COCOMO® III Project Purpose

The purpose of the COCOMO® III project is to develop a software cost estimation model, COCOMO® III, for modern software development. The project will:

* + Broaden the audiences using COCOMO®, e.g. Medical instruments, Mobile devices, Web/Internet, Big Data
  + Consider domains that use different size drivers (e.g. Function Points, Requirements, Use Cases, Story Points).
* Address the scope of modern software projects
  + New development paradigms
  + Different software domains, e.g. embedded systems, mobile devices, software as a service
  + Larger scale projects, more ambitious
  + Big Data, more risk due to data loss
  + Productivity enhancing practices
* Improve the accuracy and realism of estimates
  + New and updated software cost drivers and their ratings
  + Improved estimation workflow that reduces model misuse
  + Improved driver definitions that reduces rating selection subjectivity
  + Quality estimation capability
  + Provide point and range estimates based on model error
  + Local calibration capability
* Estimate software cost that is complementary with a COSYSMO system engineering cost estimate.
  + Separation of system and software engineering activities
  + Ability to move activity estimates between models
* Improve the value of COCOMO® in decision-making.
  + Analysis of alternatives
  + Economic impact of project decisions
* Create a strategy for maintaining past COCOMO® models
  + Transforming past model drivers into COCOMO® III drivers

The project is expected to take two years.