4 Manufacturing vs. Service Firms

As indicated above, the analysis of the relationship between organizational structure and organizational ambidexterity is complemented by a comparison of manufacturing and service firms. This additional analysis contributes to the notion that the optimal configuration of administrative mechanisms is not only dependent on the desired employee behavior or certain performance objectives, but also on the contiguity, in which such objectives are to be achieved.

The corresponding theory is referred to as structural contingency theory. This theoretical concept posits that the success of a firm – here, the achievement of organizational ambidexterity - is dependent on the fit between organizational structure and internal and/or external contingencies.\textsuperscript{130} The distinction between manufacturing and service firms denotes an internal contingency factor and is proposed to have a significant influence on the relationship between organizational structure and organizational ambidexterity. How manufacturing and service differ generally is explained in the following.

Drawing upon prior studies, the difference between manufacturing and service firms can be delineated by means of different dimensions, such as the structural context, general organizational characteristics, employed technologies, the firms’ output or characteristics of the innovation process.\textsuperscript{131} In order to facilitate the reading process, I first focus solely on the presentation of general differences between manufacturing and service operations that are not directly associated with organizational structure. Differences in organizational structure are presented subsequently in section 4.2.

\textsuperscript{130} See, for example, Lawrence and Lorsch (1967).
\textsuperscript{131} See, for example, Chowdhury and Miles (2006), Huber, Miller and Glick (1990) or Mills and Moberg (1982).
4.1 Manufacturing vs. Service Firms – General Differences

Drawing upon prior literature, MILLS AND MOBERG report that manufacturing and service firms reveal remarkable differences with regard to their operations.\(^{132}\) Compared to manufacturing, service operations are associated with unique characteristics, such as customer participation, intangibility, inseparability of production and consumption, heterogeneity, and perishability.\(^{133}\)

First, in service operations customers are directly integrated into the value-creation process. Hereby, the customer not only participates in the delivery of the service, but also during the development and production. Service operations are marked by a constant exchange of information between the firm and the customer, collaborative development and production efforts, as well as rather unsystematic (innovation) processes.\(^{134}\) Because of this close interaction with the customer across various process stages, MILLS, HALL, LEIDECKER AND MARGULIES note that the success of service operations is fundamentally dependent on communication, knowledge and energy.\(^{135}\) Only if service firms are able to establish a strong relationship with the customer, information, i.e. the "raw material" of service operations, can be exchanged effectively.

In this respect, FROHLICH AND WESTBROOK hint at the tendency of service firms to have many more physical sites than manufacturing firms.\(^{136}\) Customer participation necessitates local proximity and immediate contact between the service worker and the customer. As a result, “the service participant is actually a factory unto himself/herself because he/she is producing and selling (delivering) the service to the customer/client concurrently”.\(^{137}\)

Second, services are highly intangible and, thus, fundamentally different from manufacturing operations. Contrasting their manufactured counterparts, services cannot be touched, tasted or tested.\(^{138}\) According to MILLS AND MOBERG, the intangibility of services is responsible

\(^{132}\) See Mills and Moberg (1982), pp. 468.
\(^{133}\) See Frohlich and Westbrook (2002), p. 734.
\(^{134}\) See, for example, Hipp and Grupp (2005).