications did come at a price; the state owes the Brazilian government $21 billion and another $10 billion to public banks and international lenders (Barbara, 2016).

Phases of Project Management

A main aim of project management is to control risk and potential failure by providing a clear direction that aligns with the strategic goals and objectives for the event. The management of the sport event will pass through a number of phases, each of which will include a number of tasks that yield a deliverable that sparks the next phase. The number of phases varies by industry, but most disciplines that utilize project management tools agree on five core phases: Initiation, planning, implementation, monitoring, and shutdown (Patel, 2008; Young, 2007). Additionally, the International Event Management Body of Knowledge (EMBOK) [2006] has conceptualized a four-dimensional depiction of the phases, processes, and core values that feed into the domains necessary to create and deliver sport events. This conceptualization is adapted in **Figure 2-2**.

The Processes

The processes are sequential and iterative systems that recognize the dynamic nature of events. The first of the processes is **assessment**, which includes *identifying* and *analyzing.* As an event manager begins to assess the needs for the event, he or she must identify all of the elements in each phase and domain. The analysis of these elements facilitates the prioritizing of an element and supports predictive capabilities when forecasting (Rutherford Silvers, 2004).

The next of the processes is **selection**, which is the decision-making point. An event manager must not only choose the tactics necessary to complete the task or goal but he or she must also assign the resources to carry out the task. Assigning key staff to specific tasks, determining the financial cost to complete the event outcomes, and giving authority to carry out the work are all part of the selection process. The third process is **monitoring** (not to be confused with the monitoring element of the phases), which is the systematic tracking of the progress of a task. The monitoring process is iterative and might require a team to reassess and select new tactics.

Documentation is the fourth process, which involves recording, reporting, and maintaining assessments; analyses, monitoring reports, and other records that provide valuable data to build upon during the current event; and future improvements for the next event. Finally, **communication** is final and the most vital component of the processes because it requires

assessment Identifying and analyzing the environment to assess the needs of the event.

selection The decision point of the planning process.

monitoring The systematic tracking of the progress of a task.

documentation Recording, reporting, and maintaining assessments of progress in order to collect valuable data for current and future event processes.

communication The open and transparent channels of discussion about the processes.

