Mechatronic product development is an interdisciplinary approach that has to deal with the immanent complexity of mechatronic products. While different approaches can be found in literature which aim to support interdisciplinary development, many companies still struggle with a lack of transparency regarding interfaces on product level as well as on an organizational level or process level. This conceptual paper presents an approach towards systematic partitioning that investigates interfaces on all three levels. The approach extends and combines existing approaches by integrating domain allocation and discipline allocation based on structural dependencies. The resulting structural models are used to computationally derive coordination needs. These allow project managers to explicitly plan coordination measures and give an overview for all developers. The paper also discusses further potentials of the analysis and use of the generated structural models.