Systems Analysis of Faculty Hiring Process Within Academia

Nicole P. Farrell

The Graduate Center, City University of New York

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SYSTEMS ANALYSIS OF FACULTY HIRING PROCESS WITHIN ACADEMIA

THE GRADUATE CENTER, CITY UNIVERSITY OF NEW YORK

by

Nicole P. Farrell

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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ABSTRACT

Systems Analysis of Faculty Hiring Process Within Academia

by

Nicole P. Farrell

Advisor: Alicia M. Alvero, Ph.D.

There are three levels of performance discussed in organizational behavior management (OBM): (a) the organization level, (b) the process level, and (c) the job/performer level. Among these three levels of performance, individuals often focus least on the process level – which is the level that explains “how” work gets done (Rummler & Brache, 1995). However, if the processes are not effective, workers cannot complete tasks adequately, regardless of the contingencies applied by an organization. One way researchers can evaluate the effectiveness of processes within an organization is through the use of systems analysis. The purpose of the present study was to utilize process mapping to help identify the disconnects in the faculty hiring process within a university and to help establish how much time could be saved by making each recommended improvement. The analysis indicated that systems analysis at the process level could benefit academic settings, adding a valuable contribution to the relatively sparse empirical process analysis literature.
I would like to express the deepest appreciation to Dr. Alicia Alvero, my mentor, for all of her guidance and support throughout graduate school. I am so glad that I took a course she was teaching in 2010 to introduce me to the field that I am so interested in. Throughout my graduate school years, she taught me how to be a better researcher and writer and how to grow professionally, and I am grateful for that. I truly believe I would not have made it to where I am today without her as my mentor.

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Organizational behavior management (OBM) research discusses three levels of performance within businesses: (a) the organization level, (b) the process level, and (c) the job/performer level (Rummler & Brache, 1995). The goals, design, and management of the organization across the three levels of performance result in the overall performance of the organization (Rummler & Brache, 1995). If an organization (a) meets the consumers’ expectations of products, quality, quantity, timeliness, and cost (i.e., goals of the organization), (b) has the necessary structure of the organization in order to meet the goals efficiently (i.e., design of the organization), and (c) has management in place to make sure the current goals are being met (i.e., management of the organization), then an organization is considered to have optimal performance across all three levels. The first level, the organization level, focuses on the relationship between the organization and its market. The process level refers to the steps needed to complete a task. Lastly, the job/performer level refers to the individual human performance in completing tasks and producing valued outputs that contribute to critical processes (Rummler & Brache, 1995). If an organization experiences problems, it is imperative that each level of performance be analyzed in order to identify where the problem(s) lie and to determine how the components of the organization interact. This type of analysis is sometimes referred to as “systems analysis” (Brethower, 1997-2010).

The current study demonstrates that academic settings might benefit from systems analysis at the process level, adding a valuable contribution to the relatively sparse empirical process analysis literature. The faculty hiring process within higher education settings is a critical process and one that often suffers from costly and time-consuming disconnects which can be identified and corrected using systems analysis at the process level. This goal is accomplished by
(a) considering the three levels of performance and why the process level is targeted for change in the present research, (b) defining systems analysis and discussing the areas in which systems analysis at the process level has been used, (c) explaining how process mapping is utilized to help identify the disconnects in the faculty hiring process within the university, and (d) to help establish how much time can be saved by making each recommended improvement.

Three Levels of Performance

**Organization level.** The first level of performance, the organization level, focuses on the organization’s relationship with the market and shareholders. Performance at this level can be affected by the structure, goals, and management of the organization, as well as the distribution of resources (Rummler & Brache, 1995). Within an academic setting, the organization level would be the university’s relationship with the community, alumni, government agencies, and both current and prospective students.

**Process level.** The second level of performance, the process level, focuses on the structure of the workflow within the organization. In other words, understanding the processes (or steps) involved in completing tasks (Diener, McGee, & Miguel, 2009; Rummler & Brache, 1995). As defined by Malott 2003, a process consists of “systematic tasks that transform an organization’s resources into products and services” (p. 68). There are a variety of core, support, and management processes that are required for successful organizational performance. Process analysis typically begins with an examination of the core process, as those are the processes that convert organizational inputs into the outputs received by customers (Rummler & Brache, 1995). In an academic setting, the inputs would be money, educational technologies and equipment, and faculty/staff. The output would be university-level education and training and the customer would be the student. If the service of interest was the university-level
education and training, core processes are those that directly touch the design, development, and implementation of the education/training. In other words, instructional systems design (ISD) was the core process. Critical core processes are those that directly support the ISD process. Two critical support processes would be faculty hiring and training.

**Job/performer level.** The last level of performance, the job/performer level, focuses on the behavior(s) of the individuals who complete the various tasks within the organization (Rummler & Brache, 1995). Within an academic setting, the job/performer level would refer to the behavior/actions of staff, faculty, or administrators who work within the university.

**Analysis of the Three Levels of Performance**

To further clarify the differences between the three levels of performance, an example will be provided of an organization hiring a consultant because of overall concerns with safety and high costs associated with injuries and accidents occurring on the job. Analyzing safety concerns at the organization level may identify lack of budgets for the protective equipment available to the employees. Analyzing safety concerns at the process level may identify obstacles or steps within the process that prevent timely and efficient ordering of the required equipment. Lastly, analyzing safety concerns at the job/performer level includes how safely each employee conducts his or her job, in other words, the behavior of the employee.

Analyzing high costs associated with worker safety at the organization level includes how the injuries and accidents affect the company’s profit margin, their standing amongst competitors in the market, and the quality of products customers are receiving. Analyzing high costs at the process level may include identifying obstacles or steps within the process that prevent timely and efficient filing of a worker’s compensation claim, resulting in a fine. Lastly, analyzing high costs at the job/performer level includes how accurately the employees complete the
compensation claim because if the claim is not completed accurately, the organization can be fined.

If an analysis reveals that employees are not filing claim forms correctly, then lack of training or consequences may be identified as an area for improvement. On the other hand, if an analysis reveals that employees are following the correct protocol/steps required to file a claim, and they are doing so in the most efficient manner possible, the problem is likely due to redundant and missing steps created by the company at the process level. In summary, the protocol is inefficient. Thus, no amount of contingency management, regardless of the contingencies or motivation procedures applied within the organization, can further decrease the length of time necessary to file the claim. The process of reporting an incident to the insurance company is faulty. Identifying and rectifying these “faults” is known as process level improvements.

A Focus on the Process Level

Among the three levels of performance, individuals focus the most on improving the job/performer level (Hyten, 2009) and the least on the process level (Rummler & Brache, 1995). To allow workers to get the tasks done efficiently, the processes need to be defined clearly and managed well (McGee & Diener, 2010). Furthermore, the processes need to work effectively to allow the workers to get the job done adequately, regardless of the contingencies or motivation procedures applied by an organization. It is the processes within the organization that determine how effective the organization will be (Rummler & Brache, 1995).