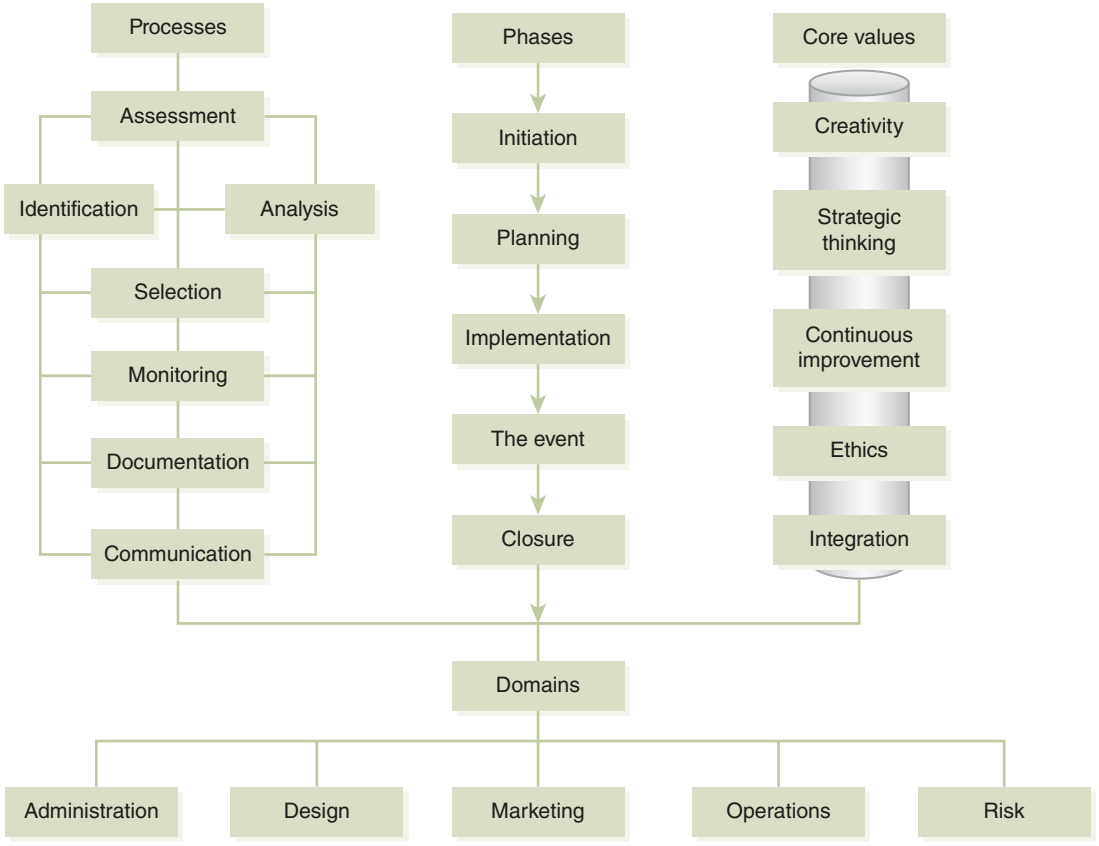

Figure 2-2 EMBOK Model for Event Management

Modified from International EMBOK Executive (www.embok.org), 2006.

timely acquisition and distribution of information for decision-making and execution of tasks required to achieve event product outcomes (Rutherford Silvers, 2004).

The Phases

initiation phase The stage in event planning that allows sport event organizers to define the event, set objectives, and determine the sport event's feasibility.

The phases highlight the critical nature of time in the event project. First and foremost, the sport event requires direction. The **initiation phase** allows sport event organizers to define the event, set objectives, and determine the sport event's feasibility. Many events are unsuccessful because inadequate information collection in the initiation phase leads to unclear goals and objectives, unrealistic resource and time estimates, and changes to objectives

midproject (Zarndt, 2011). Furthermore, if you are seeking financial assistance for the sport event with a bank loan, a bank will most likely require a detailed feasibility study before granting funds (Lock, 2013). In the initiation stage, a feasibility study will detail the viability of a sport event and the managerial requirements necessary to deliver it. This report may also detail date and venue suggestions, an assessment of competing events operating within the host location, potential sponsors, market research identifying potential customers and sponsors, a draft budget, identification of key stakeholders, and, in some cases, the potential social, political, and environmental impacts (Allen et al., 2011). A thorough feasibility study will include alternative configurations of the sport event to enable a variety of options prior to the planning phase. The end of the initiation phase is often marked by a red or green light to continue to the planning stages. **Table 2-1** identifies the areas by domain to explore feasibility of a sport event.

One very important area on which to focus the feasibility study is the financial concerns, under the risk domain. A good event manager should know whether an event is financially feasible prior to green-lighting the event. To determine what financial risk exists, a breakeven analysis should be conducted using the breakeven equation, EBIT = Fixed Costs / (Registration Fee − Variable Costs). This equation is an incredibly useful way to examine the number of attendees (or registered participants, if you are running a tournament, for example) required for the event to break even. The key to a strong analysis is to accurately predict all of the operational expenses involved, both variable and fixed.

TIP

Event Registration Fee: $150.00
Variable costs per competitor: $95.00

Total Fixed Costs: $15,000

15,000 / (150 − 95) = 272.7

You need 273 participants to register for the event to break even.

Table 2-1 Feasibility Areas by Domain

Administration	Design	Marketing	Operations	Risk
• Expertise of staff • Resource viability: Draft budget, staff requirements • Identification of key stakeholders • Timeline for project completion	• Event date and venue • Location accessibility • Program and production viability • Environment capability	• Competing events • Market research • Customer identification • Sponsor identification • Promotion, public relations, sponsor capability	• Managerial requirements • Venue/ infrastructure capability • Social, environmental, political impacts • Technical capability	• Social, environmental, political impacts • Financial concerns • Operational concerns • Legal concerns, insurance • Security

planning phase
The proactive and dynamic stage in event planning in which the various suggested options suggestion in the initiation phase are reviewed for the best course of action and preparation of the event.

This can be very difficult for a first-time event that does not have a financial history. In this case, strong budget forecasting and obtaining accurate bids for the event expenses are critical. When considering event revenue streams, an event manager should not only consider direct event revenues (such as participation registrations) but also the supplemental revenue-generating options such as concessions, auxiliary event ticket sales, sponsorship, memorabilia, etc. The revenues will be projected based on a per-unit average.

