A Π-algebra is a sequence of groups, along with an action of the primary homotopy operations, which are indexed by homotopy groups of wedges of spheres. It is natural to view the homotopy groups of a space as an object in the category of Π-algebras. The $\nu_n$-periodic homotopy groups of a space are obtained by inverting non-nilpotent self maps of finite complexes. In this talk I will investigate $\nu_n$-periodic Π-algebras.