Hyten (2009) indicated that the process level often contains many deficiencies within organizations. Organizations may have steps that do not add value to the processes; rather they result in delays and unnecessary costs. Researchers should focus on the process level within
organizations to identify and eliminate the steps that do not add value to the process (Harbour, 1993). The organization’s desired results can be met by having effective and efficient processes (Diener et al., 2009; Hyten, 2009). For these reasons, the literature reviewed for the present research study focused on the process level.

**Systems Analysis**

One way researchers have evaluated the process level is through the use of systems analysis. Systems analysis is a tool that evaluates all components of an organization (i.e., a system) to determine how they interact and to identify areas for improvement (Brethower, 1997-2010). At the process level, systems analysis involves analyzing the components, or steps, that affect performance in a process within an organization (Kriesen, 2011). Systems analysis can identify where disconnects (missing and/or redundant steps) in the processes are and what needs to be modified within the processes to minimize or eliminate those disconnects (Diener et al., 2009).

Systems analysis differs from other performance improvement interventions by targeting sustainable behavior change through evaluations of all measurable components of the system (Brethower, 2001). Systems analysis can be compared to Performance Management (PM), a common OBM intervention. The PM approach to performance improvement focuses on evaluating the antecedents and consequences that affect performance (i.e., The ABC Model) and involves manipulating the environment to improve performance (Daniels & Daniels, 2004). The majority of studies that implemented PM interventions indicated that the behavior change did not maintain across long periods of time (Sigurdsson & Austin, 2006). Systems analysis focuses on maintaining behavior change (Brethower, 2001). Systems analysis may consist of PM
interventions but also consists of other interventions to analyze the organization beyond the ABC Model.

There are a variety of terms people use to refer to systems analysis at the process level, the most commonly used term being process improvement. Although a variety of terms are used to refer to systems analysis at the process level, all of the terms refer to the same goals: reduce cost, decrease production time, and increase quality (Harbour, 1993; Sasson, Alvero, & Austin, 2006) by identifying and resolving disconnects.

The primary tools used in systems analysis at the process level are high level (macro) process mapping and detailed process mapping. High level (macro) process mapping identifies the process phases, not steps (Malott, 2003). Whereas, detailed process mapping identifies who is responsible for the completion of each step of the process and maps out every step within a process of an organization so that disconnects within the workflow can be easily identified (Blasingame, Hale, & Ludwig, 2014; Kriesen, 2011; Rummler & Brache, 1995). The initial map created when diagramming a process is often referred to as an “Is” map. An “Is” map is a map of the way the process is currently conducted within an organization (Rummler & Brache, 1995). The “IS” map is created and the process is analyzed to determine what the disconnects are and what is causing those disconnects. Then, a “Should” map is created to eliminate if possible, or reduce if elimination is not possible, those disconnects (Rummler & Brache, 1995). In process mapping, there are a variety of symbols to help to easily identify different types of actions within a process and the inputs and outputs of each action. A rectangle represents a process/task, a diamond represents a decision, and arrows represent relationships between the connecting shapes (i.e., inputs and outputs).
**Systems Analysis at the Process Level**

Researchers have demonstrated that systems analysis at the process level can be used effectively in both laboratory and applied settings.

**Laboratory settings.** Sasson et al. (2006) conducted an experiment at a university’s campus to evaluate the effects of improvement strategies on work processes and human performance. The participants, 48 undergraduate students, were told to copy electronic image files into a document in MS Word. The researchers used a 2 (manual process vs. electronic process) × 2 (behavioral intervention vs. no behavioral intervention) between subjects design to measure the amount of time the participants had work materials or completed materials in their possession (i.e., minutes-in-possession) and the number of errors made in completing the task.

First, there was a meeting to obtain the participants’ consent and to train them in MS Word and MS Hotmail. In a second meeting, the participants were trained in the processes they would use to complete the task—either the manual process or electronic process. The participants in the electronic process condition received the files via email and were required to e-mail their copy to another participant and the researcher upon completion. The participants in the manual process condition went to the experimental room to obtain a copy of the file on a floppy disk and were required to save a copy of their document onto the floppy disk and return it to the experimental room upon completion. Half of the participants were exposed to a behavioral intervention, which consisted of more training and a monetary bonus. The monetary bonus was contingent on reaching a specific criteria of the dependent variables (i.e., the minutes-in-possession and number of errors). At the start of the study, these participants were given a document that described the requirements necessary to earn the monetary bonus, definitions of the dependent variables, and “hints” (p. 58) to earn the bonus.
The results for the minutes-in-possession indicated that the participants in the manual process condition only took more time ($SD: 441; \text{range: } 936-2347$) than the participants in the manual process with the behavioral intervention ($SD: 625; \text{range: } 174-2376$). The participants in the electronic process condition only ($SD: 495; \text{range: } 882-2243$) took more time to complete the task than the participants in the electronic process with the behavioral intervention ($SD: 368; \text{range: } 24-1177$). A two-way analysis of variance indicated main effects for the type of process (e.g., electronic vs. manual) ($p<0.05$) and for the behavioral intervention (e.g., behavioral intervention or no behavioral intervention) ($p<0.001$). The effect size was $d=0.64$ for process type and $d=2.37$ for behavioral intervention. There was no interaction effect between the process type and behavioral intervention ($p=0.406$).

The results for the number of errors made indicate that the participants in the manual process condition only ($SD: 737; \text{range: } 3-2593$) made more errors than the participants in the manual process condition with the behavioral intervention ($SD: 44; \text{range: } 0-143$). The participants in the electronic process condition only ($SD: 42; \text{range: } 1-128$) made more errors than the participants in the electronic process condition with the behavioral intervention ($SD: 43; \text{range: } 0-138$). A two-way ANOVA did not indicate main effects for either the process type ($p=0.285$) or the behavioral intervention ($p=0.302$). The researchers indicated that there was no interaction effect between the process type and behavioral intervention ($p=0.337$). The researchers indicated that although it appeared that there should have been an interaction between the process type and behavioral intervention for the number of errors made, the absence of an effect was a result of one participant. Due to the outlier, the researchers indicated that there was a large range and variance in the participants’ performance on the manual task only (i.e., no behavioral intervention).
In summary, Sasson et al. concluded that the process type and behavioral intervention positively affected the minutes-in-possession. The results of the two-way ANOVA on the number of errors did not indicate a statistically significant effect for the type of process or behavioral intervention.

Sasson et al. (2006) demonstrated that changing a work process and human performance positively affected completion time on the task. However, studies conducted in such settings designed to mimic a workplace lack external validity. Fortunately, much research has been done in applied settings that supports Sasson et al.’s research.

