
Overview

This sub-discipline is concerned with the competencies involved with the analysis of human needs (HCI) so that IT/technology systems, services and assets can then be designed with humans in mind. In order for IT/technology to be successful and allow the maximisation of their potential benefits, there must be a thorough understanding of all of the different needs that humans can have from a system, service and/or asset, not just in terms of its outputs, but the format of outputs, the dissemination of outputs, the type and methods of input, of data transfer and of communication.

Human needs (HCI) analysis may be undertaken as part of a wider business analysis or may be undertaken as the result of a need to improve processes and procedures, particularly those supported by IT/technology.

Analysing human needs (HCI) requires particular competencies, both technical and personal and the transferable competencies associated with communication should be a precursor to acquiring competencies in this sub-discipline.

The outcomes of human needs (HCI) analysis are used to inform the design of IT/technology systems, services and assets, when a balance may have to be attained between human and business needs.

Human Needs Analysis Level 5 Role

Performance criteria

Prepare for human needs analysis activities

You must be able to:

- P1 Design effective processes, tools and techniques applicable to human needs analysis activities
- P2 Design, implement and maintain clear and specific naming conventions and standards to be used in all human needs analysis activities
- P3 Correctly identify organisational culture and the prevailing culture of the proposed audience/users during human interaction and interface (HCI) analysis activities
- P4 Correctly identify and use the most appropriate approach to undertake any human needs analysis assignment

Implement, maintain and monitor an effective human needs analysis assignment

You must be able to:

- P5 Correctly select, implement and maintain standards relating to human needs analysis activities
- P6 Closely manage and monitor all changes to business requirements through change control mechanisms during human needs analysis activities, under guidance
- P7 Verify that business requirements have been met during human needs analysis
- P8 Effectively manage and routinely monitor the progress of any human needs analysis assignment against plan
- P9 Critically review the findings produced from any particular human needs analysis assignment undertaken by others, taking action in the event of the deliverables and outcomes being incorrect, incomplete or inadequate

Provide reliable advice and guidance to others

You must be able to:

- P10 Report, clearly and in a timely manner, the progress of any particular human needs analysis assignment against plan to sponsors, stakeholders, superiors and other individuals
- P11 Make clear and specific recommendations as to the actions to be taken as a result of
- P12 human needs analysis activities
- P13 Provide specific and timely advice and guidance to others on best practice in human needs analysis assignments

Human Needs Analysis Level 5 Role

Knowledge and understanding

You need to know and understand:

Prepare for human needs analysis activities

- K1 Design
 - K1.1 the processes, tools and techniques applicable to human needs analysis activities and their deliverables
 - K1.2 naming conventions and standards used in all data analysis activities
- K2 Identify
 - K2.1 what information needs to be ascertained about target users/audiences in any particular human needs analysis assignment
 - K2.2 who are the sponsors and stakeholders for any human needs analysis assignment
 - K2.3 any integrity, confidentiality and information security requirements that need to be considered during human needs analysis activities
 - K2.4 internal and external sponsors of and stakeholders for human needs analysis activities
 - K2.5 standards relating to human needs analysis activities and their deliverables
 - K2.6 the most appropriate approach to undertake any particular human needs analysis assignment
 - K2.7 internal and external factors that may impact on human needs analysis activities and their deliverables
 - K2.8 any legislation, regulations and external standards that are relevant to human needs analysis activities and their deliverables
 - K2.9 opportunities to improve human needs analysis activities and their deliverables
 - K2.10 best practice in human needs analysis assignments
 - K2.11 organisational culture and the prevailing culture of the proposed audience/users during human interaction and interface (HCI) analysis activities
 - K2.12 internal and external factors that may impact on human needs analysis activities and their deliverables
 - K2.13 any issues associated with undertaking human needs analysis activities
 - K2.14 processes, tools and techniques to monitor the quality and effectiveness of human needs analysis activities and their deliverables
 - K2.15 the potential implications to the organisation of the deliverables from human needs analysis being incorrect, inadequate, incomplete and/or inappropriate
 - K2.16 potential failings in integrity, confidentiality and information security during human needs analysis activities
 - K2.17 learning from prior human needs analysis assignments
- K3 The influence that particular individuals, or groups thereof, can have on human needs analysis

