

Social Sciences in Coastal and
Ocean Policy and Resilience of
Coastal Communities – What in the
World is Going on in America?

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Community-level Climate Adaptation in Coastal Regions: A Transatlantic Exchange

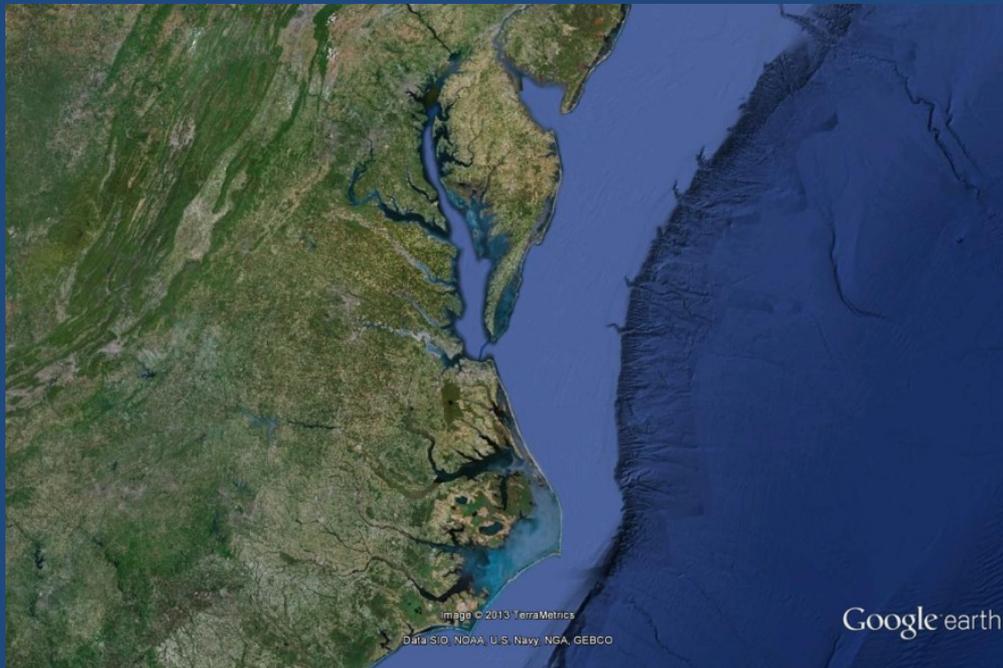


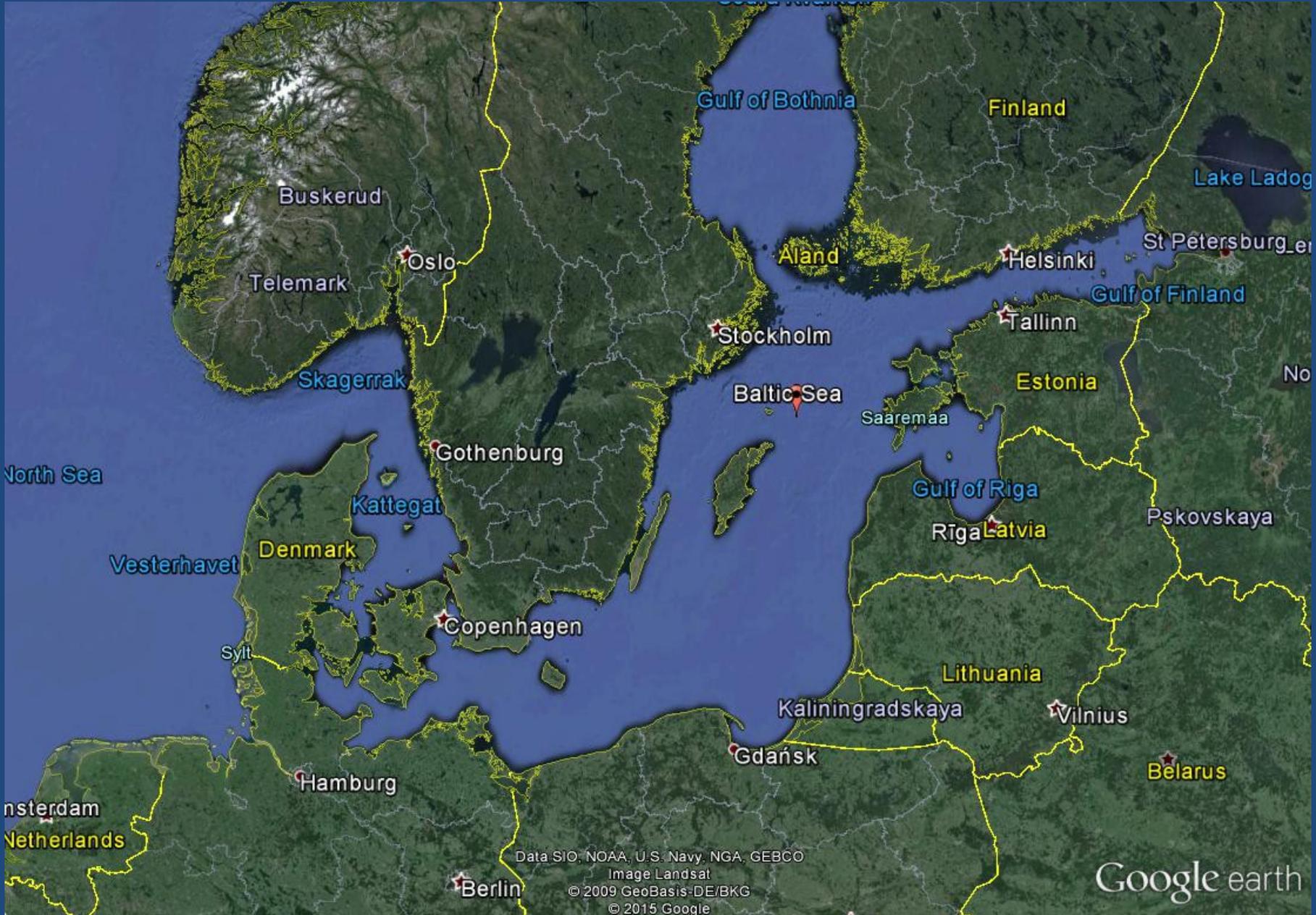
A cooperation of Ecologic Institute Berlin & Duke University/ Nicholas School of the Environment

