

## **Second Generation Infobots: When Silence is Gold**

### **Expect fewer but more significant contributions from your infobot**

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The best-known button on your personal infobot interface is, as everyone has learned hours after acquiring the must-have software, the “silence” button – better known as the “give me a break” button, or gimb. But things may change in the near future, after the announcement last week at the 20th Autonomous Agents Conference of the second generation of infobots. Launched by Mittal Digital & Network Technologies (MDNT), the second generation implements a novel relevance-emulator based on simulated annealing. If this sounds like Bantu, it basically means that your personal infobot will keep its interventions to a minimum, bothering you only when, and *if*, its contribution appears to be maximally relevant. The algorithm simply computes relevance (and makes your infobot shut up) with breathtaking speed. Says Narayan Rao from MDNT: “it is remarkable that our implementation sometimes exceeds human performance at computing relevance. We even wondered whether our algorithm outperformed the cognitive principles known as ‘conversational maxims’ or whether this is due to the relatively limited inference space of current infobots.”

Despite their well-known verbosity, the market for infobots has grown continuously in the past five years. No wonder when you think a moment at what was like to look for information on your own in the pre-infobot, all-Google days. Everything had to be consulted manually: facts to be checked, sources to be quoted, related articles, weather/traffic/stock-exchange reports, and so on. It was reported around 2008 that the average information worker had to perform information searches between ten and thirty times per hour – of course, only with keyword search! Organizing a week-long trip to Hawaii could involve thousands of information retrieval calls, and especially last-minute ones: air-traffic, weather conditions, latest shows in Waikiki, to say nothing about restaurant menus and airport transfer options.

Remember how fast the first generation infobots changed all this? Reversing the Google-based paradigm of information search, infobots anticipated your search needs by sensing your immediate information context, and brought to you all the related information before you even thought of formulating your query. Incidentally, this also increased tenfold the traffic to Google’s servers, mainly from infobots. Granted, the first infobot versions presented you with overfull interfaces or an avalanche of vocal messages, but among these one could easily find precious bits of information, which often enhanced and illuminated one’s work, boosting creativity and connecting sources of information to people all over the world.

And then, when stress was too high, there was the gimb button. With the second generation in final testing version at MDNT, be prepared to say goodbye to the gimb, and start paying more attention to your infobot.

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