Human Needs Analysis Level 5 Role

- K4 What
 - K4.1 is the range of approaches for undertaking human needs (HCI) analysis
 - K4.2 legislation, regulations and external standards are relevant to human needs analysis and its outcomes
- K5 What are the
 - K5.1 issues associated with undertaking human needs (HCI) analysis
 - K5.2 processes, tools and techniques to measure the effectiveness and quality of human needs (HCI) analysis
 - K5.3 processes, tools and techniques to measure the quality and effectiveness of human needs analysis activities
 - K5.4 techniques that can be used to avoid conflict when undertaking human needs analysis activities
 - K5.5 implications of internal and external factors on all stages of human needs analysis activities and their deliverables
 - K5.6 implications of any legislation, regulations and external standards as they relate to human needs analysis and its outcomes and how to comply with them
- K6 Who
 - K6.1 are the sponsors of and stakeholders for any human needs analysis activities

You need to know and understand:

Implement, maintain and monitor an effective human needs analysis assignment

- K7 Verify
 - K7.1 that business requirements have been met during human needs analysis
 - K7.2 that the particular needs of individuals and groups of target users have been considered during human needs analysis
- K8 Use the most appropriate approach for any particular human needs analysis assignment
- K9 Implement and maintain
 - K9.1 the processes, tools and techniques to monitor the alignment of human needs analysis activities and their deliverables with all relevant legislation, regulations and external standards
 - K9.2 standards relating to human needs analysis activities and their deliverables
 - K9.3 naming conventions and standards used in all human needs analysis activities
- K10 Monitor
 - K10.1 the progress of any human needs analysis assignment against plan
 - K10.2 the accuracy, currency and completeness of any human needs

Human Needs Analysis Level 5 Role

- analysis deliverables
- K10.3 the alignment of human needs analysis deliverables with the business requirements
- K10.4 the interpretation and use of human needs analysis deliverables within human needs (HCI) design activities
- K10.5 the alignment of human needs analysis activities with IT/technology architecture and other analysis deliverables
- K10.6 the alignment of human needs analysis activities and their deliverables with any relevant legislation, regulations and external standards, in line with organisational strategy, policies and standards
- K10.7 the quality and effectiveness of human needs analysis activities and their deliverables
- K10.8 the quality and effectiveness of external providers of human needs analysis services
- K10.9 changes to business requirements through change control mechanisms during human needs analysis activities
- K11 Negotiate with external providers of human needs analysis services
- K12 Manage
- K12.1 any issues arising from a particular human needs analysis assignment
- K12.2 any issues arising as a result of the influence of any particular individual or group during human needs analysis assignments
- K12.3 the impact of any internal and external factors on a particular human needs analysis assignment
- K12.4 the progress of any human needs analysis assignment
- K12.5 the accuracy, currency and completeness of any human needs analysis deliverables
- K12.6 the alignment of human needs analysis deliverables with the business requirements
- K12.7 the alignment of human needs analysis activities with IT/technology architecture and other analysis deliverables
- K12.8 the alignment of human needs analysis activities and their deliverables with any relevant legislation, regulations and external standards, in line with organisational strategy, policies and standards
- K12.9 changes to business requirements through change control mechanisms during human needs analysis assignments
- K12.10 relationships with external providers of human needs analysis services
- K12.11 relationships with sponsors of and stakeholders for human needs analysis activities
- K13 Present and review
- K13.1 the findings produced from any particular human needs analysis assignment
- K13.2 the quality and effectiveness of human needs analysis activities and their deliverables

