EZ Step Capstone Project

The project sponsor wishes to pursue a design concept for a foldable stool that could be stowed under a conventional kitchen counter toe kick area, and deployed easily when needed to aid in reaching items in upper cabinets.

When stowed, the device should be compact, unobtrusive, safe, and stylish. In the stowed configuration, the EZ step form and dimensions should permit easy relocation around the kitchen: Lightweight, no sharp edges or pinch points, etc.

Deployed configuration should be safe, stylish and able to hold a static load of at least 300 lbs. Deployed height should be minimum of 12” via the incorporation of extendable legs and/or adjustable frame. Alternatives to be considered include telescopic structural elements, hinged, power screw adjustable, and other options.

All designs, materials, and manufacturing recommendations should be suitable for rate production. A patent search is required, and thorough economics analysis should accompany accurate and complete engineering analysis demonstrating engineering and market viability of the product.