In the **planning phase**, the various options suggested in the initiation stage are reviewed to determine the best ones, and the planning begins. Planning is straightforward and can be considered a process of asking questions (Young, 2007), such as:

- What actions need to be taken?
- When will these actions occur?
- Who is going to take on these actions?
- What resources (including human, financial, and supplies/equipment) are required for these actions?
- Is there a bid submission requirement?
- Is there demand for such an event?
- How many staff and volunteers are needed to execute the event?

The answers to these questions can be used to develop a project form that is completed in order to reduce risks and uncertainty, establish standards of performance, provide a structure and procedures for executing work, and serve as a means to obtain required outcomes (Young, 2007). **Figure 2-3** is a sample work plan form that can be used in the planning and implementation stages. A different form can be used for various stages throughout the preparation process.

The planning stage is dynamic and continuous, and sport event managers must remain proactive and diligent. It is wise not to plan all the details at the outset to avoid reworking the plan and wasting valuable time. Furthermore, it is important to identify the key workers who will be involved in the planning process. The planning team should cover all of the previously mentioned domains to ensure well-balanced skills and expertise. Additionally, there are a number of factors, both internal and external, that can have a massive impact on the outcome of the project.

External factors lie outside of the organization's and sport event manager's control but can have a profound impact on the event—including