Focus: Cultural Perceptions of Climate Change and SLR Strategies in Maryland, North Carolina, and the Baltic Sea Coast

Culture and history determine political economy, which in turn is displayed in law and policy. This is evident in relation to perceptions, local knowledge and values concerning adaptation to climate change, as expressed in the political process.

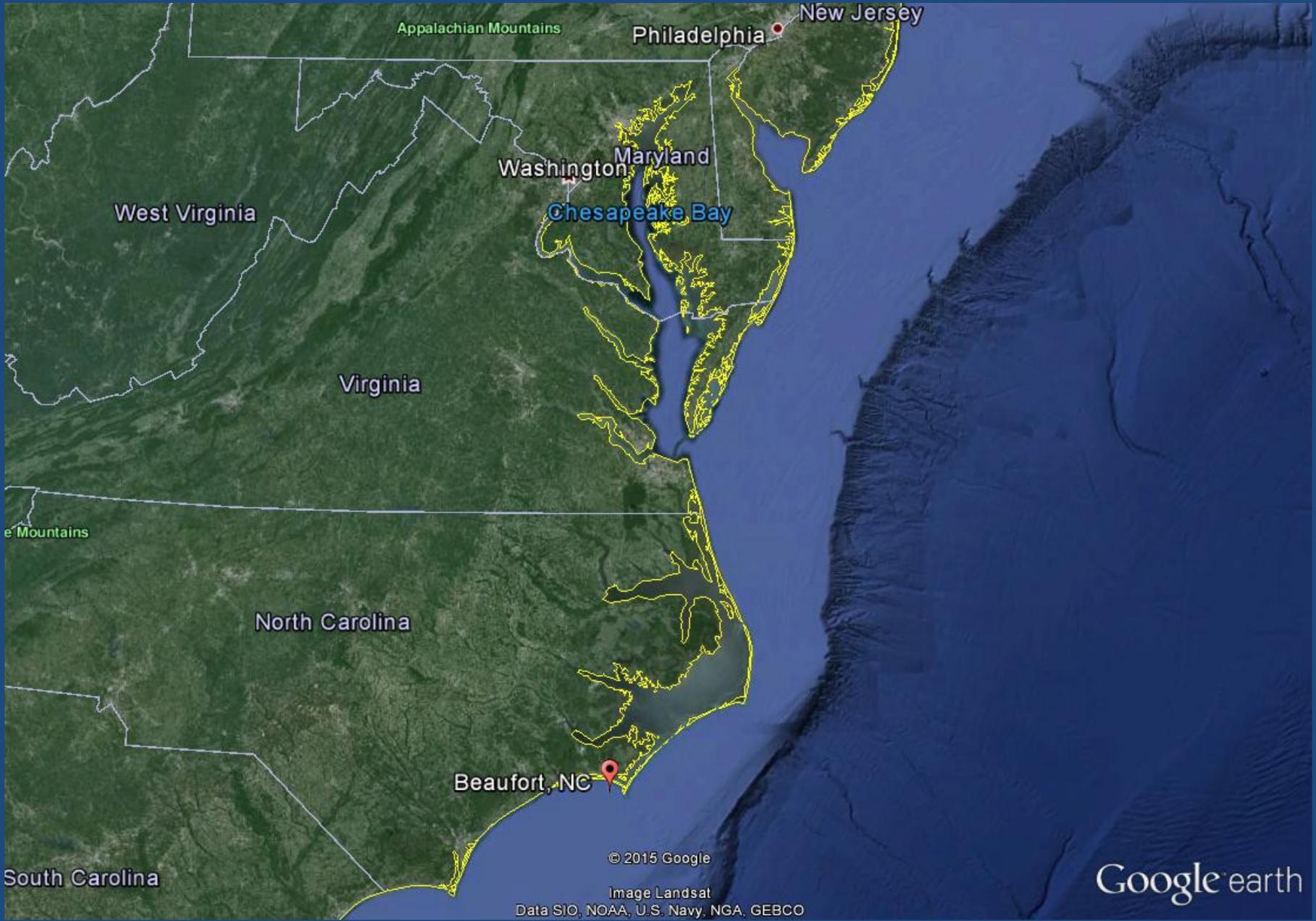
The Chesapeake Bay and the Baltic Sea





Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat
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Google earth



Appalachian Mountains

New Jersey

Philadelphia

Washington

Maryland

Chesapeake Bay

West Virginia

Virginia

e Mountains

North Carolina

Beaufort, NC

South Carolina

