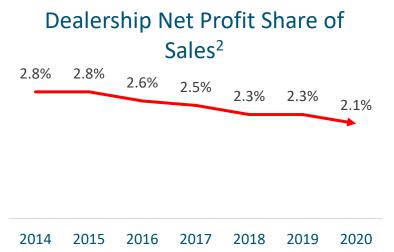


Investment Thesis: Auto Software

Faced with compressed margins and heavy competition, the automotive industry continues to seek out software solutions that drive efficiency and margin growth.





Porter's 5+ Forces

POWER OF BUYERS	BARRIERS TO ENTRY	COMPETITION	POWER OF SUPPLIERS	THREAT OF SUBSTITUTES	REGULATORY RISK
High	Low	Medium	Medium	Medium	Low
Automotive dealers and repair shops maintain a strong ability to add, remove, or renegotiate vendors and services, which can lead to commoditization of many software solutions.	Limited regulation and a large market size make it easy for upstart automotive software companies to gain footholds with collections of dealers or repair shops.	There is a broad market of software solutions servicing automotive dealership and auto repair shops. These facilities are likely to utilize dozens of software solutions simultaneously.	The owners of data and systems of record maintain significant leverage over access to actionable data and information.	The rise of electric vehicles and innovate car ownership models, while still likely a few decades away, threaten the viability of the services many automotive software providers are designed to	While regulation will continue to encourage transitions to green technology, the risk of regulation limiting technology servicing automotive dealerships and auto repair shops is limited.

SSM Experience





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SSM's Initial Perspective

- Changes in supply due to COVID-19 drove record high new vehicle sales prices, but have been unable to reverse the years-long trend of declining margins for dealerships with new car sales
- Vehicles are continuing to stay on the road longer, with 70% of vehicles on the road older than 6 years
- Electric vehicles will rise to 32% of new vehicle sales globally by 2030, though lower in North America
 - Investments in infrastructure will be required to accommodate this shift, including from dealerships
 - Traditional gas-powered vehicles will remain the predominant vehicle form for the foreseeable future
- Innovative car ownership models will adapt how people engage with vehicles, largely in urban settings
- Auto dealerships have massive networks of data from vehicle sales and service that are prime candidates for increased use of AI
- The large DMS providers have been highly acquisitive, consolidating nascent technology under their umbrellas
- The dealer model has proven resilient through many industry transformations, but will have to reckon with the most valuable car maker in the world seeking to disintermediate dealers with vertical sales integration

SSM's Initial Thesis

- Throughout the automotive lifecycle, the industry is turning to categories outside new car sales to drive profit –
 especially fixed operations and finance & insurance
- Analytics has become a must-have
- Adoption of AI for pricing and recommendations for sales and service will become a new standard
- Challenges in hiring human capital talent are driving dependence on technology to increase efficiency
- The return on digital ad spend has not kept pace with the increase in expense
- A focus on customer engagement throughout the vehicle ownership cycle will be a critical marketing tool
- Automotive software companies have a strong buyer base as strategic buyers prefer to innovate through M&A and technology buyout firms have shown an interest in paying high multiples in the automotive sector
- Non-auto industries with dealership models (i.e. trucking, motorcycles, power sports, heavy equipment) can see efficiency and margin improvements through technology investment



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