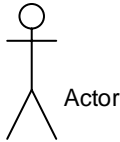



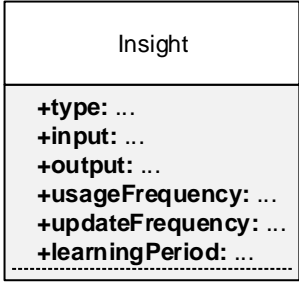



GR4ML – Business View

Element	Definition & Symbol:	Questions to ask to identify them*:
Actor	Stakeholders and potential users of the machine learning solutions. They can be humans (e.g., bank teller) or software agents (e.g., Netflix’s web UI). 	<ul style="list-style-type: none"> • Who is responsible for/aim to achieve business goals? • Who (of what system) would be using the ML system? • Who are the decision makers that will use insights and results of the solution?
Business Goal	Objectives of the business, organization, or users to which the ML solution is targeted. 	<ul style="list-style-type: none"> • What are the key business strategies and goals they aim to achieve? • How are they achieving this? • How else can we achieve this? • Why are they doing this?
Decision Goal	Business decisions that are (or will be) supported by the ML system. Decision Goals represent situations where an Actor needs to select one option among a set of possibilities. 	<ul style="list-style-type: none"> • What are the business decision(s) that need analytics (or data-driven) support? • Is there any decision activity/process that needs to be supported or replaced by an ML solutions? • How are they currently making those decisions? • What is the frequency of each decision (how often)? • Which business (routine) process is this decision part of?
Question Goal	Actors ask questions to make the best choice during decision making activities. Question Goals represent the "needs-to-know" of the Actors during decision processes. 	<ul style="list-style-type: none"> • What would the decision maker(s) need to know during the decision processes? • What are the questions that come to their mind (and they need to have an answer for) during their decision making activities? • For each question, if it is too broad, can you break it into sub-questions? • Specify the tense (past, present, or future), and frequency (how often) of the questions.
Insight	A piece of information or knowledge that answers a Question Goal. They show what is (or should be) extracted from data by applying ML or analytical algorithms. They support translating the business questions into data mining problems. 	<ul style="list-style-type: none"> • From the given list, specify what kinds of answers are needed for each of the business questions? <ul style="list-style-type: none"> • Predictive model, • Groupings of the data (segments), • Probability model, • Diagram (visualization), or • Logical rules • For each of the above, specify the Input, Output, Usage Frequency, Update Frequency, and Learning Period of the machine learning model.
Indicator	Metrics that evaluate performance with respect to business objectives 	<ul style="list-style-type: none"> • What are the key performance indicators in this context? • How would you measure how well you are achieving those goals?

*These are sample questions and one may extend, modify, or customize them depending on the use case and context. Also they are not sorted in any specific order.