Human Needs Analysis Level 5 Role

- K13.3 recommend actions to be taken as a result of human needs analysis activities
- K13.4 findings from monitoring the alignment of human needs analysis deliverables with the business requirements and/or IT/technology architecture and other analysis deliverables
- K13.5 findings from monitoring the alignment of human needs analysis activities and their deliverables with any relevant legislation, regulation and external standards, in line with organisational strategy, policies and standards
- K13.6 the findings from monitoring the quality and effectiveness of external providers of human needs analysis services
- K14 The processes, tools and techniques that can be used to monitor
 - K14.1 the quality and effectiveness of external providers of human needs analysis services
 - K14.2 that data integrity, privacy/confidentiality and security considerations have been considered in any human needs analysis assignment
 - K14.3 that user skills and IT/technology literacy levels have been considered within any human needs analysis assignment
- K15 The need for monitoring of
 - K15.1 the quality and effectiveness of external providers of human needs analysis services
 - K15.2 the fact that data integrity, privacy/confidentiality and security issues have been considered within any HCI design
 - K15.3 the fact that user skills and IT/technology literacy levels have been considered within any human needs analysis
- K16 The fact that
 - K16.1 the available operational delivery capabilities, such as bandwidth, screen size/resolution, input devices size/type and other factors need to be considered during human needs analysis activities
 - K16.2 in many scenarios, there are a wide range of human needs which have to be considered
 - K16.3 the impact of any relevant legislation, regulations and external standards needs to be reflected in human needs analysis activities and their deliverables
 - K16.4 the deliverables of human needs analysis activities must accurately represent what is required by target users
 - K16.5 external providers of human needs analysis services exist and there are disadvantages and benefits of using them
- K17 Why
 - K17.1 target operational delivery capabilities, such as bandwidth, screen size/resolution, input devices size/type and other factors need to be considered during human needs analysis
 - K17.2 the alignment of human needs analysis activities and their deliverables

Human Needs Analysis Level 5 Role

- with all relevant legislation, regulations and external standards needs to be monitored
- K17.3 the alignment of human needs analysis work with other related analysis activities and their deliverables needs to be monitored
- K17.4 the alignment of HCI design activities and their deliverables with human needs analysis work needs to be monitored
- K18 The importance of
 - K18.1 validating HCI user needs with the target audience(s) using a range of techniques
 - K18.2 considering the intended IT/technology operational environments and infrastructure relevant to the target IT/technology system/solution/service when undertaking human needs analysis activities
 - K18.3 tact and diplomacy when eliciting and verifying human needs
 - K18.4 applying a range of interpersonal communications skills during human interaction and interface (HCI) design activities
 - K18.5 considering any relevant legislation, regulations and external standards in human needs analysis activities and their deliverables
 - K18.6 integrating human needs analysis activities into projects and programmes, as appropriate
 - K18.7 managing relationships with sponsors, stakeholders and external bodies on matters relating to human interaction and interface (HCI) design
 - K18.8 using appropriately skilled individuals, groups and bodies in any human needs analysis activities

You need to know and understand:

Provide reliable advice and guidance to others

- K19 Report
 - K19.1 the progress of any particular human needs analysis assignment against plan
 - K19.2 findings from monitoring the quality and effectiveness of human needs analysis activities
 - K19.3 findings from monitoring the quality and effectiveness of external providers of human needs analysis activities
 - K19.4 the organisational culture and the prevailing culture of the proposed audience/users
- K20 Take action
 - K20.1 to establish effective relationships with external providers of human needs analysis services
 - K20.2 in the event of the deliverables and outcomes of human needs analysis being incorrect, incomplete or inadequate
 - K20.3 to take account of any internal or external factors affecting human

Human Needs Analysis Level 5 Role

- needs analysis activities or their deliverables
- K21 Communicate
 - K21.1 the need for IT/technology design and development activities to align with human needs analysis deliverables to those individuals involved in them
 - K21.2 with external providers of human needs analysis services,
 - K21.3 with sponsors, stakeholders and external bodies on all matters relating to human needs analysis activities and their deliverables
- K22 Advise and guide others on
 - K22.1 best practice in human needs analysis assignments
 - K22.2 both internally and externally, on all aspects of human needs analysis activities and their deliverables

ESKITP4035

Human Needs Analysis Level 5 Role

Developed by e-skills UK

Version number 1

Date approved September 2009

Indicative review date March 2014

Validity Current

Status Original

Originating organisation e-skills UK

Original URN 4035

Relevant occupations Business Analyst; Information and Communication Technology; Software Development

Suite IT and Telecoms

Key words HCI
