

# “A Model for Delivering Networked, Distant Learning”

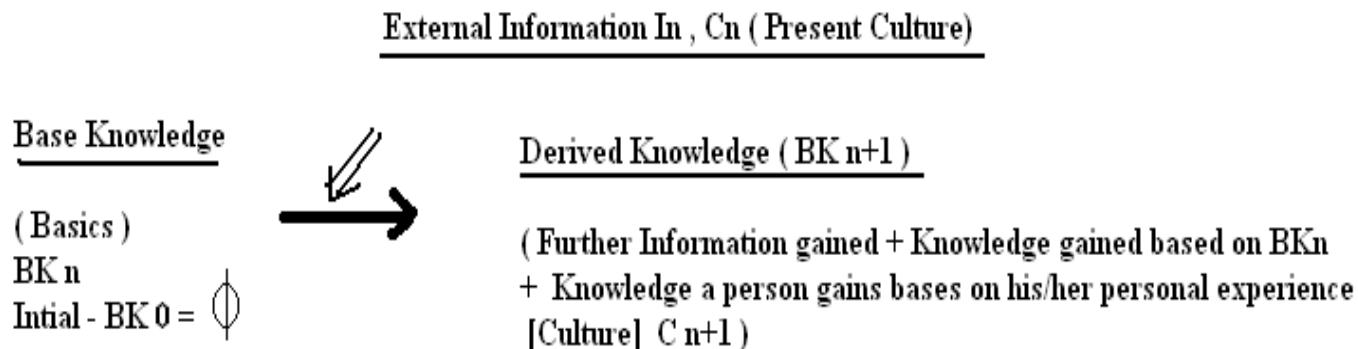
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## MTP Part I

This part consists of Integration of the following into the e – learning Model.

- 1) Pedagogy – The system should be bases on the actual learning process.

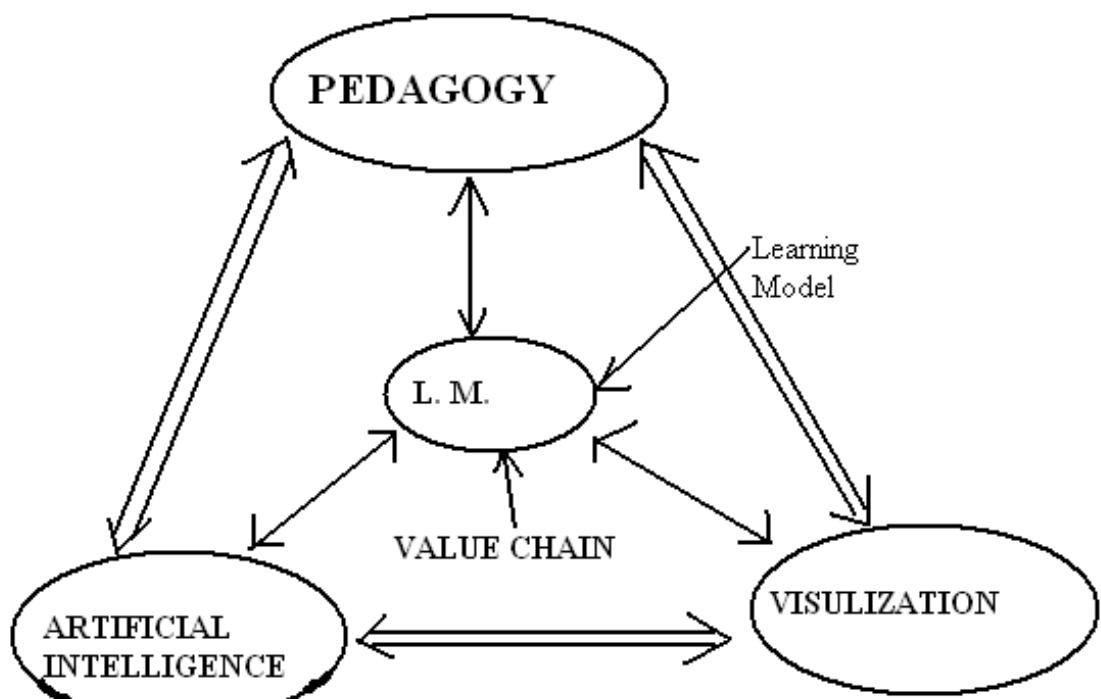


- 2) Visualization – C Sharp is used as it has a friendly Graphical User Interface (GUI) and integrated inbuilt libraries and functionalities.
- 3) Artificial Intelligence
  - Integrated with C sharp.

