



BUSINESS CASE	
Proposed Project	Freight Shield
Date Produced	29 September 2023
Background	In the freight and logistics industry, shippers are entities that need to send goods, and carriers are entities that own vehicles and transport goods. A load board is marketplace where shippers post their loads, and carriers find and choose loads to transport.
Business Need/ Opportunity	Due to the nature of the industry, there's an incentive that forces the driver to go past the safe number of hours, and for distributors to be in discriminant about how they assign jobs. We want to make a system that prevents this, and makes connecting the two parties easier and safer.
Options	Option 1: Omitting the project Option 2: Making a web application (using the LAMP stack) Option 3: Making a web application (using the MERN stack) Option 4: Making a mobile application
Cost-Benefit Analysis	
<p>Option 1: Not doing the project is out of scope. It is a requirement for this course (and the next). Not to mention the whole degree with failing this course. No costs for development, maybe some benefits for one less commitment this term, but a lot of costs for the course, and our degrees.</p> <p>Option 2: The LAMP stack is reliable but old. Less people in the group have experience with it, and it might be harder to implement the features we want on it. Might spend less time getting started, but taking it as far as we want with locations and different users etc. will get more difficult. Mixed costs/benefits from probably being able to do it, but might not get as many benefits from the results.</p> <p>Option 3: The MERN stack is newer. More people in the group have experience with it (though not all). Was able to find some similar web applications that involve connecting different types of users (with maps and jobs) that use the same stack. Will still be difficult to accomplish, but the experience means that it won't be as hard to develop the project.</p>	



Option 4: A mobile application would probably be the ideal form factor for this, but we don't have much (if any) experience with developing applications. More costs than benefits. Would probably return the most practical result, but only with significant cost from learning how to develop and implement it.

Recommendation

Going to make a web application using the MERN stack, seems like it has the best ratio between cost and benefits.