THE ISPI HPT MODEL APPLIED TO A UNIVERSITY TELEVISION BROADCAST SYSTEM UPGRADE

Dana Bobbert | Michael Robinson | Florence Martin, PhD

This is a case study describing the application of the traditional ISPI human performance technology (HPT) model at CHWK, a campus television channel broadcast from a southeastern American university cable system. CHWK’s issues with delivery options, labor-intensive work flow, and continual staff training were identified as the performance problems. Computerization of the system, including the installation of new hardware and data processing methods, was recommended as the intervention to solve the performance problem.

HUMAN PERFORMANCE TECHNOLOGY (HPT) is a process that helps performance technologists bridge the gap between what is and what should be in human performance systems (International Society for Performance Improvement, 2000). A number of models exist in the field of HPT. We used ISPI’s traditional HPT process (Van Tiem, Moseley, & Dessinger, 2004) as the guideline model for this performance case analysis (Figure 1). The true measurement of any HPT model’s effectiveness and suitability for use is its ability to visualize and then communicate the process logic to others (Wilmoth, Prigmore, & Bray, 2002). This model has been an excellent guideline for the performance technologists to visualize a process and communicate the process logic to the client.

PROBLEM STATEMENT

The current format of CHWK’s broadcast system (see Figure 2) is a standard-definition delivery system. It is a dated tool that presents a variety of issues, including a lack of the capability for advanced graphics. It currently takes approximately 80 hours to train a new student staff member to operate the system; even when the student has become proficient, the average time to design and post a bulletin is 45 to 60 minutes. Editing requires another labor investment of 6 to 8 hours a week, which slows product turnaround time and impedes CHWK’S ability to meet a high demand. One of the issues is a design method that lacks template capabilities. Because of this, all data entry work must be duplicated for each bulletin that is made. As a result, workers are forced to focus on the heavy volume of data entry rather than the creative aspects of the presentation, leading to problems in aesthetic appeal and staff motivation. In addition, campus students cited the lack of a high-definition signal, precise content control, and timing as major problems with the channel.

The actual work flow of manufacturing bulletins requires a labor investment of 20 to 30 minutes per graphical area or crawling text ticker, plus additional time spent corresponding with the submitting party. Another issue is work support. Currently no external support system is in place, and the need for student interns to rely on more experienced staff members to help them is an impediment to the work flow itself. Due to the very nature of their job responsibilities, senior staff members are often unavailable to assist junior employees, resulting in downtime for that worker until he or she receives the necessary help.

The staff envisions a high-definition delivery system (see Figure 3) that will allow a reduction in the total labor
investment per bulletin by 10 minutes and also have an integrated work support system. Furthermore, CHWK’s administrative body would like to remove postproduction labor altogether. Ideally, an updated, fully compatible production and delivery system would improve staff and system performance across all areas.

CHWK’s issues with delivery options, labor-intensive workflow, and continual staff training can be classified primarily as performance problems rooted in the environment, resulting in the need for a new product that presents additional issues related to a rollout. A complete organizational, environmental, and gap analysis was completed.
ORGANIZATION ANALYSIS
CHWK is a service provided by the Media Production Department, a unit within a southeastern university’s Division of Public Service and Continuing Studies (DPSCS). Essentially, however, CHWK operates as its own branded entity. An analysis was completed of the mission, vision, goals, and structure of CHWK; DPSCS; and the larger system they are part of. The vision, mission, values, goals, and strategies of all the collaborating organizations strategically align with the primary and secondary mission of CHWK. However, no organizations other than CHWK have specific strategies related to it. The analysis was accomplished by conducting interviews and observations with various staff members, research, and reviewing previously administered surveys.

CHWK Overview
CHWK is a closed-circuit channel broadcast on the university’s main campus that began in 1996 as a simple broadcast of 10 to 20 slides and mirrored the output of the university’s public broadcast on Time Warner Cable. In 2006, the channel evolved into a dedicated bulletin board system, which allowed original programming. Later that year, a video module was added to the channel, allowing the incorporation of video into the broadcast. The content includes university-related news, events, live specials, student-submitted work, faculty-submitted projects, promotional pieces, public service announcements, and student-selected feature movies. The station mission is “the dissemination of information and entertainment through a television broadcast outlet.” Another primary mission is “to provide a learning platform students can use for training in the fields of broadcasting and communication.” The channel is staff managed, faculty guided, and student operated with the goal of “[delivering] the finest campus television channel through a quality, high-definition service that is valued, effective, and free to use.”

