In the era of ‘Internet of Things’, more people can connect to Internet now in more way than ever before. It has been estimated that in next 10 years more than 50 billion devices may connect to Internet. Moreover it has also been estimated that by 2020, global amount of digital records will increase more than 40 fold. As these softwares and devices go online, they will generate increasing amount of personal data (data about individuals, their behavior and actions). This huge quantity of data about people and their activities offer wave of opportunity for economic and societal value creation. From the viewpoint of individuals, they enable the development of new personal applications that individuals can adopt to improve their life and health. From the point of view of organizations (either enterprises, service providers or government or public agencies), they can be used to create a better “knowledge” on clients or citizens, either as individuals or as homogenous groups of people. In this way, they can optimize their operations, enhance and tune their products, or improve the management of a city or a territory. However, the current personal data ecosystem is fragmented and inefficient. On one hand users are not empowered to control access to their personal data which results in issues related to privacy, personal data owner ship, transparency and value distribution. On the other hand it puts the burden of managing and protecting user data on organizations at a cost of trust and regulatory accountability. Current technologies fall short of providing the technical infrastructure needed to support a well-functioning trustworthy digital economy. Instead, they represent a patchwork of solutions for collecting and using personal data in support of different institutional aims (e.g., personal data systems related to banking have different purposes and applicable laws than those developed for the telecom and healthcare sectors). To this end, several privacy experts have identified ‘Personal Data Service/Store’ (PDS) as a potential tool for effective and trustworthy management of personal data. Proponents of PDS believe that it would enable a step change in trust by (i) letting user collect, store, manage, use and share their own personal data for their own purposes. (ii) make the individual the point of integration of data about themselves, (iii) help individuals to manage their relationships with many suppliers, (iv) help individuals specify their wants and needs, and making this available to suppliers in the marketplace. However, for each stakeholder in the PDS-driven ecosystem to be satisfied, it is essential to create mutually supportive incentives that enable the reduction of collective inefficiencies and promotes a trustworthy and privacy enhanced cyberspace. Our goal is to design and analyze such an ecosystem or marketplace.