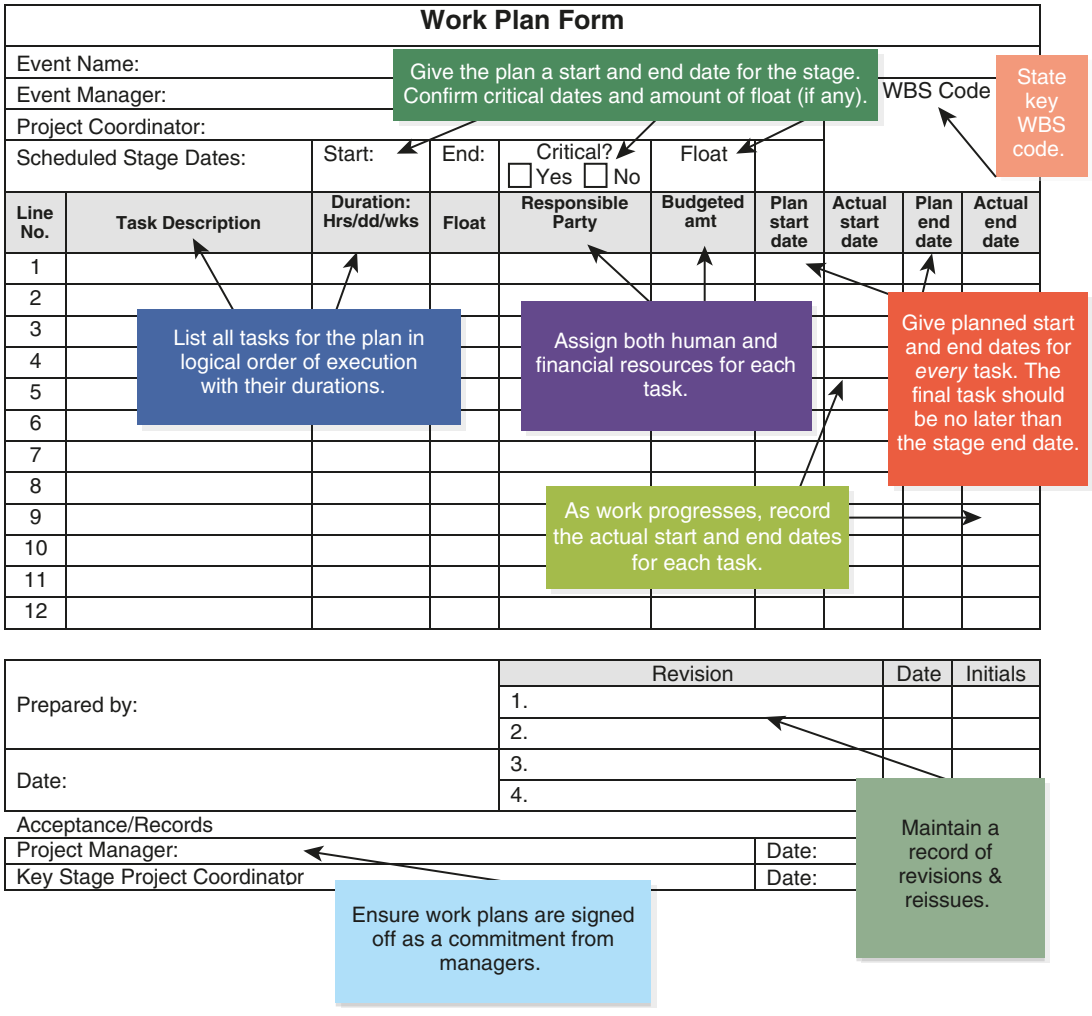

Figure 2-3 Example Work Plan

cancellation. *Acts of God* include extreme weather (e.g., hurricanes, devastating storms, heavy snow/blizzards), and earthquakes. *Fiscal policy* can impact an event when the national government modifies or enacts policy changes on taxation and other financial measures, such as choosing to abandon a government-funded event. An event can be impacted by *statutory regulations* when national or local government imposes new legislation. Such regulations can be particularly important for events that occur in foreign countries, which can be impacted by international, foreign, and local law.

The internal factors are within the sport event manager's scope of control and are likely to affect the staff and project day to day (Lock, 2013). While these factors are internal, at times, the sport event manager might not have authority or power to control them. In this case, the effect on the outcomes can be more detrimental. Proper planning should promote efficient work and maintain the project management triangle elements (time, scope, and costs), thereby saving the staff from the frustration of overcoming crises caused by poor planning (Lock, 2013).

implementation phase The execution of the event plans.

The third phase is the execution, or **implementation phase**, of the event plans. Each domain will have a specific plan that contributes to the overall event plan that must detail how and when the work will be completed (Young, 2007). For example, to attract attendees to the sport event, the marketing plan is executed in the early stages of implementation and most likely long before other plans, such as the event execution plan. One positive outcome of a successful marketing plan is a high number of event attendees, which will affect the logistics plan and the resources necessary to execute it. Thus, all domains must remain in close communication, as decisions are based on the comparison of plans and reality. One way to ensure that everyone stays on the same page is to use the work plan form (review Figure 2-3). Once the work plan is complete, managers can confirm that all tasks meet the following conditions (Young, 2007):

- Are assigned to someone who will take appropriate action
- Have financial resources allocated to them (if necessary), which allows for monitoring control over budget and spending
- Are realistic and achievable given the time constraints

This stage is marked by high activity and requires strong, effective communication among the event team members. There is the possibility that managers will need to revisit the planning stage in light of major problems or changes to the event program (Allen et al., 2011). Poor communication during this stage can lead to a major source of conflict and work slippages.

monitoring and control system The controls that are implemented to ensure that performance standards are achieved as the sport event is executed.

Monitoring and control systems are implemented to ensure that performance standards are achieved as the sport event is executed. According to Young (2007, 2013), there are three operating modes:

- Measuring, which determines progress through formal and informal reporting

- Evaluating, which determines the cause of deviations from the plan and how to react
- Correcting, which involves taking actions to correct the deviations from the plan

The overall event plan and schedule will dictate how and what objectives are to be met. The job of the sport event manager, then, is to regulate the activities and resources to achieve the results defined by the plan (Young, 2007). Because the event environment is dynamic, a great deal of flexibility is necessary in the planning stages, but the execution and monitoring of the event should be systematic in order to achieve goals (Van der Wagen & White, 2010). There are a number of reasons why events fail, including failure to plan, external factors, incompetent staff, poor control of costs or lack of income, and lack of leadership. Monitoring and controls can help safeguard the organization and assist in achieving a successful event.


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The best controls are simple and provide risk prevention and feedback on progress (Van der Wagen & White, 2010; Young, 2013). Preventive controls are established in the planning stages and continue into execution. For example, requiring that only key staff be authorized to sign purchase orders or requiring that all purchase orders be signed by a superior prior to purchase can help to curtail unauthorized spending. Also designing a checklist for event setup would serve as a preventive control *and* a feedback control. As the checklist is completed on event day, it can serve as a way to document missing activities and/or other information. Feedback controls can assist with decision making during an event by allowing an event worker to evaluate a situation and make a decision. For example, perhaps during a warm-up session, the athletes relay an issue with the equipment. The event staff can implement a preventive measure to alleviate the problem prior to competition starting.

