COMPETENCY MODEL FOR
INFORMATION SYSTEMS MANAGER (1409)

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of INFORMATION SYSTEMS MANAGER. (Numbers refers to the order of the competencies in the Competency Bank.)

3. Judgment and Decision Making
6. Attention to Detail
17. Innovation
21. Technology Application
33. Interpersonal Skills
47. Written Communication
51. Program Responsibility
53. Leadership
59. Strategic Planning

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (italicized, bolded, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.
3. JUDGMENT AND DECISION MAKING – Accurately assesses situations, seeks new information if necessary, and applies all available information to reach sound conclusions/formulate effective response.

Level of Competency Required by Job:

Level 1: Training and guidelines needed to respond to immediate situations within very specific function are provided (or supervisor available to assist).

Level 2: General information and guidance to assist in responding to a variety of situations across a range of circumstances are provided.

**Level 3:** Little guidance available for responding to a wide range of complex situations with far-reaching and/or enduring consequences.

Examples of Behavioral Indicators:

- Effectively responds to atypical situations.
- Asks questions or otherwise obtains additional relevant information to make a decision.
- Formulates a decision and necessary actions based on available facts.
- Correctly infers appropriate response based on information provided and existing policies, personal experience, and/or consultation with others.
- Discusses conclusions/possible responses with others before taking action as necessary.
- Considers impact of decisions on all affected parties.

Performance Levels:

**Satisfactory**

Correctly assesses routine and unusual situations and reaches appropriate conclusions for actions needed. Obtains additional information and/or consults with others as necessary.

**Superior**

Evaluates new situations accurately to establish an appropriate response or plan of action. Recognizes the impact on all affected parties, as well as the possible ramifications and/or repercussions of setting a precedent.
6. ATTENTION TO DETAIL – Extremely careful in addressing all aspects of each work assignment in order to produce “completed staff work” and/or avoid any negative outcomes.

Level of Competency Required by Job:

Level 1: Ensure all aspects of work assignment are completed as directed.

Level 2: Verify that each aspect of work assignment is properly completed; make logical inference regarding additional activities that may need to be performed to produce “completed staff work.”

**Level 3: Include evaluation of final work/work product in its accomplishment; make adjustments as possible to improve.**

Examples of Behavioral Indicators:

- Carefully checks all aspects of work for completion and accuracy before submitting.
- Identifies errors (for example, typo’s, computations, measurements, application of laws/rules/policies) and corrects them prior to submitting.
- Cross-checks work against available resources.
- Sets up a means of checks and balances to ensure work accuracy.
- Considers changes in final work product to ensure usability by recipient.
- Completes all revisions upon request.

Performance Levels:

**Satisfactory**

Ensures that each task accomplished represents “completed staff work.”

No remaining details/inconsistencies for others to address.

**Superior**

All aspects of each task completed are verified to be correct. Identifies any foreseeable consequences of work that may need to be addressed and does so.
17. INNOVATION – Seeks out and/or develops drastically different work products or ways of doing work in order to improve services and/or increase productivity.

Level of Competency Required by Job:

Level 1: Identify different means of doing work or suggest changes in work product that significantly improve productivity, work product, or service provided.

Level 2: Re-engineer processes and practices to increase efficiency and/or productivity and/or to improve work product or service.

Level 3: Re-conceptualize purpose of function and/or how to achieve it in a way that improves efficiency and effectiveness.

Examples of Behavioral Indicators:

- Notes inefficiencies/unnecessary steps in work processes for elimination.
- Suggests different, more expedient means of doing work.
- Conducts thorough review of work practices to identify possible points of increased efficiency in work flow and/or product/service quality.
- Identifies opportunities to increase breadth or depth of impact.
- Determines/implements novel means of accomplishing work.
- Reconfigures existing resources to improve work flow, work product, or service.

Performance Levels:

Satisfactory

Maintains constant awareness of ways to improve quantity and quality of work. Identifies and is willing to suggest changes no matter how radical a departure from current practice.

Superior

Deliberately seeks out or develops new and improved ways of doing work and/or alteration of/addition to current work product or service to vastly improve organizational performance and the “bottom line.”
21. TECHNOLOGY APPLICATION – Correctly applies technology as required on the job; conceptualizes improvements in work through introducing and/or enhancing use of technology.

Level of Competency Required by Job:

Level 1: Expert in the use of technology required for own job. May identify additional applications for currently used technology to enhance own work and/or work of others.

