

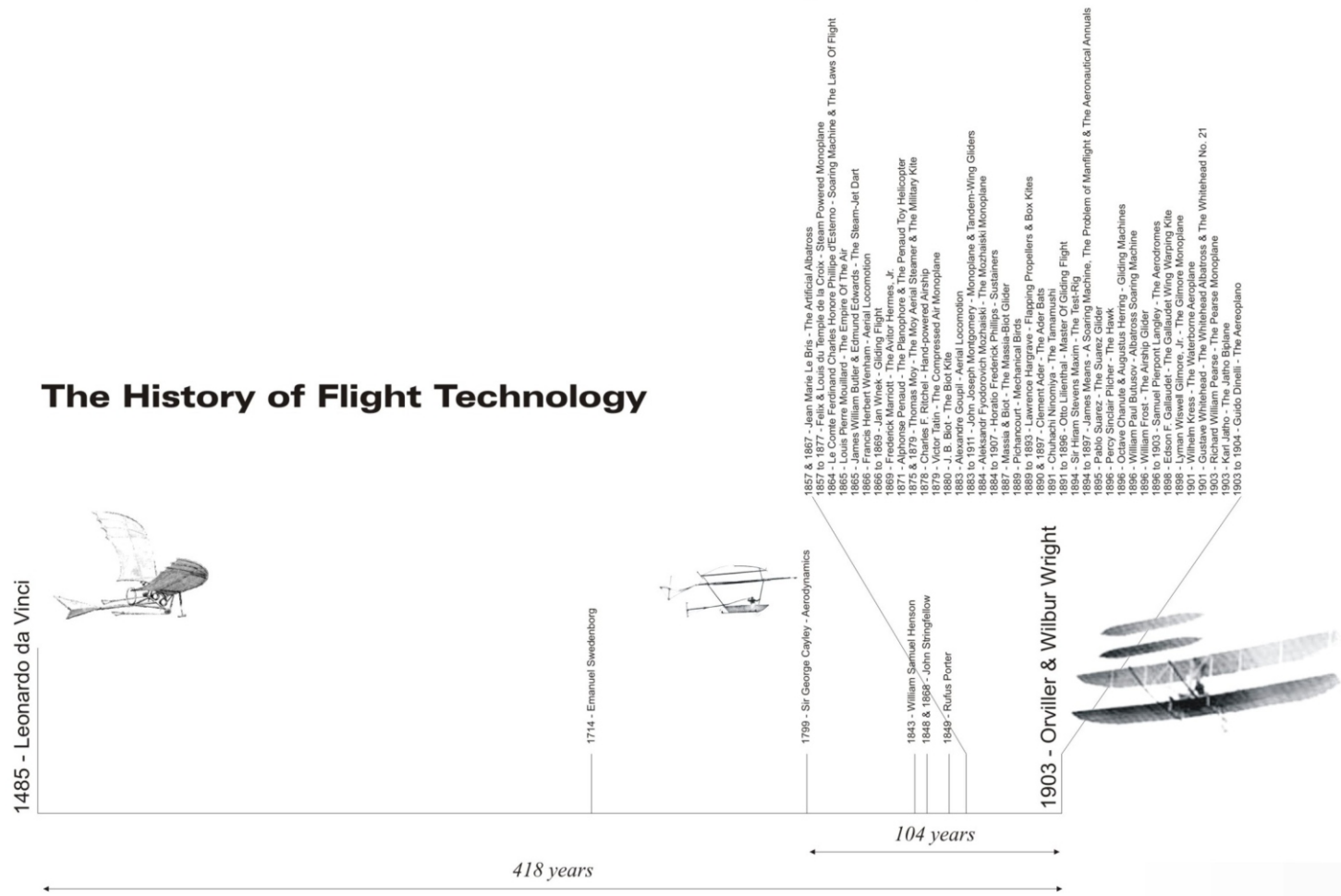
THE PROBLEM OF TECHNOLOGICAL ACCEPTANCE, DIFFUSION AND DEVELOPMENT EXPERIENCES FROM ARGENTINA

Gabriel Asato
g_asato2000@yahoo.com
Geological Survey of Argentina

Technology and new concepts are not easily accepted by society



The History of Flight Technology



New Concepts and Technology Acceptance in the Geological Science History



Alfred Wegener

At their time those innovators were not well received by scientific community



Motonori Matuyama

“The acceptance of new concepts and technology by the society demands time”

Why?

New ideas and technology are perceived as a threatening competitor to the established norms and existing culture.

How to deal with the Technological Acceptance Problem?

Different Approaches are:

Social Capital. **Resistance to Change.** **Technological Acceptance Model.** Organizational Culture. **Technology Process Adoption.** Adoption Diffusion Theories. Change Management. Etc, etc.

Abstract

It is well known that new information technologies, despite of their promise of future benefits, are not always well received or understood. These issues become critical at the moment of project design because it is not easy to distinguish the cause of some problems - like resistance to change, or why a new technology should be accepted, refused or simply ignored. In the context of federal or international organizations the problem is more complicated because it is necessary to deal with different cultures and contexts. There are some different approaches which have tried to understand and resolve the problem of technological acceptance, diffusion and development. There is the difference in cultural aspects (organizational and national perspective), social capital, resistance to change, Technological Acceptance Model, etc. This work is focusing on the problem in context of an inter-organizational working group dynamics and the importance of the relationship with stakeholders and users.

When such a group is created tensions among participants arise. These are due to differences of experience, know-how and personal interests. But the group can gain cohesion by ensuring the definition of clear aims and strong top-bottom mandates (like NSDI, OneGeology, etc.). Because of such imbalances, it is really important to develop an inclusive strategy, create visible and practical results in a short time, while at the same time the group is prepared for long term objectives.

On the other hand relationships with stakeholders and users must not be ignored because the success of data or knowledge delivery is not independent of societal predisposition to accept it. Stakeholder engagement is something which must be done at different levels: both advanced and casual users, in order to understand the specific technological adoption process and check if developments are consistent with user needs.

Conclusions

It is a fact that whatever the IT system performance, the success of the project will also depend on:
1) Good understanding and management of group dynamics.
2) Strategies about the use and acceptance of technology by users and society.

How this fact affect the development of a Geoinformation Initiative?

References

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Technology Acceptance and Group Dynamics

Strong Top-Bottom Mandates

OneGeology.
NSDI.INSPIRE.GEOSS
ScientificDataInfrastructure
NationalHazardMitigationInitiative

Successful adoption is highly dependent on the degree, stability and wisdom of the administrative sponsorship

INNOVATORS



EARLY ADOPTERS

MAJORITY

Critical mass of adopters is needed to convince the "mainstream" of technology efficacy

GeoInformation
Federal or National
Initiative

NEGATIVE OPPOSITION

Lagard
Old King
Neo-Luddite

Perceived ease-of-use
Perceived Usefulness

Success of a data services on the group of StakeHolders depends of

T.A.M.

Stakeholders

Feedback

Feedback

Monitoring succes of the initiative

Success of a data service on society depends of

T.A.M.