The last stage of the project is the **closure or shutdown** of the event, and it, too, must be carefully planned. Management of attendees' departure,

closure/shutdown
The final stage of event planning to ensure that nothing is lost, equipment is returned properly, and the flow of those involved occurs seamlessly.

removal of equipment, and event cleanup can take a great deal of time and effort. Shutdown requires proper planning and execution to ensure that nothing is lost, equipment is returned properly, and the flow of those involved occurs seamlessly. Shutdown is the most forgotten element of the project (Allen et al., 2011). Like the planning and execution stages, shutdown should include a work breakdown structure, task and responsibility checklists, and a schedule, which is subject to risk analysis (Allen et al., 2011). Items and equipment should be inventoried as they are packed up (especially small items like walkie-talkies) both to ensure that nothing is lost and in preparation for the next event. Proper coding and organization of equipment will not only ensure that the details are organized for the next event but they can also help with the closeout of contracts and bills to vendors and suppliers.

domain As used by the International Event Management Body of Knowledge, a division of the labor required at an event.

administration domain The event management domain that includes the finance, human resources, information, procurement, stakeholders, systems, and time elements of an event.

design domain The event management domain that contains the event's content, theme, program, environment, and production, entertainment, and catering needs.

The Domains

According to EMBOK (2006), the **domains** can be further divided to provide greater detail for the management of the event. For example, the **administration domain** includes the management of finance, human resources, information, procurement, stakeholders, systems, and time. The **design domain** contains the event's content, theme, program, environment, and production; entertainment; and catering needs. The **marketing domain** is composed of the event marketing plan, marketing materials, merchandise, promotion, public relations, sales, and sponsorship. The **operations domain** consists of communications, event infrastructure, logistics, the venue, technical needs, participants, and attendees. Finally, the **risk domain** involves compliance issues, emergency plans, health and safety plans, insurance needs, legal concerns, security needs, and any risk-related decisions. These domains could easily represent the departments that are developed to manage the sport event and provide an organizational structure. However, because smaller events do not have the financial or human resources to cordon off these domains into departments, typically, a small number of staff members


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must work within all of these domains. Therefore, it is important to organize the work by domain to ensure that the tasks necessary to complete the project and deliver the event are completed.

Each domain will have tasks specifically associated with the particular phase at hand. Some domains may depend on the other domain in order to begin or complete work. For example, it is important that the event stakeholders are clearly defined by the administration domain prior to the marketing domain developing the materials directed to stakeholders. Another possibility is that one domain could potentially move through one phase faster than another domain, which can create chaos if not properly managed. Going back to the stakeholder example, developing the marketing materials before the stakeholders are properly defined could lead to the costly consequence of having to revise or redo materials. Project management tools provide useful communication tools and processes to ensure that each domain communicates openly at each stage, while keeping the domains on track to deliver a successful event. Planning by stage will also keep the tasks organized for each domain. The stages of event planning are initiation, planning, implementation, monitoring, and closure/shutdown.

marketing domain The event management domain composed of the event's marketing plan, marketing materials, merchandize, promotions, public relations, sales, and sponsorship.

operations domain The event management domain that consists of communications, event infrastructure, logistics, the venue, technical needs, participants, and attendees.

risk domain The event management domain that consists of compliance issues, emergency plans, health and safety plans, insurance needs, legal concerns, security needs, and any risk-related decisions.

WORK BREAKDOWN STRUCTURE

The **work breakdown structure (WBS)** is simply the project tasks broken down into manageable parts. Once the scope of the event has been defined, the WBS allows the work required to deliver the event to be visually categorized and communicated to the staff (Allen et al., 2011). The WBS allows the numerous tasks to be aggregated under specific categories in order to better manage the large scope of work. For example, the tasks related specifically to the marketing plan would be grouped and presented on the WBS as "Marketing." Once completed, the WBS resembles a hierarchical chart, with the event itself at the top and the major activity flowing down the chart (Shone & Parry, 2010).

work breakdown structure (WBS) Project tasks broken down into manageable parts.

