



FUTURISTIC TELEHEALTH SYSTEMS: CONSIDERING KNOWLEDGE MANAGEMENT AND ICT ISSUES



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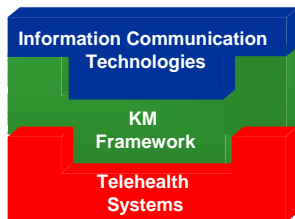
Background

- Advances in communication technologies → changing delivery of healthcare services
 - On average, 1 in 4 European households own a personal computer
 - In some countries more than 50%
- Modern healthcare: Largest sector of US economy
 - Avg IT expenditure in healthcare org : 2%
 - Other sectors : 7-10%

Current telemedicine technologies

- Two main models in telemedicine
 - I. Interactive video
 - II. Store-and-forward
- Main difference
 - Interactive video allows real-time patient care
 - Store-and-forward technology is asynchronous
 - Futuristic healthcare systems: → Internet and videoconferencing technologies → Interactive telemedicine applications

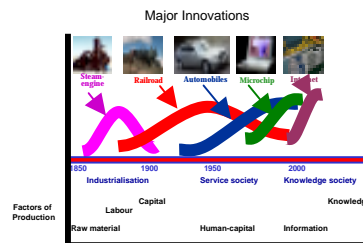
Convergence?



Difference between KM and telehealth and telemedicine

- Most systems force the caregiver / specialist to look at medical issue(s) in isolation
- Difference: lies in the application of ICT in telehealth and telemedicine in infancy
 - Contemporary focus → how best to disseminate the information
 - Futuristic → Support the transfer of information with context

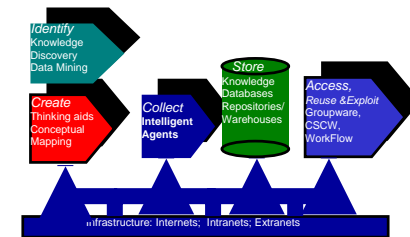
Backdrop to KM



KM framework for healthcare institutions

- To best identify and create knowledge from internal and external organisational experiences
- To disseminate it organisation-wide basis
- Ensures that acquired knowledge is available for preventive and operative medical diagnosis and treatment when required
- Give healthcare information context → healthcare providers can use telemedicine to extract knowledge not information

KM process & enabling technologies



Interrelationship between KM and telehealth and telemedicine

- Brought about by the ICT revolution
- Bringing about fundamental changes which are redefining the work place
- Concerned with dissemination of information
- Access to data and information increased exponentially :- ☺
- Healthcare industry → lacks widespread capability to acquire knowledge (by information context):- ☹

Conclusion

- Likely Futuristic scenario: Healthcare institutions would be flooded with large amounts of clinical data
- KM solution would allow give clinical data context
 - Allowing knowledge derivation for more effective clinical diagnoses
 - Provide a mechanism for the effective transfer of acquired knowledge