In high-technology industries, firms increasingly engage in acquisitions to gain access to new capabilities as sources of competitive advantage. Despite their popularity, research has shown that 80% of such acquisitions fail. These high failure rates are predominantly ascribed to the complexity of the capabilities that are being acquired and the post-acquisition integration complications that are accompanied with this type of acquisitions. This dissertation provides four studies that elaborate on these issues. Based on quantitative and qualitative studies, this research reveals that failure of such acquisitions is mainly caused by an ignorance of the dominance of tacit collective knowledge underlying targets’ capabilities which is extremely difficult to transfer and requires a specific approach post-acquisition. In line with this, it is argued that firms need to develop a distinct ability for undertaking such high-technology acquisitions. This distinct ability is labeled as a “grafting capability” in this dissertation. A “grafting capability” is a high-technology acquisition-specific capability focused on integrating newly acquired knowledge. For developing a “grafting capability,” firms need to invest in organizational activities focused on stimulating interaction among employees such as working in projects and job rotation instead of practices focused on distributing descriptions of acquired firm's processes to acquiring firm’s members or creating certain acquisition-specific functions and tools. In other words, capability transfer should be stimulated in the actual practice which can be achieved by enhancing collaboration among employees. In achieving this goal, the role of employees who could function as boundary spanners to create the necessary post-acquisition social community in which experts can collaborate and the use of mutually created boundary objects, are key.