GANTT CHART

A **Gantt chart** is a bar chart that illustrates the various tasks that must be completed in a time-sequence order (Shone & Parry, 2010). The Gantt chart

gantt chart A bar chart that illustrates the various tasks that must be completed for the event in a time-sequence order.

displays the details of the work to be completed for the WBS and can be created using the following components (Allen et al., 2011):

- *Tasks* break down the work involved into manageable activities
- *Timelines* set the time scale for each task. Factors to consider are the start and end time and the availability of the assigned resources (both human and financial)
- *Priorities* set the order of important items and identify what tasks must be completed prior to the current task starting
- *Milestones* assist in monitoring the event. Tasks that are of particular importance are designated as milestones

The benefit of this chart is that the tasks are displayed interdependently. One can easily see when a task is to start and end, the progress to date, and which tasks are dependent on one finishing prior to another beginning. A limitation is the inability to visually track resource (staff) workload. While some software programs do allow the event manager to assign resources to tasks, these resources do not appear on the Gantt chart. Therefore, it is difficult to gauge the workload of each resource visually. More sophisticated programs will have a means for monitoring workload, but they will not appear in this chart.

program evaluation and review technique (PERT) chart An illustration of the tasks, duration, and dependency information, which can be useful in defining the critical path for the project.

critical path An analysis of the most efficient scheduling of tasks and subtasks.

run sheet A detailed schedule of the sequencing and timing for each element of the event.

PROGRAM EVALUATION AND REVIEW TECHNIQUE CHART AND CRITICAL PATH

The **program evaluation and review technique (PERT) chart** illustrates the tasks, duration, and dependency information, which can be useful in defining the **critical path** for the project (Van der Wagen & White, 2010). The PERT chart allows for a series of subtasks to be analyzed to find the most efficient scheduling, or the critical path (Allen et al., 2011).

RUN SHEETS

The **run sheet** is vital for the execution of the event, as it is for the program, or schedule, of events (Van der Wagen & White, 2010). The run sheet will detail the timing for each element of the event schedule and provides correct sequencing and timing of those elements. Sequencing in the run sheet will specify the order of actions, while timing will identify when the action will commence (Van der Wagen & White, 2010).

CHECKLISTS

The **checklist** is an indispensable control tool that the sport event manager uses to ensure that each individual is performing all tasks essential to the success of the event. Checklists serve as preventive control during the planning process to account for the specific tasks prior to the event. Additionally, they are feedback control during the event as a recordkeeping process in order to prevent problems and serve to reduce risk, should plans go awry (Van der Wagen & White, 2010).

checklist A preventive control tool that ensures that each individual is performing all tasks essential for to the success of the event.

FLOOR PLANS AND FLOW DIAGRAMS

Floor plans illustrate where equipment or items are to be placed within the event venue. These plans are integral in the proper ordering of equipment based on attendee numbers and in determining whether the venue has the space to accommodate the event design and occupants. **Flow diagrams** are a graphic representation of how attendees will move through your event and venue. These diagrams ensure that queues are held to a minimum, thereby avoiding line backups; display how attendees will enter and exit the venue or event areas; and can determine and mitigate potential areas of risk due to an emergency or other problem. Flow diagrams are especially important for high-traffic areas, such as routes from the parking locations, areas where high numbers will congregate (such as registration or ticket queues), and regions where space is limited or dense.

floor plan An illustration of where equipment or items are to be placed within the event venue.

flow diagram A graphical representation as toof how attendees will move through the event and venue.

Tools of Project Management

SOFTWARE

Make good use of technology. There are a number of project management programs that offer free online software. Furthermore, there are a number of computer software programs that provide a link to a mobile phone application so the sport event manager can easily navigate from computer to tablet to smart-phone, depending on location and accessibility. Much of the current software and web/mobile applications are excellent for planning a sport event; however, due to the dynamic nature of an event, some programs are limited in their usefulness. While there are a number of options available on the Internet, only a few examples and their functionality will be discussed here.

Smartsheet. Smartsheet is a cloud-based tool that allows teams to interface on complex projects in a simple and easy format. Managing projects with the use of Gantt charts, automated workflows, and resource management.

