

In principle, increasing the coarseness of outcome value data is done with an awareness that the loss of differentiating ability of data is exchanged with the reduction of the number of possible values. This trade-off is necessary to enable the visualization and clustering in a reduced dimensional space in a descriptive way that will motivate insight generation. The principle we adopt in our approach is to limit the number of discrete values to be small, up to but no 12. This restriction in our approach is motivated by two key factors. The first one is Miller Law centered around the notion of the magic number 7 (plus or minus two) and which provides evidence that most adults can store between 5 and 9 items in their short-term memory. The second factor is the ability to differentiate colours in human working memory. While humans can distinguish the difference in hue, saturation, and value (brightness) in excess of a million colour combinations, human colour memory is not very good since people tend to coarsen (bundle) colours when memorizing them, which leads to a limited number of colours that can be readily identified.