## Unlucky Number 3, Lucky number 11

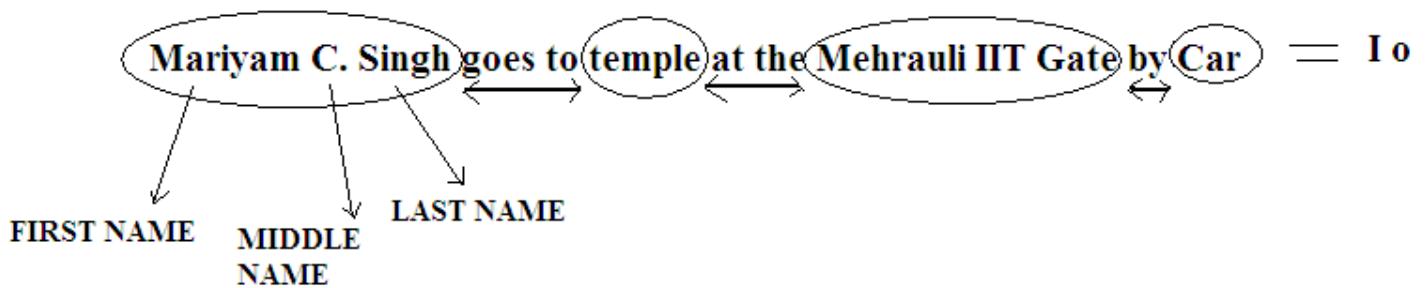
$$11 \text{ in Binary} = \begin{matrix} 0 & 1 \\ 2^0 * 1 + 2^1 * 1 = 3 \end{matrix} \text{ in Decimal}$$

So we have used the power of 3 in every mini model of our learning Model.



Without the **L. M.**, the dependencies between Artificial Intelligence, Visualization and Pedagogy are Weak. The Value chain makes them stronger.

A.I. (Artificial Intelligence)



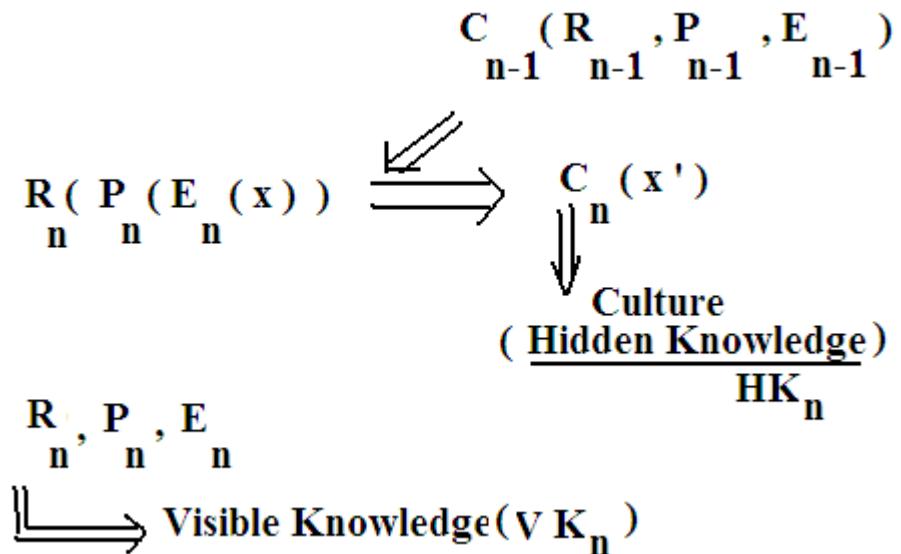
Mariyam C. Singh is the Social Being here which we take = x

Temple is the Religious being of x = R

Mehrauli, IIT Gate is the political being of x = P

Car is the Economic being of x = E

R, P, E are functions.