Teams can work in real-time, accessing their tasks, files, and calendars from any device. While this tool is not free, it does offer more functionality than other tools in its category. For more information, visit www.smartsheet.com.

Wrike. Wrike is a project management tool that enables teams to collaborate the platform. The tool offers live editing and file management so teams can see changes in real-time. It also enables Gantt charts to visualize the project schedule as well as resource management allocations and time/budget tracking. Unlike other tools on the market, Wrike offers a free individual tool for teams of five or fewer. More information on this tool can be found at www.wrike.com.

monday. monday is a visually driven project management tool that enables teams to simplify how the team works by managing workload in a more visual platform. This tool requires that you create a board (i.e., project) for the team to track workload. Projects, tasks, missions, and simple to-dos can be easily assigned to team members, where the exact status can be tracked easily and clearly. Like the other programs, monday allows for the creation of Gantt charts and other visuals. More information can be found at www.monday.com.

These are just three examples of many. A quick search of project management tools reveals hundreds of free and paid options. Other popular options include Microsoft Project, Asana, Slack, Trello, Basecamp, and Teamwork Projects. These are just a few examples and there might be a better option for your event management team.

SUMMARY

Because the sport event contains the characteristics of a project, the traditional tools of project management prove incredibly useful to the sport event manager. Project management can offer structure to the sport event and allow for detailed planning, monitoring, and evaluation. Event managers can benefit by using tools such as the WBS and Gantt charts to analyze, categorize, assign, and implement the sport event plan.

DISCUSSION QUESTIONS

1. Discuss why project management is vital for a successful event. Provide a brief overview of three different technological tools for project management. What tool would be the best for your team, if you were an event director. Why did you choose this tool?
2. Discuss the stages of event planning and describe how resources might be assigned for the development of a three-day, three-on-three basketball tournament.
3. Describe the domains of event management and the main duties of each area. Why is it important that each domain be designated for an event?

Case STUDY

Staging Events with Multiple Venues

The logistics of planning and staging a multivenue sport event is no easy task. There will be a number of elements that are compounded by the additional venues, including, but not limited to, scheduling, human resources, equipment resources, communication between venues, security within and between venues, and additional traffic/parking challenges (especially if athletes/patrons require shuttling between venues). The following case introduces the challenges faced when staging a multivenue sport event.

You are the new event director for the inaugural State Games in [the city and state of your choice]. As the newly appointed director, you are tasked with organizing the venues and equipment as well as the schedule for the week-long event. As the schedule is developed, consider the following.

A total of 25 sports have been included in the program. These include:

Archery	Flag football	Tennis
Badminton	Golf	Track and field
Baseball	Racquetball	Triathlon
Basketball	Rowing	Volleyball
BMX racing	Skateboarding	Weightlifting
Bowling	Softball	Wheelchair basketball
CrossFit	Sport skydiving	Wrestling
Diving	Swimming: Indoor	
Fencing	Swimming: Open water	

Note: These listed sports do not include all of the available events. For example, swimming offers a number of sprint- and long-distance, as well as relay, events. Take this into consideration when developing your schedule and staging plan.

- The games are inclusive of all ages and ability. You must decide the age divisions as part of the scheduling process. The games allow any athletes from 12 to 100 years of age to compete.
- The games offer three competitive levels: Novice, intermediate, and advanced.

You may find it helpful to review the Cornhusker State Games website as a resource as you work through this case: www.cornhuskerstategames.com. Using what you have just learned in the chapter about staging and implementing events, develop a plan and schedule for the State Games. Be sure to include the following:

1. The city and state chosen to host the games.
2. A list of venues and the sports they each will host. This list must be realistic and based on the venues available in the city you chose in Question 1. The venues should also be illustrated on a map, along with parking availability and shuttle transport pickup/drop-off points (if relevant).

(*continues*)

Case STUDY (continued)

3. The complete schedule for each venue over the weeklong event, detailing the following specifically:
   a. The type of competition for each sport (e.g., tournament vs. head-to-head) [All sports will have different competition needs.]
   b. The schedule breakdown by age group and level
   c. The resources needed at each venue (e.g., numbers of officials, volunteers, staff)
4. Your overall plan for the staging implementation of the event:
   a. Operations and logistics
   b. Equipment needs
   c. Human resources
   d. Financial resources
   e. Other

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