

The OSI Model and the Seven Chakras of Hinduism: A Comparative Analysis

Hudson Atwell

Atwell Publishing
1501 Springhill Terrace
Dothan, AL 36303 USA

Denise J. McManus

Information Systems, Statistics, and Management Science Department
Culverhouse College of Commerce
The University of Alabama
Box 870226
Tuscaloosa, Alabama 35487-0226 USA

Houston H. Carr

Alumni Professor Emeritus, College of Business
Auburn University
129 Quail Lane
Dadeville, AL 36853-4931 USA

Abstract

The Open Systems Interconnection (OSI) Model and the Seven Chakras of Hinduism are both models that describe an intelligent networking system. The OSI Seven Layer Model is a segmented model that describes standards of data communications and computer network protocol design. The Seven Chakra Model is a human attempt to define the networking of bio-internal energy and its functionality within the human body. These two models and their individual segments show similar characteristics when compared.

Keywords: Intelligent Networking System, International Organization Standardization, ISO, Open Systems Interconnection, OSI, Seven Chakras

1. The OSI Model

The Open Systems Interconnections (OSI) Basic Reference Model was designed in 1977 by the International Organization for Standardization, a group also referred to as the ISO. The reference model is part one of the two part OSI project that was developed by the ISO. The second part was a large collection of protocols, defining the underlying works of a system ISO was attempting to create (ITU, 1994, Zimmerman, 1980). The system was designed to be a collective effort of industry to align everyone with “common network standards” and to “provide multi-vendor interoperability” (OSI, 2013, p. 1). The second part of the universal protocol definitions was found to be too complicated for mass implementation and was outclassed by the current protocol system we use today, the TCP/IP protocol (OSI, 2013). The first part of ISO’s OSI project, the Seven Layer OSI Model is still used today as a multi reference model for services and networking protocols such as TCP/IP, ATM, Ethernet, and UDP (Data Network Resource, 2013; Dean, 2010).

The OSI Model is composed of seven layers shown in Figure 1.

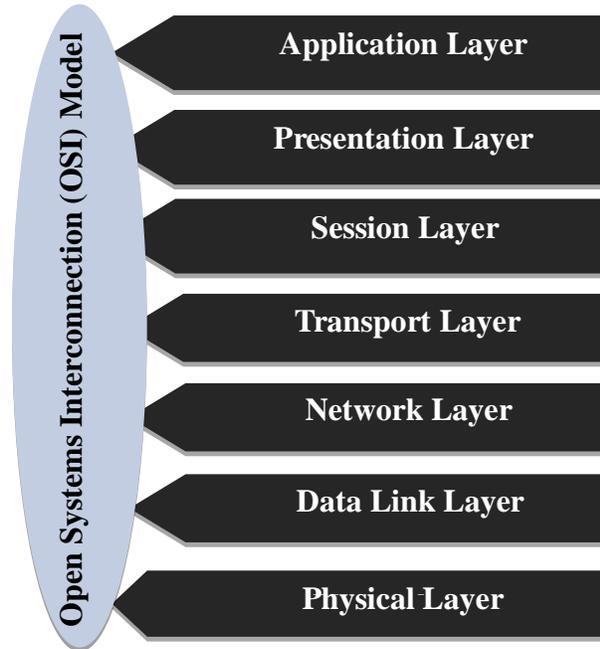


Figure 1: OSI Model

As information travels between systems it must be formatted and shaped in specific ways that allow intelligent communication. Each layer has a role specific responsibility in making sure the information is delivered and interpreted in the manner it was intended. The layers work and harmonize together in their own micro aspects to accomplish their macro goals.

2. The Chakra Model

There are many and various sects of belief surrounding the nature of chakras. The chakra system and concepts can be found within various branches of Chinese medicine, Tibetan Buddhism, and Jewish Kabalistic Mysticism (Crystal Links, 2013). The Hindu religion itself is divided in belief. For this comparative analysis, we have narrowed the focus to the most popular theory cited throughout western society, Shaktism. Shaktism is a denomination of Hinduism that pays worship to the divine mother figure, who through many different mystic practices represents the spirit of earth and nature, who births and provides for all living things (Vanamali, 2008). This denomination places the number of chakras at seven. Knowledge of the seven chakras originated from a collection of texts called the Upanishads, which can be found within a larger collection of sacred Hindu texts called the Vedas. The Upanishads are mystic writings that “primarily discuss philosophy, meditation, and the nature of God” (Crystal Links, 2013, verdas, p. 3).

