

Waste and Impediments to Flow

Waste Category	Definition	Example
MUDA: The 8 Wastes		
Waste of Motion	Unnecessary movement of people that do not contribute to the successful completion of the process	Scheduling meetings in locations convenient for the committee chair that require considerable travel for the committee members
Waste of Waiting	Halting or slowing down a process while waiting for people, information, actions, or resources	Students waiting for faculty feedback on course performance; forms waiting for approval
Waste of Movement	Materials and information travel greater distances or more often than needed	Sending documents through campus mail; delivery trucks with poor routing
Waste of Correction	An activity or step in a process must be repeated to correct a mistake or resolve a problem	Multiple submissions of faculty recruitment materials before approval is provided by human resources
Waste of Overprocessing	Unnecessary time and energy is consumed and adds no value	Staff creating memos and reports “from scratch” without relying on established templates
Waste of Overproduction	Steps or products are completed before they can be used at the next point in the process, or the output of the process exceeds what is immediately needed	Low enrolled courses are offered because of faculty teaching preferences; making ‘extra’ copies just in case; excessively detailed information
Waste of Inventory	Resources or work output (e.g., forms, parts, documentation, etc.) are stockpiled because they are not yet needed by the process	Bulk printings of admissions and academic program brochures that are quickly outdated due to personnel and programmatic changes
Waste of Untapped Knowledge	Sharing of knowledge, ideas, and creativity is insufficient to support university processes	Lack of cross training to support key processes during low staffing levels; limiting approval authority; insufficient training
MURI, MURA, and Impeded Flow		
Waste of Overburdening People, Equipment, or Facilities	Unreasonable expectations of equipment, facilities, and people (taxing them beyond their physical, psychological, and emotional limits)	Students declining to pursue a grade appeal because they perceive the process to be long, unclear, and contentious
Waste of Unevenness	Irregularity or inconsistency in work practices that creates the recurring problem of too much work followed by too little work for people and equipment in the process	Extended periods of downtime throughout the day for advising staff because of unknown student preferences for appointments to complete their course registrations
Impeded Flow	Extra resources are needed to cope with the uneven demand or fluctuating schedules caused by backlogs or “pinch points” in a university process	Long registration lines at conferences due to limited staff and budgets in conference services

Adapted from Balzer, W.K. (2020). *Lean Higher Education: Increasing the Value and Performance of University Processes (2nd Ed.)*. New York: Routledge/Productivity Press.