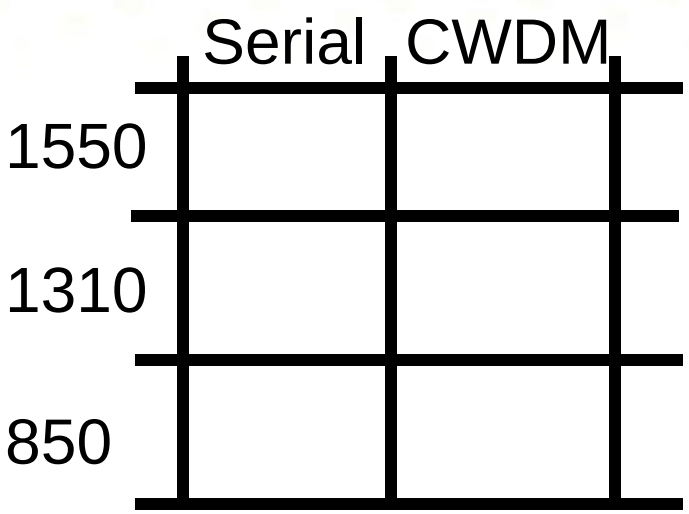
How Many PMDs ?

Stephen Haddock
May 25, 2000

PMD Options



Optimized for:

Long Reach SMF

Medium Reach SMF

Short Reach MMF

- Columns and rows are differentiated by technology.
- Only the rows are differentiated by markets.
  -- Only the rows solve different problems.
- We need one solution optimized for each market.

How many PMDs should we have?

1 -- Holy Grail, but unrealistic.

The distance and fiber type objectives are too broad to cover with a one size fits all solution.

2 -- More Realistic.

Tolerable number of PCS-PMD combinations, but still suboptimized in critical application spaces.

3 -- Best Solution.

Painful number of PCS-PMD combinations, but justifiable based on providing an optimized solution for three distinct application spaces.

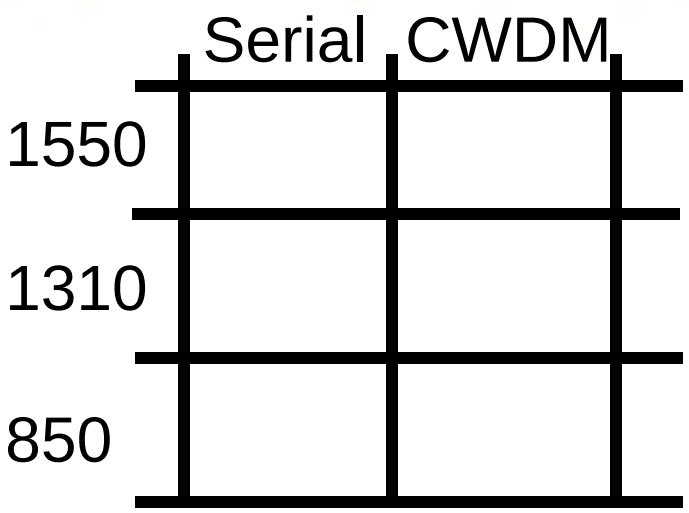
>3 -- Chaos.

… but easy for the committee. (Better be hot-pluggable SFF !!)

>6 -- Chaos x N = Chaos.

… but no longer easy for the committee.

Possible Decision Paths



1: Pick a column.

2: Pick one from each row.

3: Don't decide: Pick 'em all.

4: Don't decide: Wait.

Criteria:

- Cost
- Feasibility
- Distance / Fiber type

Why only one from each row?

- Because the columns are only differentiated by technology, not by application.
  - Customers don't care about the technology!
- Fragment development efforts
  - at every level of the food chain
- Fragment the market
- Reduce competition
- Difficult for system vendors: # of SKUs, product mix
- Difficult for end users
  - with multiple solutions for the same problem we will not cross the chasm!