The monograph develops and applies the evolutionary approach to analysis of the dynamics of entrepreneurship and related topics of innovations and technology under conditions of transitional economy. A critical review of theoretical propositions of modem institutional and evolutionary economics related to the theory of entrepreneurship and innovations is given to generalize them and determine the ways of their prospective development. Natural selection in economics is shown not to be reduced to Darwinian mechanism of survival of the best version. Another mechanism prevails which allows for path-dependence that is selection of one version among several roughly equal alternatives depending on initial conditions. A new concept for technological paradigm shift is formulated based on the above two mechanisms of natural selection to take place among the competing innovations, those mutually rivalling both antagonistically and for the common resource. Application of the developed concept of technological change to the model of central planning showed such system of management to inhibit innovation potential because it does not favor emergence and competition of technological, managerial and other innovations (due to the absence of entrepreneurial activity). A mathematical model for population of growing firms is considered and revealed a relation between firm size spectra and rate of employment. The results explain well-known empirical findings that smallest companies create the majority of new jobs. A comprehensive system analysis of recent developments in the sector of small entrepreneurship in Kazakhstan showed the social benefits from that sphere of economic activity are much higher than implies its formal productive contribution to GDP because of its diverse exterior displays. That sector is the only potential pole of intensive growth in the post-Soviet Kazakhstan, which development might induce the recovery of the whole economy. Support and "incubation" of domestic entrepreneurship by means of economic policy tools, including those proposed by the authors, should become one of the governmental priorities.