SOFTWARE WITH/FOR REUSE

The main purpose of Software Reuse is to improve software production by reusing previously created assets. Due to well-known historical reasons, its industrial application has been based on the systematic application of domain engineering.
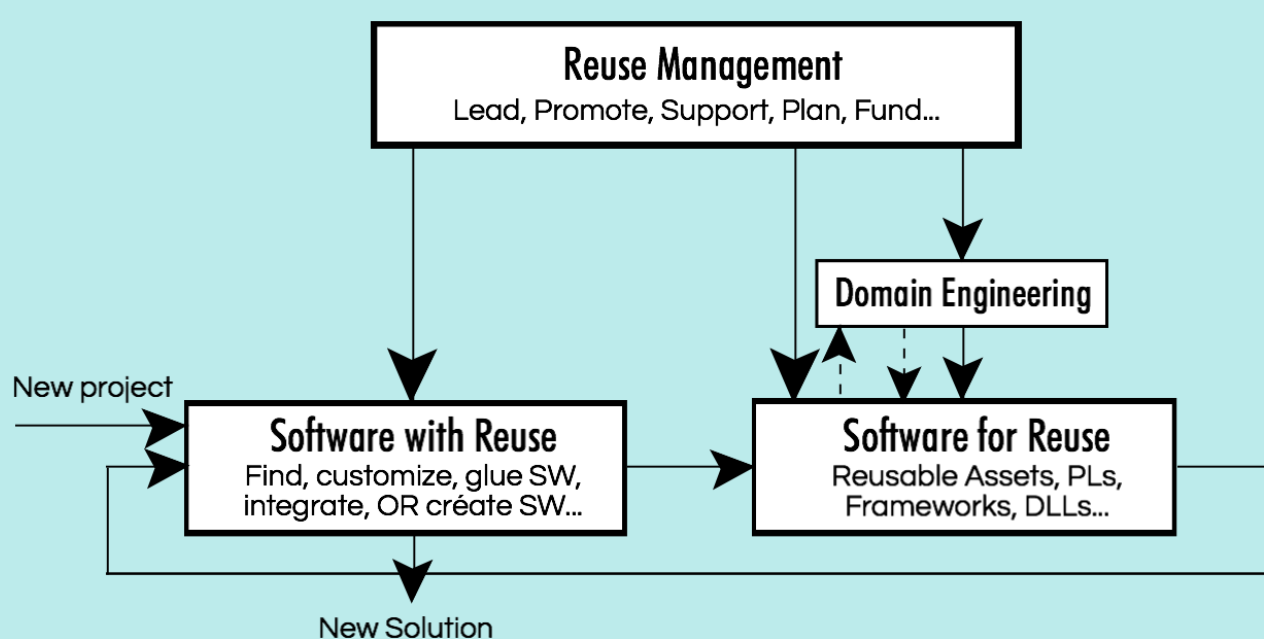
We must go back to the origins and apply Knowledge-based methods and techniques for a successful application, improving the Domain Engineering approach.

The pinnacle of software is systems — systems to the exclusion of almost all other considerations. Components, dignified as a hardware field, are unknown as a legitimate branch of software. When we undertake to write a compiler, we begin by saying 'What table mechanism shall we build?' Not, 'What mechanism shall we use? But, 'What mechanism shall we build? I claim we have done enough of this to start taking such things off the shelf.
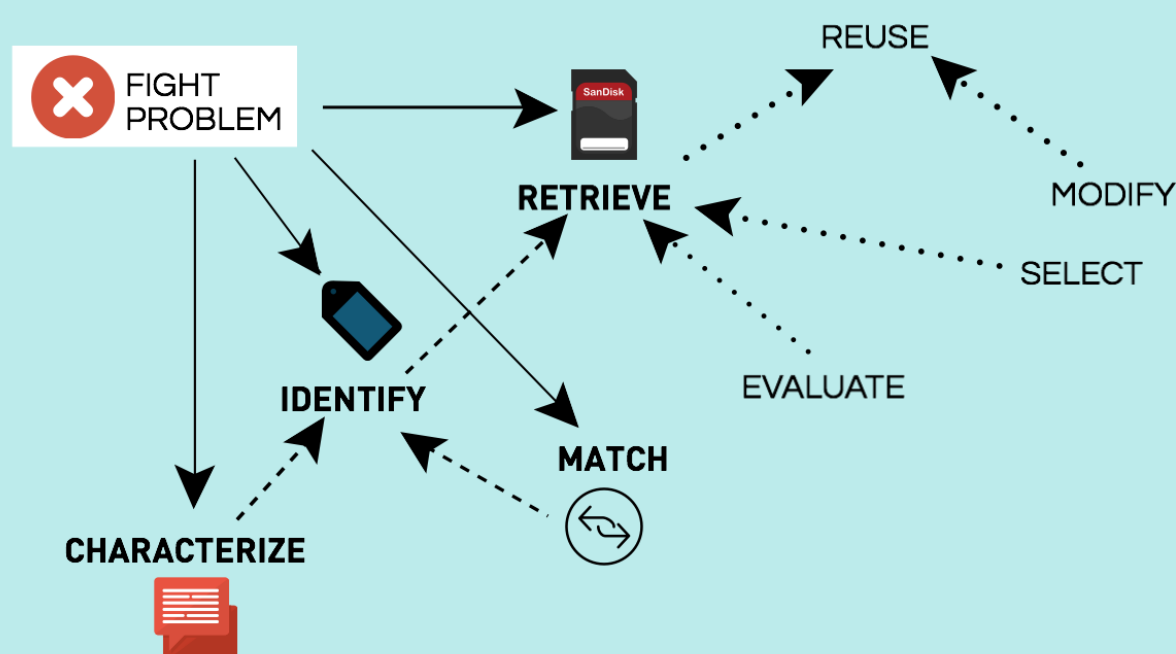
— D. McIlroy, NATO 1968

Software reuse's purpose is to improve software quality and productivity. Reusability is one of the "illities" or major software quality factors. Software reuse is of interest because people want to build systems that are bigger and more complex, more reliable, less expensive and that are delivered on time. They have found traditional software engineering methods inadequate, and feel that software reuse can provide a better way of doing software engineering.

— W. Frakes and K. Kang, 2005

Software WITH reuse as the driving goal
Software FOR reuse as an investment

Is it possible to find and retrieve software assets?

Do you think that reusing in the higher stage of the Software or System Development Process is the best?
REUSE YOUR KNOWLEDGE!!!

Anabel Fraga - UC3M