Abstract: Adopting a new technology in an organization is a crucial decision as its impact can be at technical, economical, and organizational level. One of such decisions is related to adoption of Cloud-based services in an organization. Cloud Computing is changing the way IT infrastructure is used today primarily due to high cost savings associated to it. However, if the solution adopted by an organization is not fulfilling its requirements, it can have tremendous negative consequences at technical, economical, and organizational level. Therefore, the decision to adopt Cloud-based services should be based on a methodology that supports a wide array of criteria for evaluating any available alternative. Also, as these criteria or factors can be mutually interdependent and conflicting, a trade-offs-based methodology is needed to make such decisions. In addition, inclusion and modeling of qualitative factors (e.g., legal and regulative constraints) that influence such a decision forms a crucial part of this methodology. This talk, therefore, discusses the design and implementation of Trade-offs based Methodology for Adoption of Cloud-based Services (TrAdeCIS). This methodology is based on Multi-attribute Decision Algorithms (MADA), which selects the best alternative, based on the priorities given to different criteria by decision maker. Furthermore, the talk will be concluded with the extendibility and applicability of this methodology to other domains.