

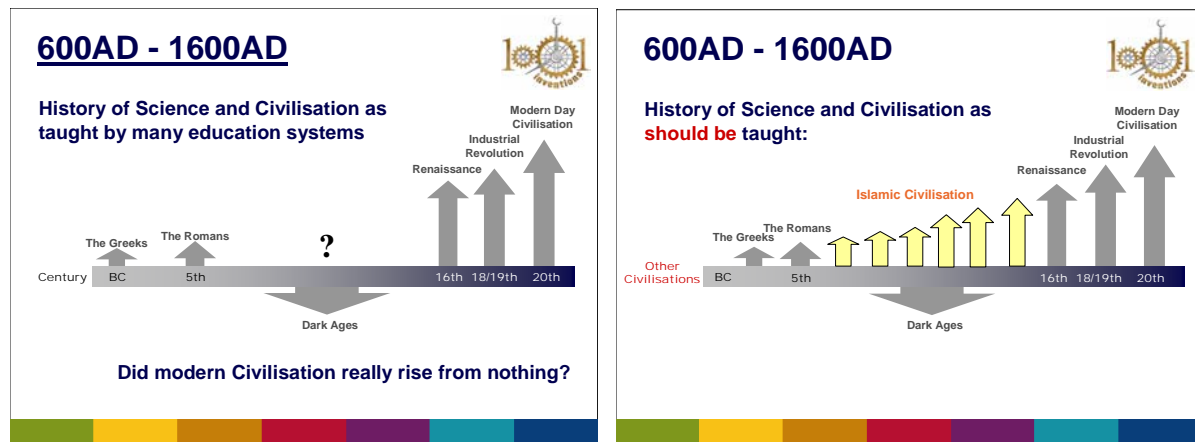
Innovation in the Islamic World: Learning from the Past, to Design the Future

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This presentation will demonstrate, using 3D animations of past key S&T inventions reconstructed in virtual space from manuscripts, how knowledge revolution of early Islam was the result of a self propelling organically growing culture which combined economic and religious incentives. A vibrant knowledge based society lasted for hundreds of years despite political and religious turbulence. The concept of faith (**Iman**) as **input** and beneficial knowledge and deeds (**A'mel Saleh**) as **output** became the engine driving individuals, male and female, to invent, innovate and achieve scientific and economic progress.

Examples of such achievements which still influence our modern homes, schools, hospitals, towns, markets and other aspects of our lives were researched in the UK and some findings are demonstrated by the **1001inventions** project, see www.1001inventions.com .

Unfortunately, there is a period of about 1000 years missing from Western educational systems. Almost in every subject taught in schools, there exists a jump from the Greeks to the Renaissance, usually referred to as the "Dark Ages", see Figures.



This amnesia affects the minds of present and future generations and distorts their attitudes and perceptions of the role of other cultures, particularly Muslim, in designing and building the present civilisation.

It is hoped that this presentation, will inspire communities, the young generation in particular, to emulate the great men and women inventors of the past to express their, personal and national aspirations by doing useful work to improve the quality of life on this earth.

For Muslim communities, the concept of "Beneficial Deeds" (**A'mel Saleh**) suggests itself as the gate through which a new "Islamically compliant" Knowledge Based Paradigm may emerge. Some suggestions for the Muslim communities and countries to take in their drive towards a Knowledge Base Society:

1. The development of a strategy for a paradigm shift towards a Knowledge Based Society requires resolution of a number of challenges. One major challenge would be to understand the "Socio-Genetics" of the society and then to suitably customise concepts like, commercial value to knowledge, knowledge economy, Science based society, Innovation, Intellectual capital and Property, Entrepreneurship, Value of intangible assets and Life long learning economy.
2. Start a cultural movement amongst the youth to celebrate the great past inventors and knowledge scholars, in theological, social and physical sciences and to express their religiousness through useful deeds in society. The theological scholars (**Ulema**) need to expand the concept of **A'mel Salleh** "Beneficial Deeds" to incorporate all acts which improve the quality of life.
3. Enhance and expand the traditional charitable (**Waqf**) and social philanthropy institutions from confinement to religious and relief programs to embracing wide educational reform, life long socio-economic entrepreneurship projects, science and technology activities and expanding mosque buildings to incorporate activities of learning, IT provisions, and recreational socially beneficial activities
4. Enrich all subjects in the schools curriculum with material from such sources as the 1001inventions book, posters and websites such as www.1001inventions.com and www.Muslimheritage.com.
5. Celebrate past Muslim inventions and inventors by; Establishing Knowledge Discovery Centres, Knowledge Corridors, Thematic Shopping Malls, Thematic Parks, Edu-tainment Centres, Thematic Towns, Villages and accommodation centres and Hotels, Healthy internet social networks, Thematic Clubs, Knowledge Clubs, participation in knowledge international competitions, Prize awarding bodies to award excellence in beneficial deeds to promote social entrepreneurship.
6. Ensure that Universities have an integrated function within the society in teaching, research, consulting and life long learning. In particular, introduce university venture companies to take research findings into the market with appropriate and administrative legal structures.