University Overview
Currently close to 13,000 students are enrolled at this university; there are 899 faculty members and 1,252 support staff members. The university’s strategic plan encompasses a mission statement, a strategic vision statement, an identity statement, a list of core values, and a list of seven strategic goals, and corresponding objectives. One of the six core values in its strategic plan harmoniously encompasses CHWK’s primary mission:

The university strives to create learning environments and experiences that promote the cognitive, affective, physical and social development of the student learner. Educators and students collaboratively identify learning outcomes that further personal and professional growth. We engage in continual assessment to ensure a campus-wide learning ecology and community that supports the development of the whole student. (University of North Carolina at Wilmington, 2009)

Of the seven goals, two specifically align with CHWK’s mission:

- Goal 1: “Create the most powerful learning experience possible for our students.” Objective 2 of this goal calls for the university to “improve the range and quality of student-faculty interactions.”
- Goal 5: “Strengthen the university’s regional engagement and outreach activities.” Objective 3 of this goal calls for the university to “connect theory and practice
through service learning programs that enrich academic coursework and serve the region.”

Division of Public Service and Continuing Studies

Media Production is one of six departments within DPSCS. The DPSCS mission statement states:

We strive to improve the social, cultural and economic life of the Cape Fear region by focusing the intellectual and cultural resources of the University on finding solutions to currently crucial and emerging issues affecting our citizens and our communities. We serve the common good by developing an educated, informed and engaged citizenry through programs of engaged scholarship, continuing education and service initiatives involving individuals, families and the business, government and non-profit sectors. (University of North Carolina at Wilmington, 2010)

DPSCS also supports the university mission by “providing leadership that links the university broadly to our public service mission, by advocating for a scholarly approach to community engagement, by offering opportunities for our public to engage with us as full partners and by facilitating access to university resources” (University of North Carolina at Wilmington, 2010).

ENVIRONMENTAL ANALYSIS

An environmental analysis was conducted through interviews with the director of media productions, CHWK’s producer, and two student interns. Data were also gathered through observations and reviews of previously administered surveys.

Organizational Environment

CHWK is located primarily in Leutze Hall. The studio and control room are on the first floor near the director’s office, and the editing room and staff and intern work spaces are on the second floor. Audio and video captures, as well as logistical considerations and follow-up inquiries, can occur anywhere on the university campus. Staff and student interns communicate with each other and their clients through face-to-face interactions, email, phone calls, and an online product submission forum. CHWK stakeholders include the staff and their clients.

Work Environment

The broadcast and postproduction facility consists of a variety of tools used in developing the broadcast package. The facility gives workers access to hardware consisting of an Apple Mac Pro editor. A server-side back end is used to support the data processing, providing 120 terabytes of storage and automated backups. The hardware includes color-accurate professional displays, Photoshop, Final Cut Studio 3, Final Cut Server, and Microsoft Office. Submissions are processed with those tools, and the work is transported via the network to the master control station, where students load the resulting product to the servers and schedule them for playback. Clients are notified of the progress at each step by email or telephone.

The Work

The station manager describes the work flow as follows: “Submitting bodies such as student organizations, staff units, and academic departments can enter submissions in either simple text or rich media form. For simple text users email an ‘idea’ to the CHWK administrative email address where students take the text and tailor a bulletin specifically for them.” This procedure (see Figure 4) occurs with each order because only one template is available. For rich media submission, end users can create their own graphical submission, such as a standard graphics file, PowerPoint, Photoshop file, or movie, and deliver it to CHWK student staff by email or uploading it using FTP. Student workers then tailor the submissions to fit CHWK formatting. Ideally this design offers opportunities for optimal efficiency; however, the station manager noted impediments to this process, such as difficulty of use and limitations with the current tools available.

Work responsibilities are clearly defined and understood by the staff and student interns, yet a lack of external support can adversely affect the work process. For example, staff members’ other job responsibilities make them unavailable at times to assist the student interns.

The Workers

Workers are divided into two trades: technical and creative. A single worker may possess or be trained to possess both talents; however, these are two unique skill sets. After demonstrating competency in either one or both of the trades, students are allowed to operate the tools of that trade. A creative student is allowed to operate production and editing equipment, and a technical student is allowed to manage the broadcast servers and related equipment. Each student employee is further divided into basic or proficient statuses within the creative and technical fields. Workers who have only basic training do not work independently. Their work is verified and closely managed by either other proficient students or staff employees; however, supervision and support are often intermittent.
because of the job responsibilities and schedules of other staff members.

