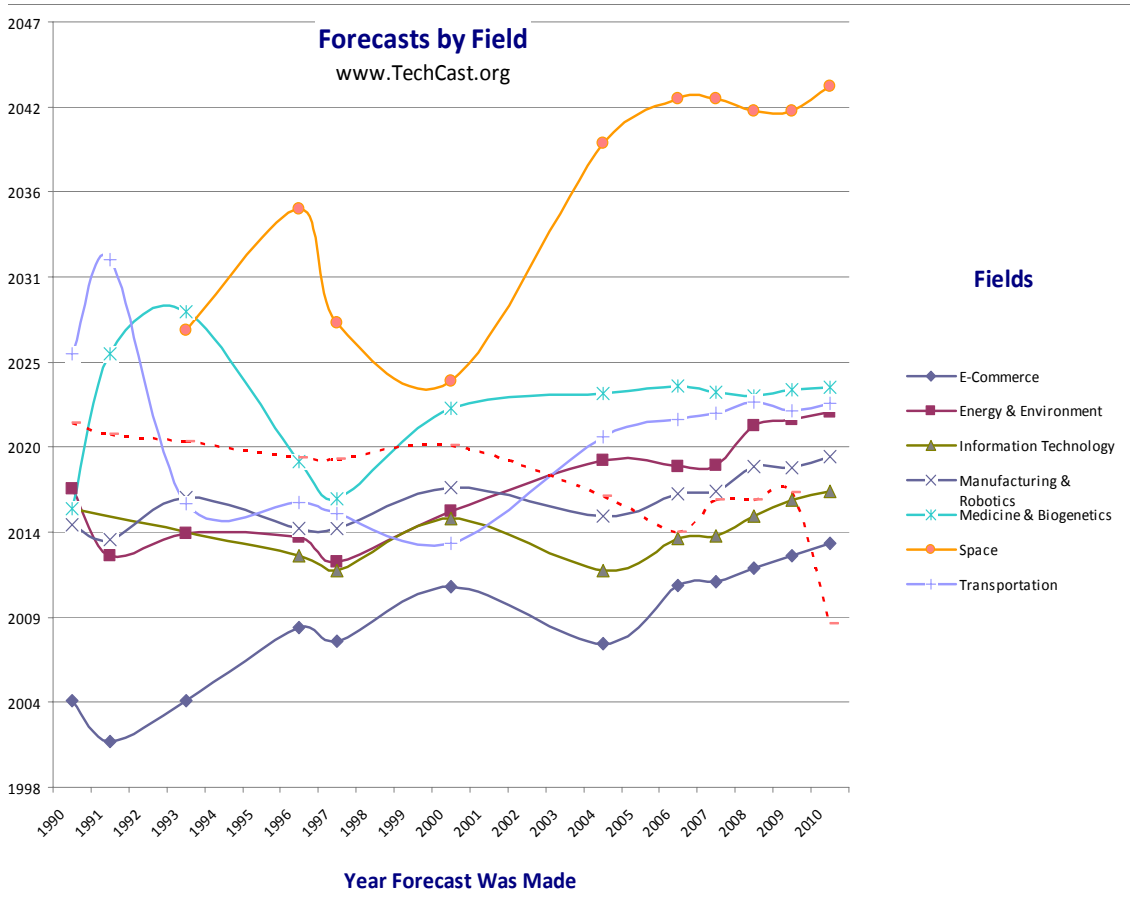


TechCast Article Series

TechCast Accuracy

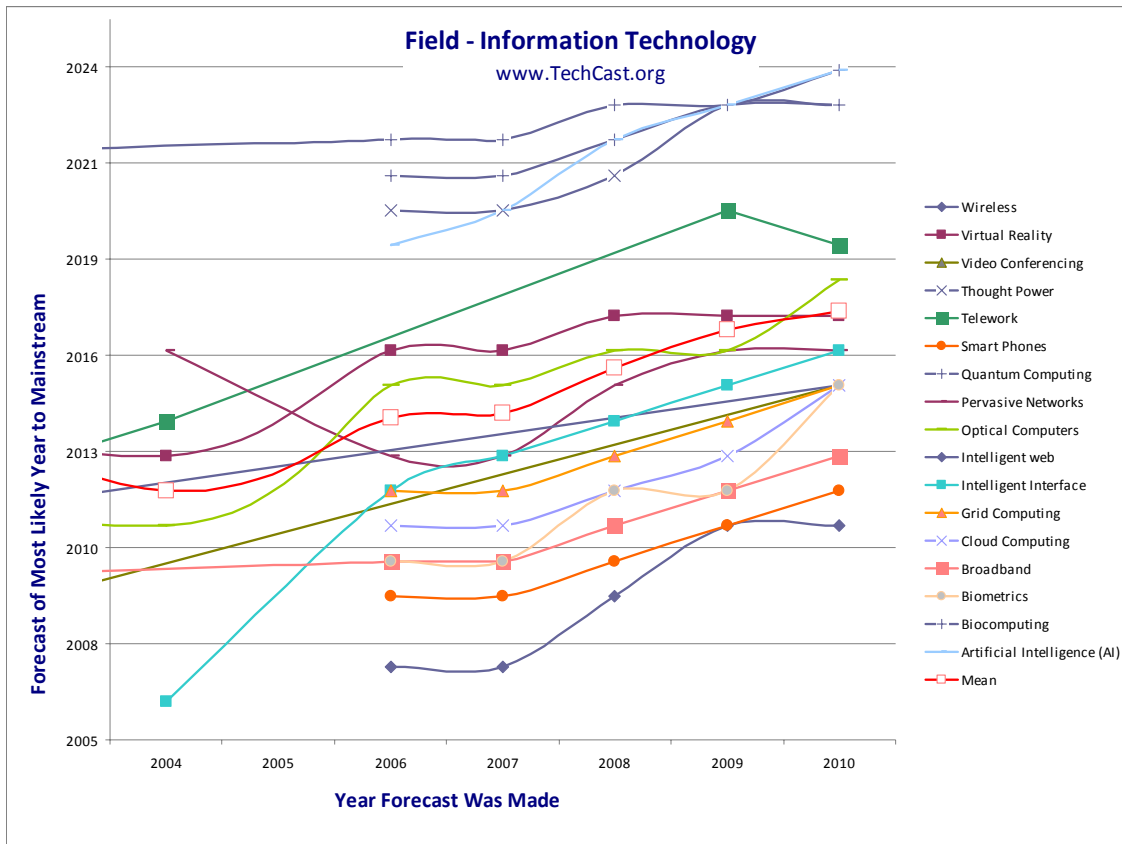
Annual Study of Variance in Forecasts

TechCast conducts an annual analysis of variance and accuracy in our forecasts. Below is a preliminary slide of the latest results focusing on our 7 fields. This work has captured the interest of Mitre and the DoD as there are few cases of validating forecasts.

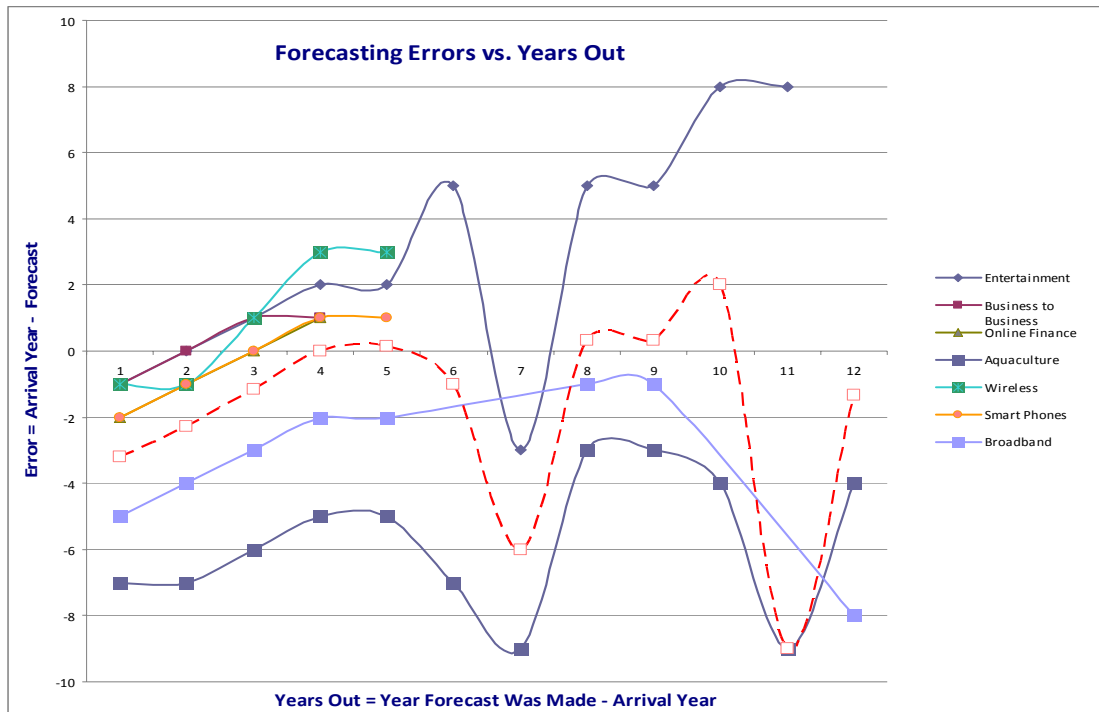


Note that the variance seems to have settled down about 5 years ago when we improved our system and recruited more experts. You can also see the tendency to "lead" actual arrival dates by being overly optimistic. We estimate average variance over all forecasts to be about +/- 3 years, which we think is pretty reliable.

The slide below breaks down the results for IT. Similar charts are available for all fields. This confirms the tendency to lead.



Here's our analysis of error between forecasts and actual arrivals for the 7 technologies that have arrived thus far:



Our major conclusion is that the bulk of variance is due to “leading” technologies by about 3 years over a ten period. That is, the typical TechCast forecast was about 3 years ahead of the actual arrival date that lay 10 years out on the planning horizon. This tendency toward optimism is commonly understood to occur widely in technology forecasting, so it’s not surprising. The error may be the result of a technology lagging unexpectedly, but that’s what we should anticipate.

It’s tempting to simply use this data as a rule of thumb and add some portion of the 3 year error to each forecast, but that would be a blunt tool. We introduce this data into our forecasting process and allow the transparency to reduce error. By better understanding this tendency and considering the likely delays, our experts can become more cautious. In fact, the results of all these improvements show that the tendency to lead is diminishing.

A more complete analysis is underway to check the data and confirm the results before publication. Look for more soon.