**Applied settings.** Kriesen (2011) used multiple strategies commonly used in systems analysis, specifically TPS, BSAQ, and process mapping, to evaluate the three levels of performance of a print production management (PPM) system in a privately-owned training company. Thirteen print vendors and 13 employees participated in the experiment. The researcher conducted an assessment that consisted of a TPS diagram to evaluate the seven key components, a BSAQ to create a list of questions used for surveys, and interviews to collect information from the individuals who perform the steps of the processes. The PPM system was evaluated for approximately 3.5 years via questionnaires and interviews from the vendors and employees, satisfaction surveys completed by the customers, purchase orders, and job reports. The general finding from the assessment indicated the need for change based on the shifts in the role of print within the printing industry. The clients’ focus on classroom training that involved a heavy use of printed materials shifted to integrating classroom training with e-learning courses (e.g., webinars, podcasts), requiring fewer printed materials.

After evaluating the organization level, the researcher indicated that a focus to improve the company should be on the process improvement and staffing in order to provide their
customers with cost-effective and high quality print-related products and services. In evaluating the organization level and the process level, the researcher found missing steps within the process, a lack of effective tools to assist in completing tasks, and poor guidance from PPM specialists which could negatively affect the company’s costs, the quantity and quality of products completed, and customer satisfaction. At the performer level, the researcher concluded that there was a lack of resources, such as descriptions of the workflow and terms used, and unclear work expectations. However, performance at the performer level cannot be improved if there are inefficient processes (Kriesen, 2011; Rummler & Brache, 1995). Throughout the assessment, the TPS map and the process map were created and refined. These tools helped to identify disconnects within the current process. An updated process map (i.e., a “Should” map) was designed to reduce the disconnects to display a more efficient process.

After the implementation of the new process, a follow-up survey was completed by six vendors. All of the vendors indicated that the new processes and tools were “very effective” and were a “major improvement.” After the revisions to the process, 66% of the vendors indicated they were “very confident” and 33% indicated they were “confident” in completing tasks with no problems, as opposed to the responses prior to the revisions, which indicated that 23% of the vendors were “very confident” and 61.5% were “confident.” Furthermore, after the revisions to the process, 83% of the employees indicated they were more confident in completing tasks and 75% indicated that the process was “less of a struggle.” The researcher also concluded that the company’s profit margin increased because the amount of time PPM specialists were needed for assistance was well below budget, which contributed the overall profit margin. The researchers concluded that, on two projects, the specialist time was 53% and 23% below budget, contributing
to 24% and 2% overall profit margins. Furthermore, productivity increased after the study was completed.

Although Kriesen (2011) identified ways to improve all three levels of performance within a printing company, she demonstrated the need to focus on the process level to improve the company’s performance. Blasingame et al. (2014) conducted an experiment at a furniture company that evaluated only the process level of performance by creating new steps in the welding process to reduce the set-up times (i.e., reducing production time) to meet the customer demands. Two full-time employees in the welding department were observed. The dependent variable was the set-up time, which was calculated by subtracting the start-time of one item from the time the previous item was completed. Every day the employees recorded their times. Video observations were used to determine the accuracy of the self-reports. The observations indicated that the set-up time was lengthy because (a) the parts to create the next item were not in the employees’ work booth, (b) the coworker/parts coordinator whose task it was to bring the material to the employees’ booth was not stationed nearby, and (c) the lack of communication between the parts coordinator and the welder regarding the completion of previous items. The researchers implemented an AB design to evaluate the effect of a new process design on the welders’ process time. To begin the intervention, the researchers held a meeting with the welders and the parts coordinator to clearly discuss the welding process and discuss the process redesign. During the meeting, the employees were shown two videos, one video that demonstrated an efficient way of setting-up and another video that demonstrated an inefficient way of setting-up (e.g., the welder having to leave his work booth to obtain the parts himself). To address the concerns regarding the lengthy set-up time, two process maps were created. One map identified the problem within the welding process and the other map displayed the process redesign.
Additionally, the employees and parts coordinator were given walkie-talkies to improve communication. The overall set-up time for both employees decreased from 9.39 min ($SD=2.78$) during baseline to 7.12 min ($SD=2.64$) during the intervention. The overall reductions in set-up times would save approximately 79 hours a year, saving the organization $1,168.92$ a year.

Similar to Blasingame et al. (2014), Goomas (2012) evaluated only the process level of performance. The researcher changed the work procedures of an organization by replacing paper audits with wireless audits and evaluated the effects on performance. The participants included 10 auditors, two from each of five auto parts distribution centers. The researchers used a nonconcurrent multiple baseline design across the distribution centers. Three centers were used as control groups and used the paper sheets, while the other two centers were exposed to the intervention and used the handheld computers. The results for the two centers that were exposed to the intervention indicated that the number of items audited per week increased from 62.8 and 76.6 using paper audits (baseline) to 119 and 132.7 using handheld computers (intervention). This experiment demonstrated that audit productivity was increased, resulting in a correction of more errors. For one distribution center, the savings resulted in approximately $400$ a week, summing to approximately $20,000$ per year. If the numbers were similar across the other four distribution centers, the total cost savings per year would be approximately $100,000.

Myers, McSween, Medina, Rost, and Alvero (2010) demonstrated that improving the process level could involve developing safety processes. The researchers created a behavioral safety process in a petroleum refinery to decrease the number of injuries. The petroleum refinery had six self-contained areas of operation. The researchers developed a safety process that could be implemented within each of those areas, as well as within the larger refinery. The behavioral safety process was introduced in a pilot area first and then was implemented in the remaining
areas of the refinery. During the start of the assessment, the researchers held meetings with the workers to discuss the safety process, the steps involved, the projected time frame, and to answer questions. Next, behavioral consultants conducted a safety assessment and an injury analysis to identify targeted work practices (e.g., body positioning when lifting). A team of 10 employees was formed and then trained on the behavioral safety process. The team created value statements and assisted in creating the safety processes for each unit within one self-contained area. Next, the other employees were trained on the safety processes. Employees were observed twice monthly and their performance was recorded via checklists. The employees also received monthly feedback on their performance. Over a period of eight years, incident rates were decreased by 81%, lost work time cases decreased by 79%, and savings in workers’ compensation costs were 97%. Prior to and during the implementation of the behavioral safety process in the pilot area, employee teams received safety rewards for time with no incidents. After the behavioral safety process was introduced to the remaining areas of the refinery, employee teams received safety rewards for reaching a specific percentage of participation in conducting safety observations. Therefore, the results cannot be attributed to the behavioral safety process alone. The researchers concluded that the behavioral safety process was associated with the decrease in the rates and severity of incidents and the number of workers’ compensations claims.

The Use of Systems Analysis at the Process Level Within Higher Education

Although researchers have used systems analysis across laboratory and applied settings, work on the use of systems analysis at the process level in an academic higher education setting has not yet been published. Universities and colleges are organizations that may benefit from systems analysis at the process level. The faculty hiring process within higher education is a
critical component of the organization; thus, identifying and solving costly, time-consuming disconnects using systems analysis at the process level would be of great value to all constituents within the university.

