Dissatisfaction with current model: "serial crisis"
- delays of content delivery
- time-consuming editing and publishing process
- expensiveness
- time-consuming editing and publishing process

Disadvantages of (both printed and electronic) journals:
- Scientific journals have been major means of scholarly communication throughout last three centuries.

Emergence of Internet (and especially World Wide Web) has brought new possibilities for profound transformation of scientific communication process.

There are two main categories:
- C-PRINT ARCHIVES: archiving peer reviewed literature or preprints (or both) discipline based and institutional centralised or distributed systems
- INITIATIVES: developing new lower-cost alternatives to high-price journals

ALTERNATIVE JOURNALS
- DOAJ: Directory of Open Access Journals - comprehensive directory of all quality controlled open-access journals
- PLOS: promoting open-publishing in the life sciences and medicine - funding model similar to BMC
- SPARC: Scholarly Publishing and Academic Resources Coalition - creating new lower-cost alternatives to high-price journals

NEW DISAGGREGATED MODEL OF SCHOLARLY COMMUNICATION
- Each future model will also have to ensure fulfillment of all four functions, but particular functions will be carried out by different instances: authors, academic institutions, professional societies, journals, eprint archives, librarians.

There are two main categories:
- centralised digital archive of institutional journals
- only peer reviewed journals
- managed by the Medical Center for Biotechnology Information (NCBI) at the US National Library of Medicine
- SPARC: Scholarly Publishing and Academic Resources Coalition
- BOAI: The Protocol for Metadata Harvesting
- DOAJ: Directory of Open Access Journals