Support for workers comes from the department’s full-time staff and their own knowledge base and skill set. No external support system currently exists. Workers are motivated to produce quality output and improve their skill level primarily through the student résumé-building process. The training received is often greater than what they will get from advanced classes and the “real world.” Portfolios are invaluable, and there is a financial incentive as well: Students with higher skills earn more than those with lower-level skills.

GAP ANALYSIS

The system in place has many limitations that put a strain on the work flow process itself. Staff power is wasted because the system allows only manual entry of data, with no direct avenue for client interaction. Each submission must be emailed to a central location and rekeyed. An average bulletin requires 20 to 30 minutes to produce, and editing requires complete re-creation as opposed to simple editing techniques. Server capabilities are also problematic because of high bandwidth use from constant uploading, which results in occasional system crashes that create more work for the staff.

In addition, postproduction editing requests by clients are arduous and time-consuming, because the very nature of this process requires the staff to start from scratch, even for simple changes. Estimates are that student staff spend upward of 6 to 8 hours a week on such requests, tedious work for student interns. Understanding the scope and depth of these changes is not the problem; the actual work is the problem because of the necessary redesign and configurations. Interns see this as doing the same work twice, resulting in frustration and, often, a slow turnaround time for product delivery.

Staff realizes that the standard-definition delivery system lacks the capabilities and qualities to support service demand. The resolution of standard-definition video limits the amount of content that can be displayed on the screen and the readability of the text (see Figures 2 and 3). The design-develop-post-unpost-repost method in place does not allow transferability and ease of use. Furthermore, in-house developmental support, though sufficient in knowledge and expertise, is also limiting for the interns because of availability issues on the part of the full-time staff. Through examination and inquiry, CHWK staff identified areas of concern that need to be addressed. These areas fall into three separate categories—current state, perceived gaps, future state—and are illustrated in Table 1.

- **Delivery system.** All stakeholders concur that a high-definition delivery system is desired. This system will also have a multichannel feature for storage purposes that will cut down on constant upload requirements and high bandwidth usage, thus resulting in less turnaround time and reducing the number of system crashes.

- **Production tools.** CHWK staff desires a multiple template system. With such a system, postproduction editing can be accomplished by clients and staff alike without the need for redesign and upload, thus reducing bulletin production by 10 minutes. The client editing capability will also allow CHWK staff
to concentrate more on graphic and artistry design, resulting in increased production. Furthermore, this feature will decrease the need for tedious data entry on the part of student interns, which will be reflected positively in their motivation through completion of more artistic-based work in graphical design.

- **Support.** Student interns require a support system that is instantaneous and as knowledgeable as the full-time staff and more experienced interns. Job aids and video tutorials available on the web are support methods outside of what currently exists and are encouraged and supported by all involved. This will assist in countering intern frustrations and will have a positive influence on their motivation to complete tasks at hand.

### CAUSE ANALYSIS

CHWK’s issues can be classified as performance problems rooted in the environment. The client interprets the analysis of the performance problem as an important aspect of the project because the channel is the focal point of the Media Production Department and has an impact on the larger campus community. To serve the campus community effectively, CHWK staff must be able to perform this service at an optimal level in a less labor-intensive environment, while delivering a high-definition-quality product. Through analysis, performance problems have been described, causes for problems have been identified, and appropriate interventions can be recommended for solving the performance problems.

The analysis of the environment and performance revealed several potential causes of the performance problems surrounding CHWK. Data obtained during performance analysis were used to classify and support each of the causes identified and the tools and methods used for this analysis. Interviews were conducted with the full-time staff and student interns, as well as observations of production assistants at work. An examination of previously administered student surveys was conducted to identify potential causes for the performance problems. The performance drivers affect the performance measures of the quality and capability of the broadcast delivery system (see Table 2).

Since its inception in 1996, the channel has evolved from a simple broadcast to a major campus service: It is a primary source for university-related news, announcements, and programming for the university community. Advancements in technology and stakeholder demand have surpassed the capabilities of the current system. The system performance is therefore identified as the root cause of deficiencies related to performance.

