

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Detailed bin inventory.	<p>All monitored bins and stands can be seen on the map, and you can visit them at any time via the Street View feature from Google.</p> <p>Bins or stands are visible on the map as green, orange or red circles.</p> <p>You can see bin details in the Dashboard – capacity, waste type, last measurement, GPS location and collection schedule or pick recognition.</p>
FR-2	Real time bin monitoring.	<p>The Dashboard displays real-time data on fill-levels of bins monitored by smart sensors.</p> <p>In addition to the % of fill-level, based on the historical data, the tool predicts when the bin will become full, one of the functionalities that are not included even in the best waste management software..</p> <p>Sensors recognize picks as well; so you can check when the bin was last collected.</p> <p>With real-time data and predictions, you can eliminate the overflowing bins and stop collecting half-empty ones.</p>
FR-3	Expensive bins.	<p>We help you identify bins that drive up your collection costs. The tool calculates a rating for each bin in terms of collection costs.</p> <p>The tool considers the average distance depo-bin discharge in the area. The tool assigns bin a rating (1-10) and calculates distance from depo-bin discharge.</p>
FR-4	Adjust bin distribution.	<p>Ensure the most optimal distribution of bins. Identify areas with either dense or sparse bin distribution.</p> <p>Make sure all trash types are represented within a stand.</p> <p>Based on the historical data, you can adjust bin capacity or location where necessary.</p>

FR-5	Eliminate inefficient picks.	<p>Eliminate the collection of half-empty bins.</p> <p>The sensors recognize picks.</p> <p>By using real-time data on fill-levels and pick recognition, we can show you how full the bins you collect are.</p>
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		<p>The report shows how full the bin was when picked. You immediately see any inefficient picks below 80% full.</p>
FR-6	Plan waste collection routes.	<p>The tool semi-automates waste collection route planning. Based on current bin fill-levels and predictions of reaching full capacity, you are ready to respond and schedule waste collection.</p> <p>You can compare planned vs. executed routes to identify any inconsistencies.</p>