Glass and Minnotte (2010) and Sheridan, Fine, Pribbenow, Handelsman, and Carnes (2010) discussed the recruiting and hiring processes of two universities. Glass and Minnotte (2010) provided a detailed description of the recruitment and hiring processes within an eastern university for a science, technology, engineering, and mathematics (STEM) tenure-track position. First, the department chair created a committee of approximately four tenured faculty members. Then, that committee created a description of the available position, which followed the guidelines given by the Human Resources Department, and required approval by the Provost before being posted. After the application deadline passed, the committee reviewed the applications and created a list of potential candidates. The potential candidates were interviewed at the campus and then were ranked. The rankings were given to the department for approval. Lastly, the department requested the Provost’s approval to offer the position to the highest ranked candidate.

A university in the midwest implemented a similar hiring process. Sheridan et al. (2010) provided a detailed description of the recruitment and hiring processes of a faculty member within a medical university in the midwest. First, the department chair created a search committee and assigned a committee chair. Then, the dean chose faculty and staff members to serve on the search committees for the heads of the department. These search committees conducted the searches, recruited and reviewed the applications, and chose the potential candidates to be interviewed at the campus. Depending on the department within the university, the committee’s responsibilities could have also included choosing the potential candidates,
ranking the candidates and giving the rankings to the department for approval, or recommending a specific candidate for the job. The departmental executive committee approved who would be hired.

In sum, Glass and Minotte (2010) and Sheridan et al. (2010) indicate that the hiring and recruitment processes within universities involves advertisement of a vacant position, creation of a search committee, interviews, and a job offer. Although these recruitment and hiring processes are specific to two different universities, they highlight: a) the number of steps and offices involved in making a hiring decision within a higher education institution, and b) the similarity in certain key steps across institutions. Clear communication across offices within an organization is critical for processes to be performed more efficiently, and academic institutions are no exception (Blasingame et al., 2014).

It is very likely that there are many processes within higher education settings that may have room for improvement; however, the hiring process, in particular the hiring of faculty, may be a crucial process. It is important for colleges and universities to hire effective faculty for students to obtain positive learning outcomes (Twombly & Townsend, 2008). Furthermore, hiring effective faculty could positively impact the university by adding a competitive advantage and increasing the retention of qualified people. There are various steps within the hiring and recruitment processes that may result in a loss of top-quality candidates from accepting the job offer. Twombly (2005) interviewed three community colleges of different sizes and locations and concluded that they all advertised the faculty positions internally, regionally, and nationally. He stated that the “focus of advertisement varied depending on the teaching field, the perceived depth of the potential applicant pool, and the timing of the vacancy” (p.438). In other words, where and how the positions are advertised can affect the number of top-quality applicants.
Another possible step in the process that may result in the loss of possible top-quality candidates is the amount of time it takes for the candidate to receive a reply in response to their application or a job offer. The search to fill vacant faculty positions took a median of 4.5 months in a study conducted by Leland and Nelson-Wernick (1983). If the college or university takes too long to offer the candidate the job, the candidate may have already accepted an offer from a different place. In other words, the less time it takes to offer the position to the top-quality candidate, the more likely that candidate will not have accepted a position elsewhere. Leland and Nelson-Wernick reported that 23% of applicants stated that they did not receive a reply in response to their applications.

Lastly, the search committee should determine whether or not the candidate would be a good match (i.e., “fit”) for the vacant position by matching the candidate’s specialties to the specialties the university is seeking. If the search committee does not make this determination, then resources and time are wasted (Basil & Basil, 2006; Murray, 1999).

In sum, the hiring process within academic settings is a critical process that may be improved using systems analysis at the process level. The hiring and recruitment processes may suffer from costly and time-consuming disconnects, which may result in the loss of top-quality candidates. The purpose of the present study was to utilize process mapping to help identify the disconnects in the faculty hiring process within the university and to help establish how much time could be saved by making each recommended improvement.

**Method**

**Setting**

The study was conducted at a public, liberal arts and sciences university located in the northeast United States. The university was a public university that offered an education in
liberal arts and sciences. The university offered both graduate and undergraduate programs. There were over 100 undergraduate and graduate degree programs and approximately 16,680 undergraduate students and 3,186 graduate students that were enrolled in the university.

**Pre-Intervention Tool Development: IS Map**

**Identification of Steps in the Hiring Process.** The researcher conducted individual interviews with some of the key personnel who were involved in the hiring process within the university. These individuals included: the Dean of Arts and Humanities, the Provost, representatives from the Office of Compliance and Diversity Programs (OCDP) including the Chief Diversity Officer, the Vice President of Human Resources, department chairs, and search chairs. The purpose of the interviews was to identify the role(s) of each individual involved in the hiring process, which steps/tasks within the process they were involved in, and to clarify any steps that were unclear to the researcher.

After the individual interviews were conducted, the researcher summarized all of the information reported during the meetings into a single word processing document. The researcher then held a group meeting with the key personnel listed above to review and verify the information presented in the summary document (see Appendix A).

**IS Map Development.** The summary document was then used to create the “Is” map. An “Is” map displays the way the current steps in a process are conducted; in this case, the “Is” map depicts the current steps in the faculty hiring process (see Appendix B). There were 12 individuals/departments that were involved in the hiring process: the department chair, the Divisional Dean, the Provost, the President, Budget Office, a search committee, a search chair, Office of Human Resource Recruiter (OHRR), OCDP, CUNY Central, CUNYFirst, a department Personnel & Budget (P&B) Committee, and the candidate. There was also one database,
CUNYfirst, involved in the process. The performer labels (i.e., row labels) for the individuals/departments are displayed on the left edge of the map. Each step within the process consists of a step number and a task. There were 68 steps within the hiring process. The steps illustrated in the “Is” map were those listed in the summary word processing document (see Appendix A). The numbers for each step on the “Is” map correspond to the same numbers on the list.

**Intervention: Utilization of the IS Map**

The IS map was utilized to identify data sets/timeline and to identify disconnects within the hiring process.