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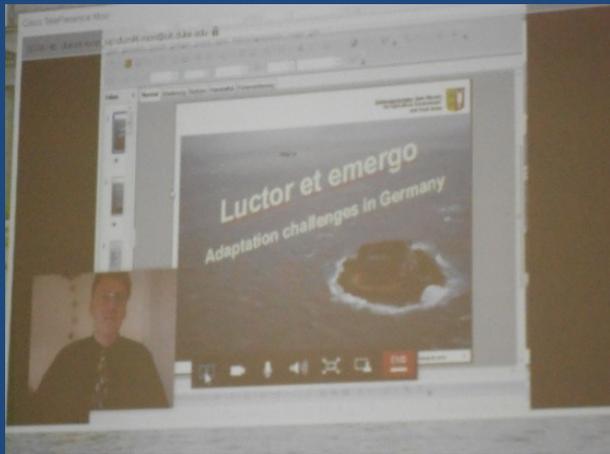
Google earth

Our project involved three types of transatlantic activity research:

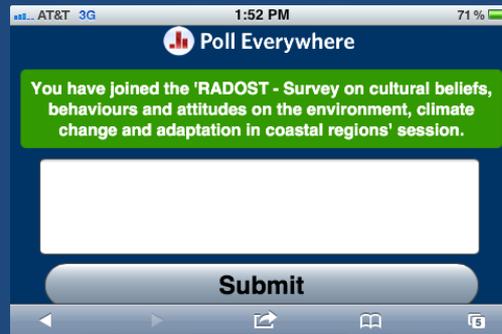
1. Workshops in the US and Germany (virtual participation)
2. Face-to face meetings with coastal stakeholders from the US and Germany
3. A research project with Masters student candidates from Duke University/Nicholas School of the Environment and a PH.D. student from Humboldt University Berlin

Workshops in the US and Germany (2012)

- Spring 2012 Annapolis (MD), Beaufort (NC), Charleston (SC)
- Fall 2012 Timmendorfer Strand (Baltic Sea, Germany)



Jacobus Hofstede, Ministry of Energy, Agriculture, the Environment and Rural Areas, Videoconferenz Annapolis 2012