Chakras are said to be energy centers within the human body that regulate the distribution of energy into vital systems, while also regulating aspects such as consciousness and emotion. Chakra is a word derived from Sanskrit meaning *wheel*, as the Hindus believe that each chakra represents an invisible wheel located within specific locations of the body. These wheels are said to “act as a vortex, spinning life-force energy into or out of the body” (Tooley, 2012, p. 1). This life-force energy is often referred to as *prana*. Each of the seven chakras can be found within the torso of the body and the head. The chakra centers, as cited, “are described as being aligned in an ascending column from the base of the spine to the top of the head” (Crystal Links, 2013, pg. 20). These chakras, as ordered from one to seven respectfully, are shown in Figure 2: The Muladhara, known as the Root and located at the base of the spine; the Svadhisthana, known as the Sacral (or Sacrum) and located within the groin area; the Manipura, known as the Solar Plexus and located at the navel; the Anahata, known as the Heart and located over the diaphragm; the Vishuddhi, known as the Throat and is there located; the Anja, known as the

Brow and Third-Eye (Leadbeater, 2001; Crystal Links, 2013), and located in the middle of the forehead where all beautiful Indian women place their red dot (Religious Facts, 2013); the seventh and last chakra is the Shagasarara, known as the Crown and located on the top of the head ((Leadbeater, 2001; Crystal Links, 2013).

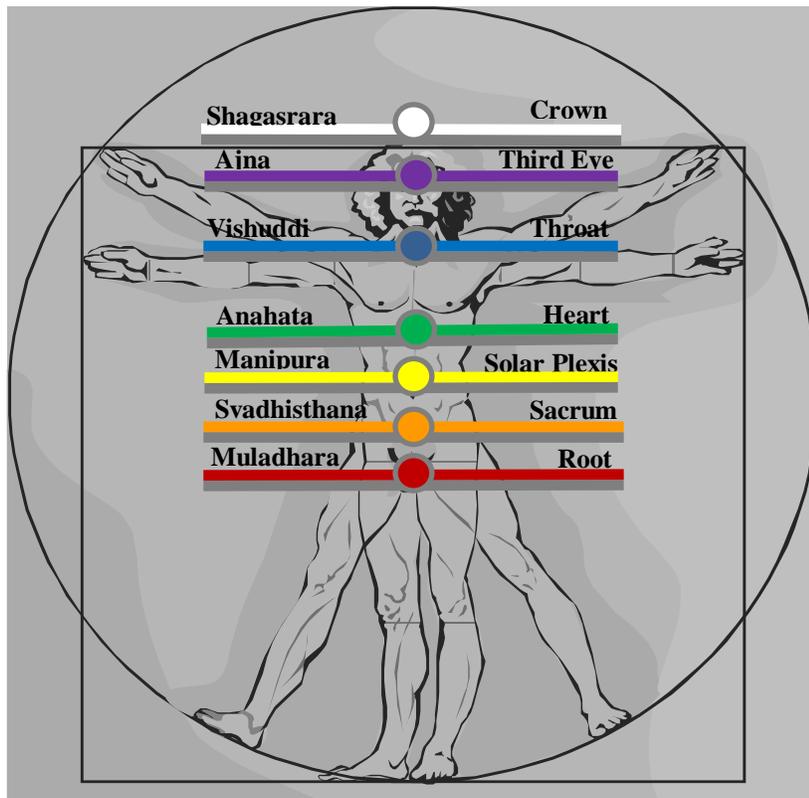


Figure 2: Seven Chakras

When looking at the two models from an additional descriptive viewpoint, the OSI model exists as a conceptual map designed by individuals that attempt to organize and segment network protocols into layers for universal use. Data in all its forms act as the medium of expression. The chakra model is a descriptive construct based on introspection and reverse engineering of the human condition through the meditations of guru-like individuals. Within this model, energy, earlier referred to as prana, is the medium of expression. The qualities of the segmented layers and segmented chakras share some general characteristics. In the next parts of this comparative analysis each OSI layer and chakra, correspondingly, will be compared and reviewed in attempt to extract those similarities.