**Data sets/timeline.** The researcher obtained computer records that indicated the dates that candidates went through specific steps within the hiring process to determine the duration for specific steps in the faculty hiring process. There were 17 faculty searches identified in one academic year. The researcher attempted to collect data on the duration of each step in the faculty hiring process for the 17 faculty searches; however, because there were no tracking systems in place for many of the steps, data on only some of the steps were obtained. Below are the data sets on which the researcher attempted to collect data along with the corresponding number of steps indicated in the word processing document and “Is” map. Table 1 consists of each data set and the numbered steps for each set of variables that correspond to the “Is” map and the “Should” map. The data sets were (a) the length of time between when the President authorizes a faculty search and when the department is notified by the Provost of the President’s approval (steps 4-5); (b) the length of time between when the President approves a faculty search and when the job is posted on CUNYfirst (steps 4-32); (c) the length of time between when the President approves a faculty search and when someone is hired (steps 4-68), (d) the length of
time between the departments being notified of the approved faculty search and the department contacting the Office of Human Resources Recruiter (OHRR) to set up a Recruitment Advisory Session (RAS) (steps 5-15); (e) the length of time between the departments being notified of the approved faculty search and the department contacting the Office of Compliance and Diversity Programs (OCDP) to schedule a briefing conference with the Chief Diversity Officer (steps 5-20); (f) the length of time between the department receiving the search plan paperwork from OCDP to complete and when the search plan was approved by OCDP (steps 16-25); (g) the length of time between the department contacting OCDP to schedule a briefing conference with the Chief Diversity Officer and the date of the briefing conference (steps 20-23); (h) the length of time between the date the job posting closed and when the search chair sends a completed search grid to OCDP for approval (steps 35-45); (i) the length of time between OCDP approving a grid and when interviews are conducted (steps 51-56); (j) the length of time between interviews completed and when the department chair provides the Dean with the top candidate's CV, proposed offer letter, and letter of recommendations (steps 59-61); and (k) the length of time between when the department chair provided the Dean with the top candidate's CV, proposed offer letter, and letter of recommendations and the Provost notifying the department chair of the approved offer (steps 61-63).

**Disconnecteds.** The researcher reviewed the “Is” map and looked for unclear steps/roles, redundant steps (i.e., rework loops), and missing steps. The researcher also looked at the decision diamonds to determine the process of the “no” arrow and looked at the inputs to each process to determine if any inputs are generating problems. An organization consultant would convert the “Is” map to a “Should” map which would eliminate the disconnects to depict the way a process should occur within an organization (Rummler & Brache, 1995).
A visual example of a rework loop in a process map is shown in Figure 1. This figure displays repeated steps following the “no” arrow from the decision diamonds, specifically the repeated steps involving the assignment of an HCM number. The HCM number is a number that was assigned to job positions and was associated with a corresponding line in the college budget. The bolded and italicized font on the process map indicates the steps that consist of disconnects within the process.

A visual example of a disconnect in a process map is shown in Figure 2. This figure displays a missing step, specifically a step that should consist of the Human Resource Department sending “thank you” emails to the applicants not selected for the position.

**Dependent Measures: Should Map & Time-Savings Analysis**

The information from the “Is” map helped identify data sets to collect and displayed disconnects within the hiring process. As a result, the researcher made recommendations to produce a more efficient process – known as a “Should” map (see Appendix C). The “Should” map depicted the faculty hiring process reducing the disconnects, in other words, the more efficient hiring process for the university.

The changes to the “Is” map were also used to help calculate a time-savings analysis utilizing the data described above in the “Data Set/Timeline” subsection.

**Results**

Analysis of the process using the “Is” map resulted in the identification of three rework loops (i.e., unnecessary repeated steps) and four other disconnects in the faculty hiring process within the university.

**Rework Loops.** The rework loops identified were (a) regarding who assigned the HCM number, (b) whether the budget office declined the HCM number that the Divisional Dean or
department chair assigned and (c) whether the job advertisement and/or recruitment plan documents were completed accurately by the search chair.

As the “Is” map displays, the department chair or the Divisional Dean assigned the HCM number. The department chairs and Divisional Dean had access to a list of possible HCM numbers; however, because HCM numbers were associated with the budget office, department and divisional staff were not well-versed in the assignment process. The department chair completed and signed the Hiring Budget Justification form and sent the form to the Divisional Dean (step 6). The department chair did not always include the assignment of an HCM number to that position when completing the form. If the department chair did not assign an HCM number to that position, either the Divisional Dean assigned an HCM number when he reviewed and signed the form or the Divisional Dean sent the form back to the department chair for an HCM number. This example indicates that the steps to assign and HCM number repeatedly go back and forth between multiple people/departments (i.e., the department chair and Divisional Dean).

Furthermore, after the budget office received the Hiring Budget Justification form with an HCM number (step 9), the budget office either accepted or declined the HCM number that the Divisional Dean or department chair assigned, depending on whether they selected a vacant number that was associated to the correct position title. If the budget office declined that HCM number, the budget office notified the Divisional Dean or the department chair to choose a different number. Those steps continued to repeat until a number was approved. It was important for the HCM number to be assigned quickly because the subsequent step within the process could not start until a number was assigned. The “Should” map illustrates the elimination of those steps that involve the assignment of the HCM number by recommending that the budget
office assigns the HCM number at the very start of the faculty search process (step 8), after the Divisional Dean reviews and signs the Hiring Budget Justification form.

The “Is” map also made visible a redundancy regarding whether the job advertisement and/or recruitment plan documents were completed accurately by the search chair. OCDP reviewed the job advertisement and recruitment plan documents (step 24) and if they indicated that the documents were not completed accurately, the search chair was required to modify the documents and re-submit the documents. These steps repeated until the documents were accurately completed. To eliminate this redundancy, it was recommended that OCDP provide the search chair with templates and examples of what information should be included on each document following the search chair’s request to schedule the OCDP briefing conference to increase the likelihood that the initial document submission would be accurate (step 20 on the “Should” map).

**Other Disconnects.** The disconnects the “Is” map identified were regarding (a) the final steps to close the search, (b) poor data records for job searches, (c) the assignment of one individual assigned to oversee the process, and (d) which individuals contact the applicants not selected for the position,

After the department chair received the signed offer letter, the Human Resource department was not notified to send “thank you” emails to the candidates not selected for the position and OCDP was not notified to close the search. Thus, the “Should” map indicates that after the department chair receives the signed offer letter and notifies the Divisional Dean and the Provost, the Divisional Dean contacts the Human Resource Department and requests for “thank you” emails to be sent (step 68). Then, the Human Resource Department will notify OCDP to close the search (step 69).
Another disconnect identified involved poor data collection for the job searches. Data for the following steps could not be attained because those dates could not be located by the key personnel involved in the hiring process: (a) when the department requested a faculty line to the Dean, (b) when the request for the faculty line was made from the Dean to the Provost/President, and (c) when the Dean notified the department chair of the approved offer. A better tracking software system, such as ProcessMaker, should be used to collect information regarding the steps of the process. This computer software can consist of documents used throughout the process and display the due dates for steps within the process and which step of the process is currently being worked on.

The process also lacked the assignment of an individual to oversee the process. There should be one person assigned to oversee the process. That person would be responsible for the completion and maintenance of the process.

Lastly, when the researcher interviewed the search chairs, the search chairs indicated that it was unclear who was responsible for emailing the candidates who were not selected for interviews. The researcher added step 53 on the “Should” map, indicating that the Human Resource Department should contact the applicants not selected for interviews immediately after the search chair notifies the department of the approved grid and certification.

**Additional recommendations.** The researcher made further recommendations to improve the hiring process. Another step within the process that can be modified in the “Should” map involved in the scheduling of the OCDP briefing conference. The “Is” map illustrates that the entire search committee and search chair were required to attend the OCDP briefing conference (step 22). It may take a long time to arrange a date that everyone can attend. Thus, it was recommended that only the search chair is required to attend the OCDP briefing conference
to reduce the length of time it takes to schedule a date that is convenient for a large number of people.

