we can increase the communication and computation overlap by distributing the memory into block partitioning which is more efficient in computation and communication overlap than any other partitioning scheme.

For matrix multiplication we can increase the computation and communication overlap by using horizontal partitioning of data as it is more suitable for the matrix multiplication problem, by using horizontal partition of data, it will not have dependencies to compute x in each node i.e a subset of X-Vector is calculated by each node and at the end of the iteration all of the subset X-Vectors from each node is combined to get whole X-vector and it is distributed to every other node to be used for next iteration.