# Lesson 12 Knowledge Acquiring, Managing and Storing processes

### Three processes for knowledge

- Acquiring process
- Managing process
- Storing process

### Knowledge and Information Relationship

- According to an English dictionary is sharable information and understanding about a subject or context
- Knowledge comes from researching up on the information
- Knowledge is an important asset of an enterprise

# Example of Knowledge and Information Relationship

• Information that all Automatic Chocolate Vending Machines (ACVMs) filled at most times gives understanding and knowledge that "Fill service is prompt in attending to the service requests"

# Example of Knowledge and Information Relationship

• Information about the time series data of sale figures for chocolates gives understanding and knowledge that "ACVMs give good sales and profit during festive days near the gardens."

#### Data-Information-Knowledge-Wisdom (DIKW)

- Forms a pyramid
- Information is enriched set of data values when considered in the given context and that can be queried upon
- The answer for the information comes from processing the data and querying

#### Information

- Visualisation of data gives information
- Spreadsheet gives the information
- Analytics gives information.

#### Knowledge Discovery Tools

• Provide the knowledge at particular amount of time as more and more data process and analyse, additional knowledge discovers

#### Knowledge management

- Managing the knowledge when that new knowledge
- regularly discovers, processing and storing that knowledge
- Also provisions for replacing the earlier gathered knowledge
- Managing the life cycle of stored knowledge

#### Wisdom

- Wisdom, according to an English dictionary
- "Ability to use the experience, and sensible and reasonable decisions"
- Advanced tools can enable wise decision(s).

#### Example of Wisdom

• Example of a wise decision can be "ACVMs chain needs to adaptation of loyalty point scheme" or alternatively "A free chocolate on pre-stored birthday of a child using the ACVM"

#### Example of Wisdom

- Judgment from the knowledge of clients of a particular bank
- "Operating a free dispensary will improve heath of the clients", then they will earn more and consequently bank expects to attract bigger deposits is a wisdom

#### Knowledge-Management Reference Architecture

- Highest layer has knowledge acquiring, managing, storing and knowledge life cycle management
- Sublayers for managing, storing and knowledge life cycle management.
- Knowledge acquires from the use of information access tools and knowledge discovery tools

Knowledge managing, storing and knowledge life cycle management and knowledge acquiring sub layers
Information Access and
Knowledge discovery tools

Services and Applications Capabilities layer

**Application Layer** 

Processing and Analytics Services and Application Support layers

Data adaptation and enrichment sub layers

IoT/M2M devices data, streaming data, business support and operational support systems, databases sub layers

Generic and Specific support capabilities)

Device and Gateway capabilities Layer Application and Application Support Layer

Adaptation Layer

Physical/Data link Layer

Fig. 5.7(a) Knowledge management reference architecture (b) correspondence with in terms of ITU-T Reference Model and

Chapter-5 L12: "Internet of Things," Rai Kamal,
OSI layers for IOT/M2M

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#### Summary

#### We learnt

- Knowledge and Information Relationship
- Data-Information-Knowledge-Wisdom Pyramid
- Knowledge-Management Reference Architecture

## End of Lesson 12 on Knowledge Acquiring, Managing and Storing processes