$(R_n \circ P_n \circ E_n) \Rightarrow$  The order of functions can be changed to see the effects on the final  $C_n$ .

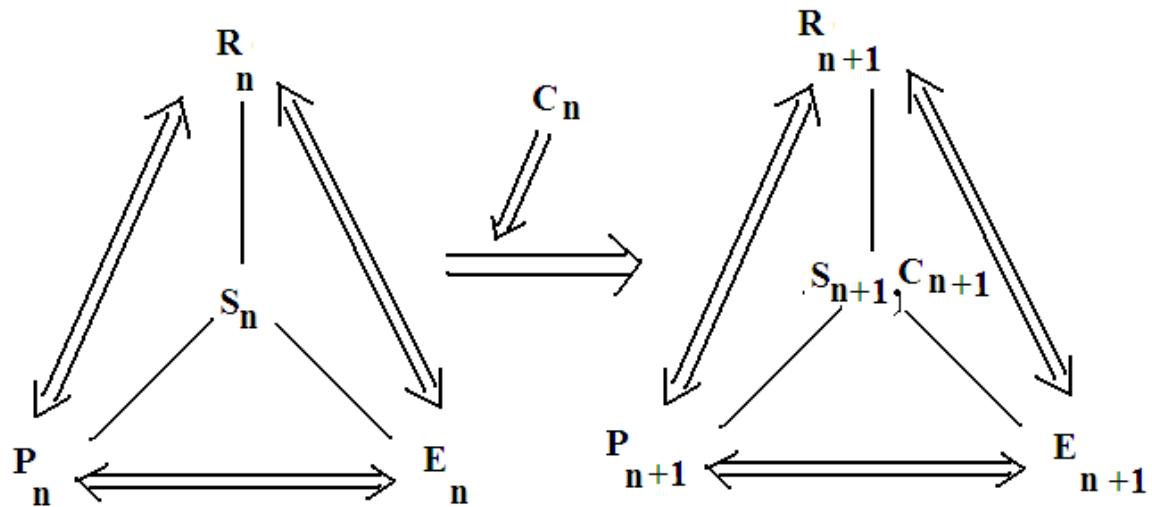
$$x \rightarrow x'$$

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R, P, E are equivalence classes

We use the object Relation Object Model or the ORO Model next.

O- R- O = 3



So, if we track back

R 1, E 1, P 1 had an external C 1 which gave rise to R 2, E 2, P 2 and C 2.

R 0, E 0, P 0 had an external C 0 which gave rise to R 1, E 2, P 2 and C 1.

Where R 0 =  $\emptyset$ , E 0 =  $\emptyset$ , P 0 =  $\emptyset$

C 0 = Null set of Knowledge or the World set of Knowledge =  $\bullet$  = Point.

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Extracting Knowledge from Information

I<sub>o</sub> = Initial Information

Initial Knowledge = K = K<sub>o</sub>

Using the ORO model

- K<sub>o</sub> = Mariyam C. Singh goes to the temple.  
= Mariyam C. Singh goes by Car.  
= Mariyam C. Singh goes to Mehrauli IIT Gate.

Using concepts from Natural Language Processing Car implies Rich and Temple implies Hinduism.

K<sub>o</sub> → K<sub>o</sub>' ( Visible Knowledge )

- (i) Mariyam C. Singh is a Hindu or practices Hinduism.
- (ii) Mariyam C. Singh is rich.
- (iii) Mariyam C. Singh lives near Mehrauli IIT Gate.

Hidden Knowledge ( C )

1. Mariyam C. Singh is a Muslim but her husband is a Hindu
2. The temple near IIT gate is very famous/ popular among Hindu devotees.
3. It is a tradition to go to a temple by car.
4. Also if a man is married his wife should accompany him to the temple on special occasions.
5. Mariyam C. Singh is a Muslim married to a Hindu C. Singh hence she visits the temple.
6. Mariyam C. Singh and his husband are poor but they hire a taxi to visit the temple on the auspicious occasion.