<table>
<thead>
<tr>
<th>CURRENT STATE: STANDARD-DEFINITION DELIVERY</th>
<th>PERCEIVED GAPS</th>
<th>FUTURE STATE: HIGH-DEFINITION DELIVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand outweighs turnaround</td>
<td>Lack of delivery quality</td>
<td>Product turnaround at pace with demand</td>
</tr>
<tr>
<td>Limitations with current tools</td>
<td>Demand outweighs turnaround</td>
<td>No limitations with tools</td>
</tr>
<tr>
<td>Created and edited by staff and interns</td>
<td>Outdated tools</td>
<td>Client editing capabilities</td>
</tr>
<tr>
<td>Only a single template available</td>
<td>In-house-only editing ability</td>
<td>Multiple template availability</td>
</tr>
<tr>
<td>In-house support system</td>
<td>Labor-intensive process due to lack of templates</td>
<td>External template availability</td>
</tr>
<tr>
<td>Waning motivation of interns</td>
<td>Support availability limited due to staff job responsibility</td>
<td>Motivated interns</td>
</tr>
<tr>
<td></td>
<td>Interns lack motivation to complete menial data entry tasks</td>
<td></td>
</tr>
</tbody>
</table>

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During interviews with CHWK staff members, analysts asked all interviewees to explain what they perceived to be impediments to production and broadcast performance. Their answers revealed that the existing system was ineffective with regard to postproduction editing because it resulted in a total redesign and reworking of the original slide. Furthermore, the availability of only one template resulted in a loss of labor time because necessary template building specific to topics to be broadcast was necessary. For example, a blank template is available and must be constructed to contain a video or graphical area and a crawl space each time. A new design is necessary if the announcement is news, sports, or announcement related.
In addition, the process of constant downloading, uploading, and reloading causes spikes and high bandwidth usage, which results in occasional system failure, in turn creating more work for the staff. Through examination of a previously administered survey, external stakeholders stated that the lack of deliverable quality of the channel itself was a reason for intermittent and declining viewership. External stakeholders recognize and embrace the value of CHWK’s offerings; however, any aesthetic appeal is missing. The analysts recognize the performance drivers for these deficiencies to be a lack in environmental resources and tools.

Work flow procedures are clearly communicated and understood by the staff and their clients. Impediments to work flow are often caused by issues related to available equipment and tools. Infrequent disruptions to the work flow process do occur as a result of a lack in problem solving and resolution. These disruptions cannot be wholly attributed to a lack in skills and knowledge, since these deficiencies are associated only with new employees and are remedied through experience. Staff have incentives to

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**TABLE 2 CAUSE ANALYSIS**

<table>
<thead>
<tr>
<th>PERFORMANCE DRIVERS (CAUSES)</th>
<th>PERFORMANCE DEFICIENCY NOTED</th>
<th>TOOLS AND METHODS</th>
<th>POTENTIAL AREAS FOR FURTHER ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data, information, feedback</td>
<td>No suspected problem</td>
<td>Interviews</td>
<td></td>
</tr>
<tr>
<td>Environment support, resources, tools</td>
<td>Ineffective production techniques associated with editing due to tools available</td>
<td>Environmental analysis and interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack in template availability requires constant redesign</td>
<td>Environmental analysis and interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constant redesign and editing use lots of bandwidth for storage, which causes occasional system crashes</td>
<td>Environmental analysis and interviews</td>
<td>Further analysis of bandwidth usage required during summative evaluation after implementation</td>
</tr>
<tr>
<td></td>
<td>Standard definition lacks quality and clarity</td>
<td>Environmental analysis and interviews, observations, and review of surveys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-house support system posttraining relegated to full-time staff and experienced interns, intermittent due to availability</td>
<td>Environmental analysis and interviews</td>
<td>Further analysis of support system required after implementation to gauge success and feasibility</td>
</tr>
<tr>
<td></td>
<td>No consequences for poor performance; incentives for mastering are financial and experiential</td>
<td>Environmental analysis and interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deficiencies attributed only to new staff; knowledge base and skill level increase with time and experience</td>
<td>Environmental analysis and interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No suspected problem</td>
<td>Interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waning motivation directly linked to repetitive data entry associated with current system</td>
<td>Interviews</td>
<td>Student intern interviews indicated decrease in motivation when assigned tasks that are repeat efforts of work already done; further analysis of staff motivation required</td>
</tr>
</tbody>
</table>
overcome these deficiencies as quickly as possible in the form of financial compensation and the experience they are gaining.