Level 2: Identify additional technology to be applied to improve own work and/or work of others and/or enhanced use of current technology to improve the operations of an entire function or department.

Level 3: **Identify new technology application to improve/enhance work of an entire function, department, or organization.**

Examples of Behavioral Indicators:

- Demonstrates mastery of technical applications required for current work.
- Suggests additional applications of existing technology that improve productivity.
- Identifies new technology that can be applied to improve existing operations.
- Provides convincing justification for investment in new technology versus anticipated benefits.
- Presents compelling arguments to justify purchase of existing software (with or without modification) versus in-house development.

Performance Levels:

**Satisfactory**

Knows and correctly applies current technology as required on the job. Extends use of current technology to improve efficiency of accomplishing additional tasks.

**Superior**

Recognizes opportunities to apply technology to improve work processes in a function, department, or the entire organization. Identifies and justifies specific technology for specific uses.
Technology Application Areas

1. Knowledge of the components of business requirements gathering such as work flow, legal requirements, and technical requirements sufficient to ensure proper requirements gathering, including the development of effective requirements.

2. Knowledge of the components of system design including programming languages, database and security technology, telecommunications, computing platforms, and backup and recovery issues sufficient to provide recommendations of system solutions.

3. Knowledge of the steps involved in system implementation including system cut-over, parallel testing, and phased implementation, training, integration and acceptance testing, and documentation in order to ensure system stability and integrity.

4. Knowledge of basic system maintenance procedures such as security patches and performance tuning sufficient to determine potential impacts on systems operations, staff resources, and work load if changes are made to a system.

5. Knowledge of the different work areas and responsibilities involved in information technology (IT) such as computer operations, production control, communications network, technical support, system development, standards, security, and administration sections sufficient to know who to consult with to solve various problems.

6. Knowledge of the capabilities of different technologies such as servers, workstations, database and communications software, and programming languages in order to meet the requirements of the organization.

7. Knowledge of new developments in information system technology such as cloud computing and big data sufficient to forecast potential new technological impacts on data, systems, and network architecture.

8. Knowledge of information system terminology such as cyber security, networking protocols, data analytics, system integration, architecture, and agile development sufficient to explain these terms to all personnel including department representatives, and elected and appointed officials.

9. Knowledge of service management concepts for system change management such as Information Technology Infrastructure Library (ITIL) in order to efficiently manage changes and minimizing impact on users.

10. Knowledge of basic cyber security and data privacy principles, best practices, and risks related to system-wide management information systems such as password protection, data encryption, two-factor authentication, and intrusion detection and prevention sufficient to identify security exposures and provide mitigation controls.

11. Knowledge of physical security including public safety systems and needs such as police dispatch, facility access control, administrative control, and video surveillance sufficient to provide physical threat mitigation techniques.
33. INTERPERSONAL SKILLS – Interacts effectively and courteously with others.

Level of Competency Required by Job:

Level 1: Interact with members of the workgroup, supervision, and/or the public in a cordial, service-oriented manner.

Level 2: Interact across department lines and with appointed City officials, and/or members of the public, at times under adversarial circumstances, in a cordial, respectful manner.

Level 3: Interact with appointed and elected City officials, department heads, representatives of external organizations, and/or the media in a cordial, effective manner.

Examples of Behavioral Indicators:

- Works well with others toward mutual objectives.
- Does not arouse hostility in others.
- “Disagrees without being disagreeable.”
- Elicits acceptance/cooperation from others.
- Affords all individuals respect, regardless of their role or status.
- Effectively addresses concerns of politicians or others who may have their “own agenda.”

Performance Levels:

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<td>Behaves in a courteous, respectful, cooperative manner toward coworkers, other City employees, and members of the public.</td>
<td>Facilitates positive interpersonal relations within/among workgroups and toward members of the public. Adept at finding similarities and grounds for cooperation/mutual benefit.</td>
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47. WRITTEN COMMUNICATION – Communicates effectively in writing.

Level of Competency Required by Job:

Level 1: Write notes/e-mails. Completes forms with some open-ended responses (sentences).

Level 2: Write letters, articles/reports, and/or detailed descriptions of activities/occurrences.

Level 3: Write lengthy reports, instruction manuals, in-depth analyses/reviews of complex issues and/or articles for publication. Reviews the written work of others.

Examples of Behavioral Indicators:

- Writing includes the necessary information to convey the intended message.
- Sufficiently few errors in spelling, punctuation, grammar to not interfere with the intended message or distract the reader.
- Little editing or re-writing needed to produce a final product.
- Composes materials efficiently.
- Information is presented in a well organized manner.
- Tone and degree of formality are appropriate to the purpose and audience.

