

**Fig. S17.** A scholarly information system bridges the supply side to the customers' side. The supply side of scholarly information could be a form of common pool resources (CPR), club/private goods, or public goods depending on the mode of availability. The recognition of public users in addition to scholarly users is important for customers. Subject specialist librarians will meet the demands of users. open access (OA) enables people to become members of open science. TA, toll access.