3. Seven Layers Seven Chakras

The first layer of the OSI model is the Physical layer. This layer segments the standards and protocols that define the hardware that allows the transferring of data, such as the cable or pin connector. It controls the connectivity of the connected machine (Dean, 2010). The corresponding chakra is the Root [Muladhara] chakra. The Root chakra, like the physical layer, deals with connectivity. It is said that the root chakra grounds the body, mind and soul to the material world. The Hindu perspective is that a healthy Root chakra promotes good kinetic and mental focus (Leadbeater, 2001; Eclectic Energies, 2013).

The Second Layer of the OSI model is the Data Link layer. This layer segments the standards and protocols that manage the transfer of the information as it is needed to complete intended goals. A common example of a Data Link Protocol would be Ethernet, as it controls and maintains the transfer of information through physical cables of a LAN (ITU, 1994, Zimmerman, 1980). The corresponding chakra would be the Sacral [Svadhithana] chakra. The action of transferring data from one system to another can be seen as the system's intentions. From a human viewpoint it can be argued that the will to action is a creative response fueled by personal emotion based upon subjective experience.

The Sacral chakra is said to relate to personal mood, emotion, sexuality, and creativity (Mercier, 2007; Leadbeater, 2001). Like the Data Link layer, which manages the outflow and inflow of data as needed, the Sacral chakra manages the fluxations of emotions and creativity, which by relation, manages the transfer of personal will into action. The Data-Link layer manages data, which expresses the will of machines. The Sacral chakra manages emotion and creativity, which combine to express the will of humans.

The third layer of the OSI model is the Network layer. This layer contains standards and protocols that involve data connections between nodes. Examples of connection techniques found within this layer are routing functions, switching, and creating virtual circuits between nodes (Dean, 2010). The IP protocol can be found within this segment of the OSI model. The Network layer corresponds with the Solar Plexus [Manipura] chakra. The Solar Plexus is said to play rolls with digestion, the outer adrenal glands, higher emotion, and social assimilation (Mercier, 2007). A healthy Solar Plexus chakra provides self esteem and social placement. It allows one to connect with another individual or a group. Emotions and feelings also flow well within and social connections come easy. Like the Network layer helps regulate and direct data between nodes, the Solar Plexus chakra helps regulate and direct energy manifested through personal assertion within social situations (Mercier, 2007; Eclectic Energies, 2013).

The fourth layer of the OSI model is the Transport layer. The Transport layer involves the transfer of data between nodes. It is also responsible for information recovery and bandwidth control, as to make sure end nodes are not overwhelmed by incoming information (Dean, 2010). A well known protocol found within this layer is the TCP protocol (Dean, 2010). This layer differs from the preceding layer in the way that the Network layer sought to secure the connections, while the Transport layer uses those secured connections to transfer the information. The chakra that corresponds with the Transport layer is the Heart [Anahata] chakra. The heart chakra is said to relate to higher emotion, compassion, love, equilibrium, and well-being (Mercier, 2007). Humans relate to each other through communication and action. Words and actions have emotional connotations attached to them that express personal intention and condition. Communication between individuals attempting to connect is a form of emotional exchange and this act can be directly compared to data transfer between nodes.

The fifth layer of the OSI model is the Session Layer. This layer controls the nature of the communication sessions between two nodes. It initiates the conversation, terminates the conversation, and provides error checking and mediation between parties. It ensures the solid communication between two nodes. The Chakra that corresponds with this layer is the Throat (Vishuddi) chakra. It is said to relate to the thyroid gland which regulates the thyroid hormone that is responsible for maturation (Mercier, 2007). The Throat chakra relates to the Session layer because it is a means for communication. It allows for the individual to express ideas and concepts to another individual. Unlike the Session layer, which is a solid standard, our communication is limited and is a mere jest at protocol. Both the Session Layer and the Throat Chakra manage and maintain circumstances that allow and promote communications between nodes and individuals.