The researcher also modified steps 56 and 59 on the “Should” map to improve how the Divisional Dean, search chair, and search committee interviewed the candidates. When the top candidates are being interviewed by the Divisional Dean, the Divisional Dean should use best practice interviewing (step 56). For example, the Divisional Dean could take the leading candidate to lunch/dinner after the completion of the initial interviews. Additionally, it was recommended that the search chair and search committee should use online videoing (step 59) when it would expedite the process to increase the likelihood of scheduling an interview sooner and eliminate travel expense costs associated with interviewing a candidate that does not live nearby.

**Time-savings analysis.** In addition to the utilization of the “Is” map to identify disconnects that resulted in recommendations to produce a more efficient process as shown in the “Should” map, a time-savings analysis was calculated. Data were analyzed by calculating descriptive statistics for the completion time for each data set. The researcher contacted the individuals (n=14) who served as search chairs for each of those faculty lines to request dates of when specific steps within the process were completed. The response rate for the search chairs was 79%. The researcher also received dates of specific steps within the process from the Office of Compliance and Diversity and the Office of Human Resources.

The time-savings analysis for the “Should” map included estimates of the duration of time saved for each data set. The estimates were made by setting goals to complete certain steps within the process and by reducing the length of completion time for the steps that consisted of eliminations or alterations. The goals were identified by the key personnel who attended the
group meeting during the initial steps of this study. Table 2 includes the projected reduction of days for specific steps within the hiring process and the data sets that are included in each of the steps listed. The projected reduction in the number of days for each data set was calculated by identifying which steps of the process the data set included in the “Is” map and totaling the projected number of days that can be reduced across those steps. As indicated in Table 2, some of the data sets overlap. Then, the sum was subtracted from the current average number of days to complete the corresponding data set (shown in Table 1). For example, data set B was included in the first 7 columns in Table 2 (i.e., involved steps 4 to 5, 5 to 10, 10 to 15, 15 to 20, 20 to 23, 23 to 25, and 25 to 32). The projected number of days reduced that were listed for those 7 columns were added together and totaled to 40. Thus, the projected number of days that can be reduced for data set B is 40. Table 1 indicates that the current average number of days to complete data set B was 97. If the projected number of days (i.e., 40) was subtracted from the current average number of days to complete that data set (i.e., 97), it can be concluded that the projected average number of days can be as low as 57 for data set B.

Table 1 also indicates the average duration it took for the participants to complete specific steps within the hiring process, the time-savings analysis, the numbered steps for each set of variables that correspond to the “Is” map and the “Should” map, the number of participants that reported dates for each data set, and descriptive statistics. The time-savings analysis concluded that the current hiring process took a minimum average of 386 (SD: 77; range: 308-388) days which could be reduced to as low as 230 days. Thus, the time-savings analysis showed an overall estimated decrease of 156 days.

The time from when the President authorized a faculty search and the department was notified by the Provost of the President’s approval could not be reduced because these steps were
done on the same day; (b) from when the President approved a faculty search and the job was posted on CUNYfirst could be reduced from an average of 97 days ($SD$: 73; range: 29-195) to an average of 57 days based on setting goals and the alterations for some of these steps; (c) from when the President approved a faculty search and someone is hired could be reduced from an average of 386 days ($SD$: 77; range: 308-461) to an average of 230 days based on setting goals and the alterations for some of these steps; (d) from when the departments were notified of the approved faculty search and the department contacted the Office of Human Resources Recruiter (OHR) to set up a Recruitment Advisory Session (RAS) could be reduced from an average of 21 days ($SD$: 27; range: 0-59) to an average of 7 days based on setting goals and the alterations for some of these steps; (e) from when the departments were notified of the approved faculty search and the department contacted OCDP to schedule a Briefing Conference with the Chief Diversity Officer could be reduced from an average of 36 days ($SD$: 38; range: 8-80) to an average of 19 days based on setting goals and the alterations for some of these steps; (f) from when the department received the search plan paperwork from OCDP to complete and when the search plan was approved by OCDP could be reduced from an average of 26 days ($SD$: 23; range: 5-83) to an average of 14 days based on setting goals and the alterations for some of these steps; (g) from when the department contacted the OCDP to schedule a briefing conference with the Chief Diversity Officer and the date of the Briefing Conference could be reduced from an average of 15 days ($SD$: 12; range: 3-28) to an average of 10 days based on setting goals and the alterations for some of these steps; (h) from when the date the job posting closed and when the search chair sent a completed search grid to OCDP for approval could be reduced from an average of 47 days ($SD$: 49; range: 10-152) to an average of 14 days based on setting a 2 week goal for these steps; (i) from when OCDP approved a grid and when interviews were conducted could be reduced
from an average of 24 days ($SD$: 14; range: 12-50) to an average of 14 days based on setting a 2 week goal for these steps; and (j) from when the interviews were completed and when the department chair provided the Dean with the top candidate's CV, proposed offer letter, and letter of recommendations could be reduced from an average of 10 days ($SD$: 11; range: 2-31) to an average of 7 days based on setting a 1 week goal for these steps. The length of time from when the department chair provided the Dean with the top candidate's CV, proposed offer letter, and letter of recommendations to when the Provost notified the department chair of the approved offer could not be calculated because data for when the Dean notifies the department chair could not be obtained.

Figure 3 displays the duration for each data set and indicates that the duration can be reduced for 9 out of the 11 data sets (i.e., 82% of data sets). One data set could not be reduced further because the steps involved in that data set were completed the same day and the final data set could not be calculated because data on that variable could not obtained. Even though the number of steps continue to be similar in the “Is” map and the “Should” map, the number of days decrease using the “Should” map. In the “Should” map, there were two data sets, c and i, that indicated an increase in the number of steps (range: 1-2) and three data sets, b, d, and e, that indicated a decrease in the number of steps (range:1). This figure suggests that the more steps involved in each data set, the higher the number of days it will take to complete.

**Discussion**

The present study utilized process mapping to help identify the disconnects in the faculty hiring process within the university and to help establish how much time can be saved by making each recommended improvement. The present study extended research that has tested the effects of systems analysis across laboratory (Sasson et al., 2006) and applied settings (Blasingame et
al., 2014; Goomas, 2012; Kriesen, 2011; Myers et al., 2010) by using systems analysis at the process level in an academic setting. Work on the use of systems analysis at the process level in an academic higher education setting has not yet been published. The results of the present study indicated that even though the number of steps continue to be similar in the “Is” map and the “Should” map, the number of days decrease using the “Should” map.

This analysis consisted of process mapping which was used to identify disconnects within the hiring process to make recommendations for a more efficient process. As a result of this study, the researcher can provide a document to all key personnel involved in the hiring process that lists all of the steps involved in the hiring process and who is responsible for each step.

