

Table 2: Definitions and types of obsolescence

Type	Definitions
Systemic obsolescence	It encompasses “altering the system in which the product is used to make it more difficult to use, or by cancelling maintenance services for the product” (Rivera and Lallmahomed, 2016: 120).
Diminishing Manufacturing Sources and Material Shortages (DMSMS)	It refers to the “loss of the ability to procure required materials, parts, or technology” (Bartels et al., 2012: 4).
Functional obsolescence	It occurs when the specific requirements for the product have been changed, rendering the product’s current function and performance outdated (Bartels et al., 2012).
Logistical	This is where the focal firm is unable to procure the components or materials to deliver continuous service/support the operations of the technology (Feldman and Sandborn, 2007).
“Inventory obsolescence”	This refers to where “inventories of parts become obsolete because the system they were being saved for changes such that the inventories are no longer required” (Sandborn, 2007a: 2).
Managerial obsolescence	Diminish value of individuals’ human capital in the face of environmental shifts (Aryee, 1991).
“Involuntary” obsolescence	This occurs when “products are forced to change by circumstances that are beyond their control” (Sandborn, 2007a: 2).
Planned obsolescence/ built-in obsolescence	Planned obsolescence refers to a deliberate attempt to curtail the lifespan of a product (Cooper, 2004; Packard, 1960).
“Psychological” obsolescence	This occurs where “a product that is still sound in terms of quality or performance becomes ‘worn out’ in our minds because a styling or other change makes it seem less desirable” (Packard, 1960: 58–59; Cooper, 2004: 424).
Economic obsolescence	When economic factors cause a product to be considered obsolete or waste (Cooper, 2004). End user attributes little or no value to the product.