The sixth layer of the OSI model is the Presentation Layer. The Presentation layer is a compression layer that compiles data from the session layer into forms of expression that the next layer, the Application layer can accept (Dean, 2010). A familiar example of this process would be the encoding of picture data into a *JPEG*. Data from the Session layer is collected. The data is then compressed into a JPEG format for the application use and presentation. The corresponding chakra, the Anja [Brow] chakra, is related to the interpretation of time and light. It functions with the pineal gland, which is light sensitive and regulates sleep instincts. It is said that that the Anja chakra, relates directly with the third eye (Mercier, 2007). The third eye is also referred to as the mind's eye. It is simply the imagination and mental visualization capability of the individual. When one dreams, the dream is experienced through activation of the third eye. To keep symmetry, the Anja chakra is looked on as the energy center that collects information seeking expression from the Throat chakra, and processes it through the Anja chakra into the third eye. The third eye would then visually present the information at the command of the Crown chakra. This concept can be taken even further by suggesting the Crown chakra derives existential information from the visual representations. This feedback allows a refining process to occur as the new information is relayed to the Throat chakra. There the refined information continues to be manifested for a real-time flowing process of data actualization. In summary, The Anja chakra and the Presentation layer both provide the means for expressing information in an interface manner.

The seventh and final layer of the OSI model is the Application layer. The function of this layer is to make practical use of the data transferred through the lower six layers. Information from the Presentation layer is retrieved to construct an application interface (ITU, 1994, Zimmerman, 1980). Familiar examples of network applications are email and FTP (Dean, 2010). The seventh and final chakra is the Crown [Sahasrara] chakra. The Crown chakra is the chakra of personal consciousness. It is said to connect to the central nervous system through the hypothalamus and the pituitary gland, which can be found within the hypothalamus (Mercier, 2007). The pituitary gland produces hormones that control the endocrine system and regulates homeostasis (Upright-Health, 2013).

The comparison of the seven Chakras and the OSI Model are shown in Figure 3.

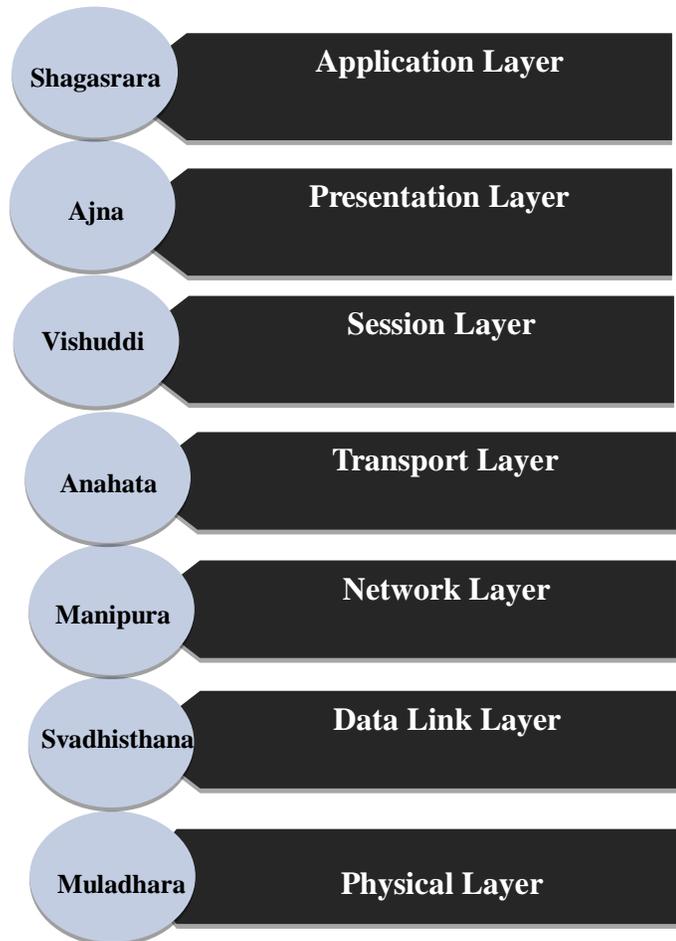


Figure 3: Seven Chakras and OSI Model Compared

4. Conclusions

Like the application layer, it is the master segment that makes applicable sense out of the incoming data, except we recall that the medium for chakra data exchange is prana, which is life energy that seeks manifestation. The medium for electronic data exchange is electricity which transfers data intended for manifestation. Consciousness is our subjective interpretation of reality and our control center for existence. An application is the control center for a data system where data is manipulated for practical use. Our consciousness is where we direct our life and dictate our choices. Through our consciousness we decide how we will apply our energy in our intended manner. Both behave as centers of application.

Both the seven layer OSI Model and the seven compared Chakras of Hinduism organize a network of protocols into a functional model. Each layer and chakra showed to have similar characteristics of function, though each slightly differed in relativity. Each segment of both models performed specific duties that contribute to the overall application of interpreted data.

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