These deficiencies can be wholly attributed to support. The current support system relies on full-time staff and more experienced interns. A newly hired intern explained in an interview that he received more than adequate training and often his work was overseen by more experienced individuals. He believed that staff were very approachable and more than willing to help and assist when he ran into issues and problems—that is, when they were around. However, staff job responsibilities often take them outside the studio, so they are unavailable to provide assistance. In fact, on numerous occasions, this intern was the only staff member in the studio. The analysts view this lack of support as an environmental support performance driver.

An additional discrepancy concerning the systems interactions with staff was discovered during the interviews. The station manager revealed that the interns, who were excited about working on the artistic aspects of graphical design and video editing, hated the data entry they had to do. The interns revealed a high level of complacency and waning motivation concerning data entry and its repetitive nature. Postproduction editing takes time away from the more intriguing and experience-related aspects of graphical and video design and editing.

Through analyzing the interviews, observations, and previously administered surveys, the analysts identified the root cause of the performance issues to be an underperforming, dated system that is incompatible in design and delivery to the demands of the service (Figure 5).

### INTERVENTION SELECTION AND FEASIBILITY ANALYSIS

Several interventions were considered in an effort to help rectify the performance problems. Although many different interventions would have addressed the issues individually, only computerization as an intervention could address all the root causes. Feasibility analysis was conducted throughout the interview process and in follow-up questioning to determine whether computerization was cost-effective and was possible to implement and maintain (see Table 3).

![FIGURE 5. ROOT CAUSE ANALYSIS DIAGRAM](image-url)

<table>
<thead>
<tr>
<th>Table 3</th>
<th>INTERVENTION ANALYSIS: PEOPLE AFFECTED, COSTS, AND TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERVENTION</td>
<td>PEOPLE AFFECTED</td>
</tr>
<tr>
<td>Computerization</td>
<td>Station manager</td>
</tr>
<tr>
<td></td>
<td>Producer</td>
</tr>
<tr>
<td></td>
<td>Four student interns</td>
</tr>
<tr>
<td></td>
<td>External stakeholders</td>
</tr>
</tbody>
</table>

- Item purchased = $5,493.00
- Annual maintenance and service support = $823.95
- Training = $356.00
- Total cost = $6,672.95
- System training = 52 hours
- System integration, preparation, and deployment = 108 hours
- Total hours = 160
Computerization Intervention

The components of a computerization intervention include the processing of information and data, shopping for more appropriate systems, ordering new hardware and software, reconfiguring the existing system to accept the new system, and training employees in the best use of the new system (Sanders & Thiagarajan, 2001). This intervention addresses the root cause of the performance problems. A new design and delivery system alleviates the issues concerning quality and clarity, as well as high bandwidth usage, which results in system crashes. In addition, computerization can address the single template and limited editing capabilities, which would reduce labor time, allowing staff to concentrate their efforts on graphical and video design to meet the high demands of the service. Consequently, this will also improve motivation since interns would no long have so much data entry to do.

The new system should include an extrinsic support system, which will help address performance issues related to environmental support. Because staff members are not always available for assisting others, an integrated support system will reduce delays in production that result from a lack of experience.

Computerization Intervention Feasibility Analysis

This intervention efficiently and effectively addresses the root problems that the CHWK channel is facing. At the core, the issues involve the systems used to power the broadcast and the operational processes required by that equipment.

CHWK staff want to upgrade their equipment; the core component of the upgrade is the character generator server. This item will be purchased for a cost of $5,493.00, which will be absorbed in the department’s annual operating budget. The estimated life span of the system is 6 years. Maintenance and service support are operationalized costs at 15% of the system price per year: $823.95. This expense will ensure the system is in proper operation and functions over the estimated life span. Maintenance and support are also required by the university’s internal policies. Having a service plan will ensure that product updates and security patches are applied, thereby keeping the unit within policy. Supportive structures for the upgrade, including cabling and transmission systems, are already in place from previous infrastructure upgrades.

Outside of the core character generator server, the only expense that must be incurred is training on the system. Four hours of training on the system is being conducted by the manufacturer at the rate of $89 per hour, for a total of $356. This is a one-time expense. Training will have an initial impact on staff labor as well. Staff will be trained to an expert level, then pass that knowledge on to proficient students, who will then support basically trained students. The total estimated staff labor is 48 hours: 12 hours to train the three full-time staff members in the manufacturer-led training, 12 hours to train proficient students, and another 12 staff hours to train basic students. The last 12 staff hours will be for remedial training because early spikes in end user support will be necessary.

