	Key Questions to Ask	Why it's important to ask	What aPriori does
1	What manufacturing processes do you support?	If you design for multiple manufacturing processes, you want to make sure your DFM solution covers as many of them as possible. It would be very inefficient to have a different application for different processes.	aPriori covers over 440 different manufacturing processes for cost, many of which also have DFM checks built in. After all, DFM is all about making things easier and cheaper to manufacture, so cost is a good measure of DFM.
2	Do you support multiple manufacturing processes on one component?	There are often more than one type of process to manufacture a component, such as casting followed by machining. It is important to check DFM for the complete set of processes as it will happen in the factory.	aPriori automatically simulates all the steps required to manufacture a component, and optimizes it for cost, all in seconds, giving insights into what processes are suitable, and which are not.
3	Do you support tolerances or MBD/PMI?	A real digital twin of the product, will include 3D dimensions and tolerances, which are critical for the manufacturing process. Depending on the tolerances, some processes may not be feasible.	aPriori can read PMI directly from your 3D CAD models, or you can apply default, or individual tolerances during the setup of an analysis, resulting in more precise feedback on the required steps of manufacture.
4	Do you support secondary operations such as heat treatment, anodizing, chrome plating, etc?	Depending on materials and processes, some secondary processes may not be possible. A sophisticated DFM solution should check this to mitigate risks of delays from late-stage changes.	aPriori can specify all kinds of secondary processes for all types of materials. This means you have much less to worry about prior to going into production.
5	Do you quantify how serious a DFM issue is?	DFM is a gradient. It is a measure of how easy something is to do. The harder it is, the more costly. DFM ensures designs follow best practices, within predefined acceptable limits. Knowing what is close to the limit, or acceptably beyond it, is crucial for decision-making.	aPriori gives quantified design guidance as a result of every analysis. The feedback consists of what the acceptable limits are, compared to the 3D CAD model submitted, advises what percentage contribution of cost certain features are responsible for, and general guidelines on how to improve DFM. Summarizing all the feedback, aPriori provides a DFM risk score of High, Medium or Low.
6	Does your DFM solution help to identify cost-reduction opportunities within a design?	DFM is usually carried out to ensure the design is suitable to manufacture at a reasonable cost. A sophisticated solution will call out cost drivers as well as features difficult or impossible to manufacture.	aPriori categorizes Design Guidance as Design to Cost feedback, or Design for Manufacture feedback. This allows faster identification of cost reduction opportunities as well as critically required design changes.
7	Does your DFM solution provide analytics to identify opportunities to focus efforts?	Analytics from a solution are often a powerful way to identify trends or outliers. Having more than just DFM feedback from the solution allows for deeper analysis.	aP Analytics can give a high level view of an entire project or portfolio of products. This can be used to identify areas of risk, such as material consumption, or areas of potential opportunity to innovate, where certain components have high DFM risk, or high cost compared to the component weight, or a range of other KPIs.

8	Does your DFM solution advise on product carbon footprint?	Environmental impact is best addressed as early in development as possible. If the manufacturing process is not optimal, the carbon footprint will be more significant than necessary. Carbon emissions are already driving additional costs in some markets. (e.g. CBAM in EU)	aPriori calculates the carbon-equivalent emissions associated with the design, material, and manufacturing processes at the same time as calculating cost, and assessing manufacturability. This all-encompassing analysis saves time and gives insights earlier.
9	Can your DFM solution be automated?	A DFM solution should enable teams to work faster and smarter, not harder and slow them down. For scalability, having the ability to automate the DFM checks may not be something to look for from day one, but it is means you do not have to look for another solution in future to continue to get value.	aPriori has 3 levels of automation. 3D CAD files can be simulated automatically, on-demand. For more efficiency, a whole project of CAD data can be analyzed through aPriori's Bulk Analysis, or Matrix Analysis, with a single setup. The third level of automation, emails the DFM, Cost and Carbon results to stakeholders as a result of PLM integration, no user interaction required!
10	Does your DFM solution give material-specific and machine specific feedback?	DFM is complex. Each material has its own variations on DFM recommendations for each manufacturing process. Different machines for the same manufacturing process may also have varying capabilities and therefore different design guidance is required.	aPriori has the most advanced manufacturing simulation available today. With machine and material specific design guidance for the most manufacturing processes of any solution, and differentiated design to cost and DFM feedback, you get more precise, more actionable feedback.
11	Does your DFM solution allow for configured or customized checks?	Every manufacturer has slightly different capabilities, particularly where designs are more complex. It may be necessary to go beyond what is widely considered best practice for certain applications. To avoid "noise" in DFM feedback, configuration and customization can allow more accurate and relevant feedback for design teams.	aPriori is very flexible when it comes to configuration and customization of the manufacturing simulation. The Digital Factories in aPriori are there to be a Digital Twin of the manufacturing facility the design will be sent to. Just like the real factory, any equipment and capabilities can be tuned to reflect how the manufacturing will actually be done, giving appropriate, actionable design guidance.
12	Does your solution give Cost, DFM & CO_2e all in one?	Design is about solving multi-faceted challenges. DFM is just one problem to solve. Having more insights from a single tool means less jumping back and forth, in and out of other solutions. The purpose of checking DFM is generally for cost reasons. The harder something is to make, the more expensive it will be. Having cost together with DFM is the ultimate measure of a design's manufacturability.	aPriori gives all 3 insights every time an analysis is done. It is critical for data-driven design decisions to see the impact of changing something in more than one dimension. Something which reduces embodied carbon, could increase cost. Or vice versa. Any changes made, could impact manufacturability, which usually impacts both sustainability and cost. Having all 3 insights doesn't impact the time of the analysis either, so there is no drawback in aPriori to a more comprehensive evaluation.