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New Derived Knowledge =  $K_o''$

$K_o \subseteq K_o' \subseteq K_o'' \subseteq W$  = World Knowledge

$K_o''$  has 3 entities / objects and 1 Mariyam C. Singh or the Social being which can be described using Temple, Mehrauli IIT Gate and Car )

using 3 Relations Goes to , at the and by.

Using NLP we can derive  $w * y * z$  new relations and the  $HK(C) = W$  ( World Knowledge)

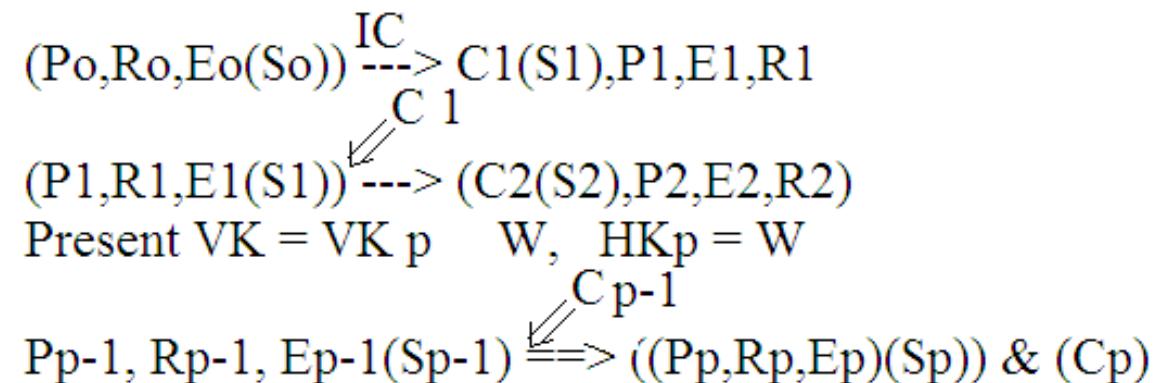
$w$  = number of words for goes to

$y$  = no of words for “at the”

$z$  = corresponding no for “by”

So to make our model =  $W$  at a very high order when we add new objects into it , NLP, ORO and C have to be applied on it recursively

Initial Culture ( IC ) =  $\bullet$  .



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Hidden Knowledge at any point in History of time =  $W = ( \bullet )$

In our A. I. Model

We start from  $P_o, R_o, E_o \rightarrow P_p, R_p, E_p$

By adding new objects and entering Relations which we know to get new Relations using NLP.

But Relations using C can only be derived when we can put some Co into the system which we have to define ourselves.

because

$$C_{(\dots\dots any. point .of .time)} = W$$

If our systems can achieve any C in the series  $C_1, C_2, \dots, C_p$  (present) then we

Our system knows the World Knowledge already.

Hence entire W has to be derived from  $P_o, E_o, R_o$  by assigning intial value to C that

Is Co. This has to be achieved at an exponential rate to make it = W.

C can be defined or we can say HK can be extracted only when we disregard all  
Relations defined among various subclasses of the Classes R ( Religion ), P ( Politics)  
And E ( Economics).

**1. EVERY SET IS derived from empty or full set .apart from empty or full set all sets have some hidden knowledge or trend thats called culture.**

**2. CULTURE EXAMPLE**

**1. politics = economics and religion applied to land or geography = distribution of food, land and clothing ( vegetation , live stock ) among people**

**When people went to other places there came out cultures like gypsy culture and many other cultures.**

**3. its not easy to comment about religion but most religions talk about onesss of being or god .**

**2. When there was no money no economic disparity there was the barter culture it was a free culture, culture in general is free**

**3. inequalaties bases of economics ,politics or religion were created to manipulate society like accumulate wealth land or power through religion or limiting knowledge to a few. theses 3 are the basic limitations in society which stop the propogation or birth of new culture or realization of the culture that already exists.**

**4.Hence when E= ( null ), P= ( null ),R= ( null ) which =>there exists no distinction between various subclasses in the sets E,P and R only then intial culture orignates or complete culture can be realized or understood= complete HK can be discovered = intial hidden knowledge can be determined**