Performance Levels:

**Satisfactory**

- Writes material that clearly communicates the necessary information; needs little editing.

**Superior**

- Precisely uses words and organizes information in a way that enhances presentation of the message. Virtually no editing needed.
51. PROGRAM RESPONSIBILITY – Directs all aspects of an ongoing multi-faceted program/function to ensure resources are continually available and actions are continually taken at proper times to accomplish its objectives.

Level of Competency Required by Job:

Level 1: Plan, coordinate, and direct the operation of a multi-faceted program/function.

**Level 2:** Plan, coordinate, and direct the operation of a large-scale, multi-faceted program/function or several smaller-scale programs/functions.

Level 3: Plan, coordinate, and direct the operation of a very large-scale, multi-faceted program/function or multiple programs/functions.

Examples of Behavioral Indicators:

- Plans and directs the day-to-day and long-range operation of the program(s)/function(s)
- Secures necessary resources for successful performance.
- Clearly designates roles/responsibilities/accountability.
- Monitors the processes and products of the operation to ensure they meet standard; makes adjustments when needed.
- Addresses failure to perform or other problems in a timely and effective manner to minimize negative impact.
- Audits the processes and products of the operation to identify opportunities for improvement.

Performance Levels:

**Satisfactory**
Ensures sufficient staff and resources are available to continually accomplish objectives of the program/function. Directs staff and establishes personal responsibility/accountability.

**Superior**
Continually seeks to improve the program/function to maximize productivity and minimize use of resources.
53. **LEADERSHIP** – Influences others toward goal accomplishment.

**Level of Competency Required by Job:**

**Level 1:** Assume responsibility for operations or a situation when necessary. Direct the actions of others or otherwise ensure required actions are taken. Remain responsible until relieved or situation is resolved.

**Level 2:** Motivate others to continual activity focused on goal accomplishment. Provide clear objectives and articulate individual activities necessary to achieve them; ensure resources necessary to do so are available. Monitor work progress and provide feedback; assess results.

**Level 3:** **Articulate a vision, convey it to others, and assign responsibilities (or assure they are assigned) for achieving it. Monitor progress, make adjustments as necessary, and evaluate results.**

**Examples of Behavioral Indicators:**

- Evaluates circumstances, determining what needs to be done, and ensuring individual responsibility for performing specific actions is assigned.
- Follows-up to ensure that specific actions have been taken and overall objective has been accomplished.
- Clearly communicates objectives and responsibility/individual actions necessary to achieve them.
- Monitors work in progress, provides feedback to those involved, and makes adjustments to work plans/processes to ensure goal attainment.
- Evaluates completed work for quality, thoroughness, and effectiveness to determine whether re-work or additional work is required to meet intended objectives and to provide learning for future assignments.

**Performance Levels:**

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<td>Assumes responsibility for work of others when required or necessary. Ensures actions taken to achieve objectives, and evaluates results to determine any follow-up needed.</td>
<td>Articulates vision/states clear objectives and assigns responsibility/motivates others toward achievement. Monitors progress; gives feedback; evaluates results; ensures follow-up.</td>
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59. STRATEGIC PLANNING – Establishes plans in a way that will achieve vision for the future.

Level of Competency Required by Job:

Level 1: Recognizes that no work organization is static, so identifies how an improved organization would function and develops plans to create such an organization.

**Level 2:** Considers factors in the external environment, best practices, and internal organizational factors to develop a vision for the future; identifies feasible changes/innovations in support of the vision.

Level 3: Considers social, economic, legal, and political trends and the “big picture” of the organization to establish a vision for its effective operation in the world of the future.

Examples of Behavioral Indicators:

- Establishes and keeps up-to-date a “strategic plan.”
- Articulates how current trends and anticipated future events are expected to impact the organization.
- Identifies actions the organization can take to accommodate or leverage trends and future events.
- Recognizes that evolution/change will occur, and without an attempt to manage it, that it is unlikely to be in the best interest of the organization.
- Accepts that even when many factors are unknown or their certainty is questionable, that which is known with any degree of certainty can be effectively used to formulate plans.

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<td>Considers the future when establishing current day-to-day operational practices. Envisions an improved organization and identifies specific actions to help create it.</td>
<td>Understands that the larger environment in which the organization exists is influenced by and influences the organization. Notwithstanding uncertainties, formulates a vision and plans to achieve it.</td>
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