Beyond financial feasibility, the system will have considerable impact on the staff during the deployment phase of the project. Integration engineering will be paramount to success, as the unit will need to function seamlessly and flawlessly with other broadcast equipment. Media Production Department staff have been working with test equipment supplied by the manufacturer for over two months to ensure that the new system will seamlessly integrate with the other broadcast system to remain in place after the upgrade.

In spite of extensive preparation, staff nevertheless are preparing for unforeseen issues by allowing a five-day downtime window during the initial installation with hopes that integration will be less than four hours. The existing system will be removed, and a temporary message will be placed into the broadcast, alerting viewers of the upgrade. As estimated by the university’s technical producer, the total integration time with preparation and final deployment, in addition to product research, will be 160 hours; consequently, the only real barrier to implementation is finding enough labor over the summer.

CHWK staff have already discussed the advantages and risks of a computerization intervention. Given the
TABLE 4  
ADVANTAGE AND RISK RATINGS AND FACTORS FOR THE INTERVENTION

<table>
<thead>
<tr>
<th>POSSIBLE INTERVENTION</th>
<th>ADVANTAGE RATING (0 = NO ADVANTAGE; 10 = HIGH ADVANTAGE)</th>
<th>RISK RATING (0 = NO RISK; 10 = HIGH RISK)</th>
<th>ADVANTAGES</th>
<th>RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computerization</td>
<td>10</td>
<td>3</td>
<td>High-definition delivery Integrated support system Reduction in production labor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>160-hour labor investment to implement Financial commitments (initially and annually)</td>
<td></td>
</tr>
</tbody>
</table>

high advantage and relatively low risk of this intervention (Table 4), the intervention will be implemented.

IMPLICATIONS AND RECOMMENDATIONS

The findings from the problem identification and performance analysis report concluded that the CHWK channel is using dated technology that delivers a poor-quality product relative to a modern system, as well as making inefficient use of available labor. The inefficiency imparts a delay in the delivery of data from the client to the broadcast and demotivates the workers. The current expectations of the IT-driven systems leave clients dissatisfied with any system integration that does not lead to an instantaneous result. The existing systems are not high definition capable and are therefore not meeting the expectations of the student body, as discussed in the survey results presented in the problem identification and performance analysis report.

Students also feel that the turnaround time frustrates clients. The student audience is accustomed to news being reported almost instantaneously. With the data reprocessing happening in the current work flow, there is a lag of several hours to as long as three days, so by the time information reaches students, it is often old news. The last implication is the issue with graphical design, specifically what staff call the “look and feel.” Currently pages are not generated from a template, so each individual graphical broadcast looks different from the others. This creates continuity problems for viewers who see the same broadcast but with radically different graphics. More professional systems allow continuity between systems.

The recommendation is for the Media Production Department to retire the product currently used for CHWK broadcasts and replace it with a new unit. The new system should include high-definition capabilities, network management, direct data entry capability, an extrinsic support system, and a template-driven engine. The analysis portion of the project, which followed the ISPI HPT model of organizational, environmental, gap, and cause analysis, concluded that these features will remedy the issues that CHWK faces.

Furthermore, the system should be robust. The department technical staff requires the system to operate at a 100% duty cycle, meaning it needs to be able to operate at 100% load, 100% of the time without failure. It is also required to meet 99.5% up-time. When sampled over a 12-month period and taking routine maintenance and system failures into account, downtime should be less than 44 hours. Finally, the system is required to withstand a 6-year life span under normal operating conditions.

References


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NEW BOOK REVIEW GUIDELINES ESTABLISHED

Performance Improvement journal has developed new guidelines for writing and submitting book reviews. The book being reviewed should be relevant to applying performance improvement in the workplace; it should go beyond training and development. For example, ideas can be presented on the book’s value in:

- furthering our mental models
- increasing our capacity to diagnose performance problems
- expanding our awareness of interventions
- increasing our understanding of the dynamics of behavior change
- applying systemic thinking to performance improvement, etc.

For a complete copy of the new guidelines please contact briang@ispi.org.

Note: Updated guidelines are also available for writing and submitting articles and commentaries.