# Relationship Between Proposals

Independent proposals

choosing any proposal from that set has no effect on your ability to choose any other proposal in the set

Dependent proposals

choosing any one proposal from that set limits your ability to choose any other proposal in that set

For now, Ignoring budget constraints, staffing limits, etc

### Dependent Proposals

Codependent proposals

choosing one requires choosing the other and vice versa

Mutual exclusive proposals

choosing either one prevents choosing the other (for other technical or business reasons, not because of financial or staffing limits)

Contingent proposals

choosing P2 depends on first choosing another proposal, P1, but P1 doesn't depend on choosing P2.

One way dependency

### **Alternatives**

- The typical business decision involves choosing between more than just two proposals
- It's often possible to choose more than one of the proposals at the same time.
- Given a set of k proposals, if those proposals are all independent and there aren't any budget (or other resource) constraints, then there would be 2<sup>k</sup> different possible unique courses of action.
- These range from carrying out none of the proposals to carrying out all of the proposals, and includes all of the various combinations in between
- Any dependencies among the proposals just make matters more complicated.
- The decision process is a lot simpler when the choices can be represented entirely in mutually exclusive terms.

## Developing Mutually Exclusive Alternatives

 STEP 1: Generate All Theoretically Possible Combinations Of Proposals

STEP 2: Remove Invalid Alternatives



### The "Do Nothing" Alternative

- It's important to consider the do nothing alternative in most business decisions
- Alternative A0 represents a course of action that, by convention, is called the "do nothing" alternative.
- This alternative doesn't really mean doing nothing at all, it only means that none of the proposals in the set being considered are carried out.
- Instead, the money is put into investments that give a predetermined rate of return (bonds, interest bearing accounts, put into a more profitable part of the corporation, etc.).
- Sometimes even the best of the stated proposals is worse than what could be achieved by investing somewhere else

### Reading Material

- Part I
  - Chapter 9 : Developing Mutually Exclusive Alternatives

#### **Text Book:**

"Return on Software: Maximizing the Return on Your Software Investment" by Steve Tockey