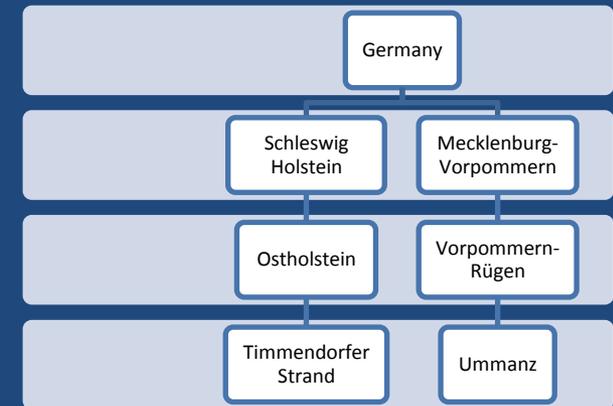
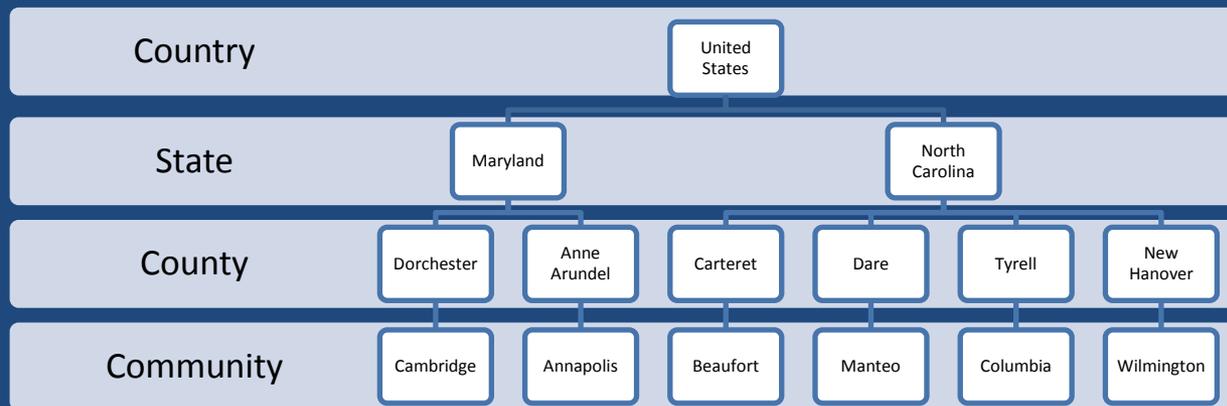
Jeff Allenby, Chesapeake Conservancy, Video conference Timmendorfer Strand 2012.

Face to face meeting with coastal stakeholders from the US and Germany

Timmendorfer Strand, April 2013



Research project with Master student
candidates from Duke University/Nicholas
School of the Environment and PH.D. student
from Humboldt University Berlin



Topic	US	Germany
Discussing Climate Change	If at all in the context of coastal management (50%), 50% not at all	Considered as societal problem Local risk perception is high
Experienced Sea Level Rise	Significantly	No experience
Approaches to coastal adaptation	If, then mainly soft measures/eco-system based approaches	Mainly dykes but also sand dunes, ecosystem based approaches
Guiding factors in community development	Economic, political, religious	Political, economic, socio-cultural
Driving entities of socio-economic development	State/regional/local governments and commissions, NGOs	Local decision makers, local social movements and entities
Sources of funding	Federal/ state/local governments, NGO's	Federal government: channeled through state and local government

Characteristics – U.S.

- Adaptation to long-term coastal change
- The retreat strategies in the Carolinas is based on observed data, whereas forecasts of an accelerated rise due to climate change will not be considered.
- Maryland does not have an overall retreat strategy but allows for reclaiming land.
- Great autonomy of states in design and implementation of programs

Characteristics -- Germany

- Shoreline protection against (longterm) change
- Coastal retreat no option; reclaimed land is protected
- Impacts from climate change explicitly addressed in coastal management planning although no recession of the shoreline currently observed
- States obliged to adopt, national guidelines for adaptation to climate change in state plans

Conclusions – U.S.

- Whether or not anthropogenic climate change exists and requires responses is highly contested
- Individualist measures are considered by private households, and NGOs contribute to the funding and design of adaptation measures, in addition to governmental action
- Local experience provides an evident link between reactive and preventive measures

Conclusions – Germany

- Anthropogenic climate change is an ‘issue to be solved’ (measures widely accepted)
- Coastal dwellers generally expect to be able to rely on governmental institutions when it comes to protection from coastal hazards
- Coastal adaptation measures considered are (so far) solely preventive measures

The General Difference Between the U.S. and Germany...

- In Germany, governments at all levels are actively and comprehensively planning for climate change and sea level rise
- In the U.S., some planning is being done, but major political impediments exist, in particular in local governments and the U.S House of Representatives

In North Carolina specifically...

National & International Ridicule

The Colbert Report



Monday June 4, 2012 | Views: 142,395 | Comments: 0

The Word - Sink or Swim

In the U.S. generally.....

- 1) Not what is said, but who said it...
- 2) Call it something different...
- 3) Just DO it...
- 4) Not denial, but fear!