The current study had several limitations. One limitation was that the researcher was not provided with time-stamped documents to indicate when specific steps within the process were completed. There were some discrepancies found between dates obtained by different departments/key personnel. These discrepancies were not included in the results. Thus, the time-savings analysis may not be an accurate representation of how long steps within the process take. Future studies should obtain time-stamped data if possible.

Another limitation was that the intervention (i.e., the “Should” map) was not implemented due to a hiring freeze at the university. Thus, the time-savings analysis consisted of estimations based on the goals set to complete certain steps within the process and by reducing the length of completion time for the steps that consisted of eliminations or alterations. When the hiring freeze is lifted, a researcher should implement the “Should” map and follow-up data should be collected. The researcher should also assess the quality of the intervention by measuring saving costs, quality of the candidates, retention of qualified faculty, and the student outcomes/ performance. Furthermore, the tool RACI (responsible, accountable, consulted,
informed) should be used to identify if all of the 12 parties involved in the process are necessary. Lastly, the intervention should consist of checklists, set goals, and feedback to maintain the parties’ behaviors.

Additionally, because the “Should” map was not implemented due to the hiring freeze, the researcher could not collect social validity regarding the goals, procedures, and outcomes of the intervention. Future researchers should collect social validity following the implementation of the “Should” map to determine how valuable the intervention was to the individuals involved in the hiring process.

The university consisted of poor data records for the job searches. The researcher could not obtain data points for (a) when the department requested a faculty line to the Dean, (b) when the request for the faculty line was made from the Dean to the Provost/President, and (c) when the Dean notified the department chair of the approved offer. Therefore, the researcher could not calculate one of the data sets.

When the researcher conducted interviews with key personnel who were involved in the hiring process within the university, the individuals reported that the current hiring process was cumbersome. Some of the complaints were that departments had slow response times to questions via emails, that they were unsure and received little guidance on how to complete some documents, and that they did not know who was required to assign an HCM number and how to assign an HCM number that would get accepted by the budget office.

Despite these limitations, it is important to focus on using systems analysis at the process level in academic higher education settings. Specifically, the hiring process within higher education is a critical component of the organization that can benefit from systems analysis at the process level. The primary tool used in systems analysis at the process level is process mapping.
Process mapping helps to identify disconnects and to reduce or eliminate those disconnects. Costly and time-consuming disconnects in the hiring process can result in the loss of top-quality candidates. It is important for universities to hire effective faculty to increase students’ positive learning outcomes (Twombly & Townsend, 2008) and the retention of qualified people and to add a competitive advantage. Thus, future research should continue to focus on improving the hiring of the best faculty members.
Table 1

The Time-Savings Analysis and Descriptive Statistics for Each Data Set

<table>
<thead>
<tr>
<th>Description</th>
<th>Current Average Number of Days to Complete</th>
<th>Projected Average Number of days using Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The length of time between when the President authorizes a faculty search (n=4) and when the department is notified by the Provost of the President's approval (n=5)</td>
<td>0 (n=4) steps 4-5</td>
<td>N/A steps 4-5</td>
</tr>
<tr>
<td>B. The length of time between when the President approves a faculty search (n=4) and when the job is posted on CUNYfirst (n=17)</td>
<td>97 (n=4) steps 4-32 range: 29-195 SD: 73</td>
<td>57 steps 4-31</td>
</tr>
<tr>
<td>C. The length of time between when the President approves a faculty search (n=4) and when someone is hired (n=14)</td>
<td>386 (n=3) steps 4-68 range: 308-461 SD: 77</td>
<td>230 steps 4-70</td>
</tr>
<tr>
<td>D. The length of time between the departments being notified of the approved faculty search (n=5) and the department contacting the Office of Human Resources Recruiter (OHR) to set up a Recruitment Advisory Session (n=4)</td>
<td>21 (n=4) steps 5-15 range: 0-59 SD: 27</td>
<td>7 steps 5-15</td>
</tr>
<tr>
<td>E. The length of time between the departments being notified of the approved faculty search (n=5) and the department contacting OCDP to schedule a briefing conference with the Chief Diversity Officer (n=4)</td>
<td>36 (n=3) steps 5-20 range: 8-80 SD: 38</td>
<td>-19 steps 5-14</td>
</tr>
<tr>
<td>Step Count</td>
<td>Steps</td>
<td>Range</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>F.</strong> The length of time between the department receiving the search plan paperwork to complete from OCDP (n=15) and when the search plan was approved by OCDP (n=17)</td>
<td>26 (n=15)</td>
<td>steps 16-25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>range: 5-83</td>
</tr>
<tr>
<td><strong>G.</strong> The length of time between the department contacting OCDP to schedule a Briefing Conference with the Chief Diversity Officer (n=4) and the date of the briefing conference (n=17)</td>
<td>15 (n=4)</td>
<td>steps 20-23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>range: 3-28</td>
</tr>
<tr>
<td><strong>H.</strong> The length of time between the date the job posting closed (n=17) and when the search chair sends a completed search grid to OCDP for approval (n=7)</td>
<td>47 (n=7)</td>
<td>steps 35-45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>range: 10-152</td>
</tr>
<tr>
<td><strong>I.</strong> The length of time between OCDP approving a grid (n=17) and when interviews are conducted (n=6)</td>
<td>24 (n=6)</td>
<td>steps 51-56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>range: 12-50</td>
</tr>
<tr>
<td><strong>J.</strong> The length of time between interviews completed (n=7) and when the department chair provides the Dean with the top candidate's CV, proposed offer letter, and letter of recommendations (n=6)</td>
<td>10 (n=6)</td>
<td>steps 59-61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>range: 2-31</td>
</tr>
<tr>
<td><strong>K.</strong> The length of time between when the department chair provided the Dean with the top candidate's CV, proposed offer letter, and letter of recommendations (n=6) and the Provost notifying the department chair of the approved offer (n=0)</td>
<td>unknown</td>
<td>steps 61-63</td>
</tr>
</tbody>
</table>
Table 2

The Number of Days Reduced for Steps Within The Hiring Process

<table>
<thead>
<tr>
<th>Steps in the &quot;Is&quot; Map</th>
<th>Projected Number of Days Reduced</th>
<th>Data Sets Included in the steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 to 5</td>
<td>0</td>
<td>a, b, c</td>
</tr>
<tr>
<td>5 to 10</td>
<td>14</td>
<td>b, c, d, e</td>
</tr>
<tr>
<td>10 to 15</td>
<td>0</td>
<td>b, c, d, e</td>
</tr>
<tr>
<td>15 to 20</td>
<td>3</td>
<td>b, c, e, f</td>
</tr>
<tr>
<td>20 to 23</td>
<td>5</td>
<td>b, c, f, g</td>
</tr>
<tr>
<td>23 to 25</td>
<td>4</td>
<td>b, c, f</td>
</tr>
<tr>
<td>25 to 32</td>
<td>14</td>
<td>b, c</td>
</tr>
<tr>
<td>32 to 35</td>
<td>10</td>
<td>C</td>
</tr>
<tr>
<td>35 to 45</td>
<td>33</td>
<td>c, h</td>
</tr>
<tr>
<td>45 to 51</td>
<td>20</td>
<td>C</td>
</tr>
<tr>
<td>51 to 56</td>
<td>10</td>
<td>c, i</td>
</tr>
<tr>
<td>56 to 59</td>
<td>20</td>
<td>C</td>
</tr>
<tr>
<td>59 to 61</td>
<td>3</td>
<td>c, j</td>
</tr>
<tr>
<td>61 to 68</td>
<td>20</td>
<td>C</td>
</tr>
</tbody>
</table>
Figure 1. An example of a process map consisting of a rework loop.
Figure 2. An example of a process map consisting of a disconnect.
Figure 3. The number of days to complete each data set using the “Is” map and “Should” map.
Appendix A

Current Hiring Process Listed

Requesting a Faculty Line
1. Department chair requests a faculty hire(s) from the Divisional Dean
2. Divisional Dean presents the request(s) to the Provost
3. Provost presents the request(s) to the President
4. President decides which faculty hire requests will be approved and notifies the Provost
5. Provost notifies each department chair of Faculty Hires approved by the President

Hiring Budget Justification Form
6. The department chair completes hiring budget justification form, signs the form, and sends the form to the Divisional Dean for signature
7. Divisional Dean reviews the form and sends it to the Provost for signature
   a. Department chair or the Dean assign an HCM number
      i. If the department chair assigns the number, the process continues. If the department chair does not assign the number, then dean does.
      ii. If the Dean assigns the number, process continues. If the Dean does not assign the number, then the form is sent back to department to assign the number.
8. Provost receives the form, signs the form, and sends the form to Budget Office for signature and to check HCM number
9. Budget receives the form, reviews the form, and accepts or declines the HCM number
   a. If the HCM number is declined, the Budget Office will tell the department chair or the Dean to assign a different number and these steps repeat until an HCM number is accepted
10. Budget Office accepts the HCM number and signs the hiring justification budget form
11. The Budget Office sends the final copy of the form to the Human Resource Department to be filed
12. The Budget Office send the final copy of the form to the Dean and the department to get filed

Search Process
13. Department chair selects search chair and search committee
14. The search committee and search chair receive notification that they will assist with this search and begin the job posting process

Job posting process
15. Search chair contacts Office of Human Resources Recruiter (OHRR) to schedule a Recruitment Advisory Session
16. OHRR provides the search chair with paperwork and instructions to complete the paperwork and schedules the Recruitment Advisory Session (RAS)
17. Search chair completes paperwork
18. The search chair attends RAS with OHR to review CUNYfirst Job Vacancy Notice template, guidelines for completing the template, and external job advertisements.
19. Search chair works with OHR recruiter to develop job advertisements
20. The search chair contacts Office of Compliance and Diversity Programs (OCDP) to schedule a Briefing Conference
21. OCDP provides the search chair with paperwork and schedules the Briefing Conference
22. The search chair completes the documents
23. All committee members attend OCDP Briefing Conference
24. OCDP reviews the proposed recruitment process, job advertisement(s), and the grid that must be utilized when applications are reviewed.
   a. If OCDP recommends changes to the proposed job advertisements or recruitment process, the Search Chair makes changes and returns the documents to OCDP for approval
25. OCDP emails the Department Chair, Divisional Dean and Provost to notify them that the ad and recruitment plan has been approved
26. OCDP emails Search Chair and OHR to notify them that the ad and recruitment plan has been approved
27. OHR recruiter forwards the approved job ad to CUNY Central for review.
28. CUNY Central approves the ad
29. The job ad is inputted into CUNYfirst.
30. Department chair receives an email notification to approve job ad on CUNYfirst
31. Chief Diversity Officer also receives CUNYfirst request for approval
32. Upon last approval, ad is posted on CUNYfirst
33. OHR recruiter and search chair posts both paid and unpaid job ads on all external sources
34. The search chair must verify that all advertisement (both internal and external) are posted and retain an electronic copy of all advertisements

Applicant review process
35. Applications are available to be reviewed after 30 days.
36. After 30 days or after the time frame listed in the search plan approval form, the OHR Recruiter provides search committee CUNYfirst link to access applications/CVs.
37. Search committee reviews all applicants and completes the grid to rank the applicants and group them into 2 categories: Tier 1 and those not selected for interviews
   a. If there are no Tier 1 or Tier 2 candidates, the committee can make a new grid with new applicants on CUNYfirst
38. Search committee sends completed grid to P&B for approval
39. P&B approves the grid
40. Search chair receives notification of the approved grid from P&B
41. The search chair send the Provost the grid for review
42. The Provost approves the grid
43. The search chair sends the grid to the Divisional Dean for review
44. The Dean approves the grid
45. Search chair sends the completed grid, copies of the job ads placed, and a brief bullet pointed summary of deliberation requirements to OCDP for approval
46. The department chair will (a) contact the Provost’s Office to notify them of the approved grid
47. The department chair will contact the Provost’s office to determine the amount of financial support available to cover search-related expenses and (b) provide the Provost’s office with a copy of the job posting.

48. Allocation for search expenses will be transferred from the Provost to the Divisional Dean.

49. The Dean will receive the search expenses.

50. OCDP will review the grid.

51. OCDP will approve the grid and look for certification.

52. Search chair is notified of the grid approval.

53. The search chair will notify the OHR recruiter of the applicants not selected for interviews.

**Candidate Interview Process**

54. Search chair notifies the department chair of the approved grid and makes a request for him to schedule on-campus interviews.

55. The candidate confirms the interview date.

56. The candidate is interviewed by the department chair and the Divisional Dean.

57. The search chair may also schedule lunch or dinner interviews with candidates and search committees.

58. The candidate confirms the lunch and dinner interview.

59. The search chair, the search committee, and candidates have the lunch/dinner interview.

**Job Offer Process**

60. The search chair selects the top candidates and obtains Department P&B agreement.

61. Department chair contacts the Divisional Dean and provides (a) a copy of the top candidate’s CV, (b) a proposed offer letter and, if applicable, a start-up offer letter and (c) letters of recommendation for review.

62. The Divisional Dean provides the above information to the Provost for review.

63. Provost notifies the department chair of the approved offer.

64. The candidate receives an offer from the department chair via email.
   a. If any negotiations take place, all negotiation should occur between the candidate and the department chair (who then works with the Dean and Provost to arrive at a revised offer).

65. When the offer is accepted, the candidate signs and returns the offer letter to the department chair.

66. The department chair receives the offer letter and file it.

67. The department chair notifies the Divisional Dean and Provost of the accepted offer.

68. Candidate becomes faculty on his/her hire date.
Appendix B

“Is” map
Appendix C

“Should” Map
References


