

Adaptive experiential learning for business intelligence agents

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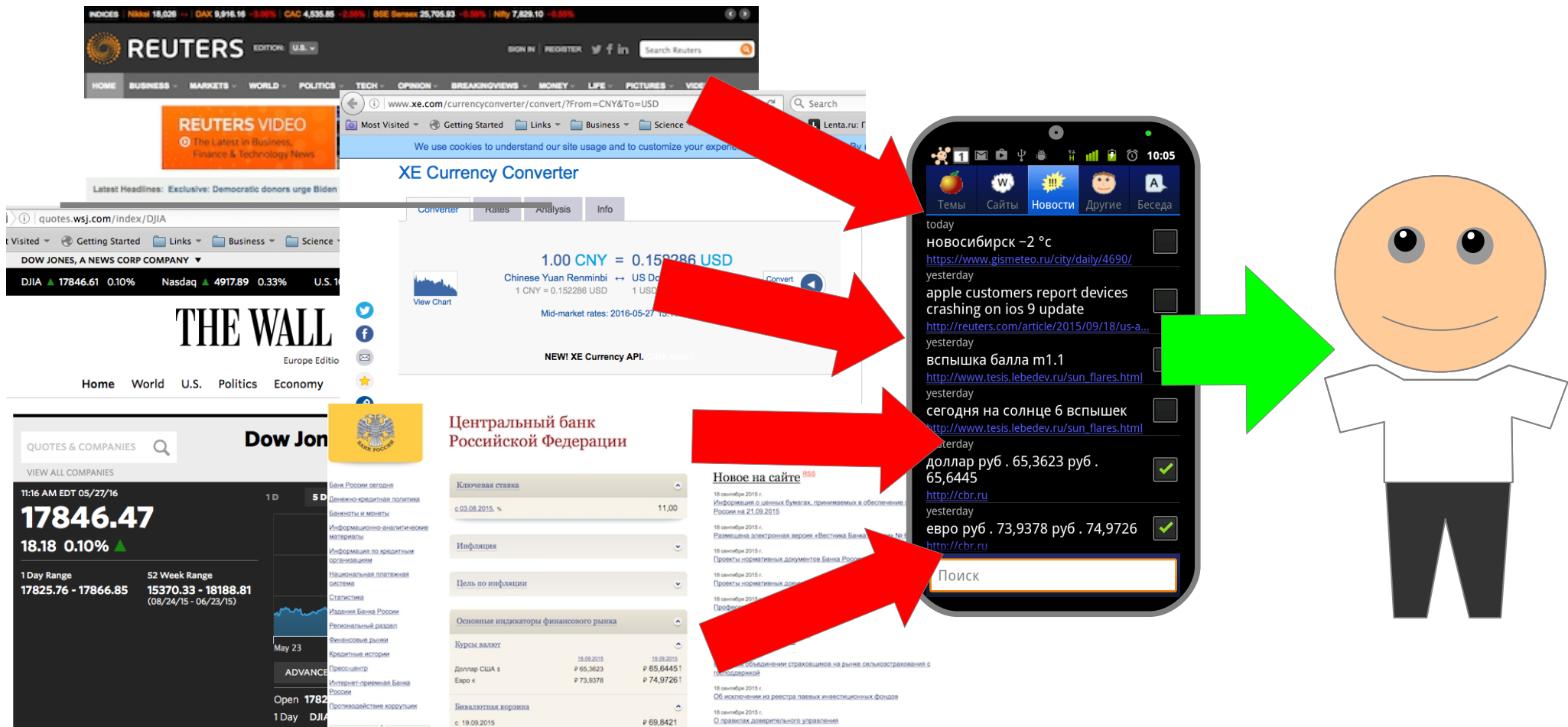
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Real-time information extraction from web resources:

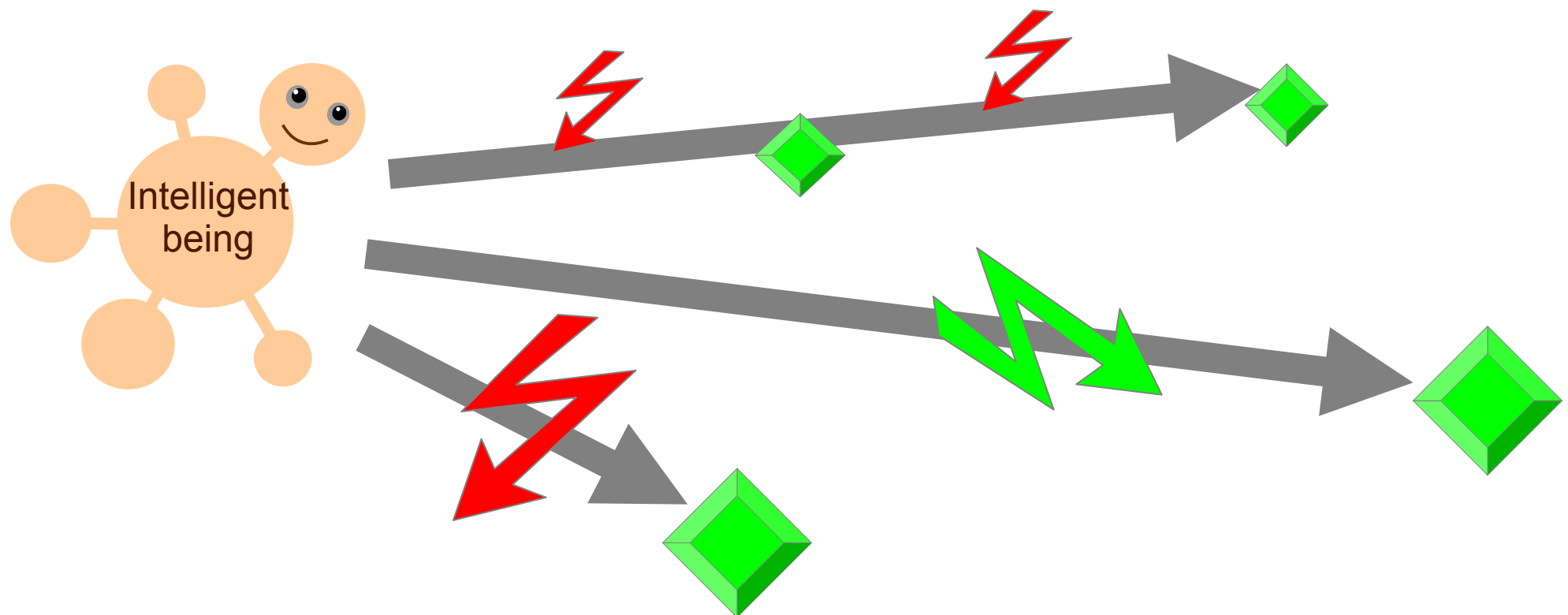
- Many target sites and too many pages on each of them
- Too much irrelevant information on each of the pages
- Information on the pages is getting updated too often
- Not enough time to read that all by eyes often enough



General Intelligence:

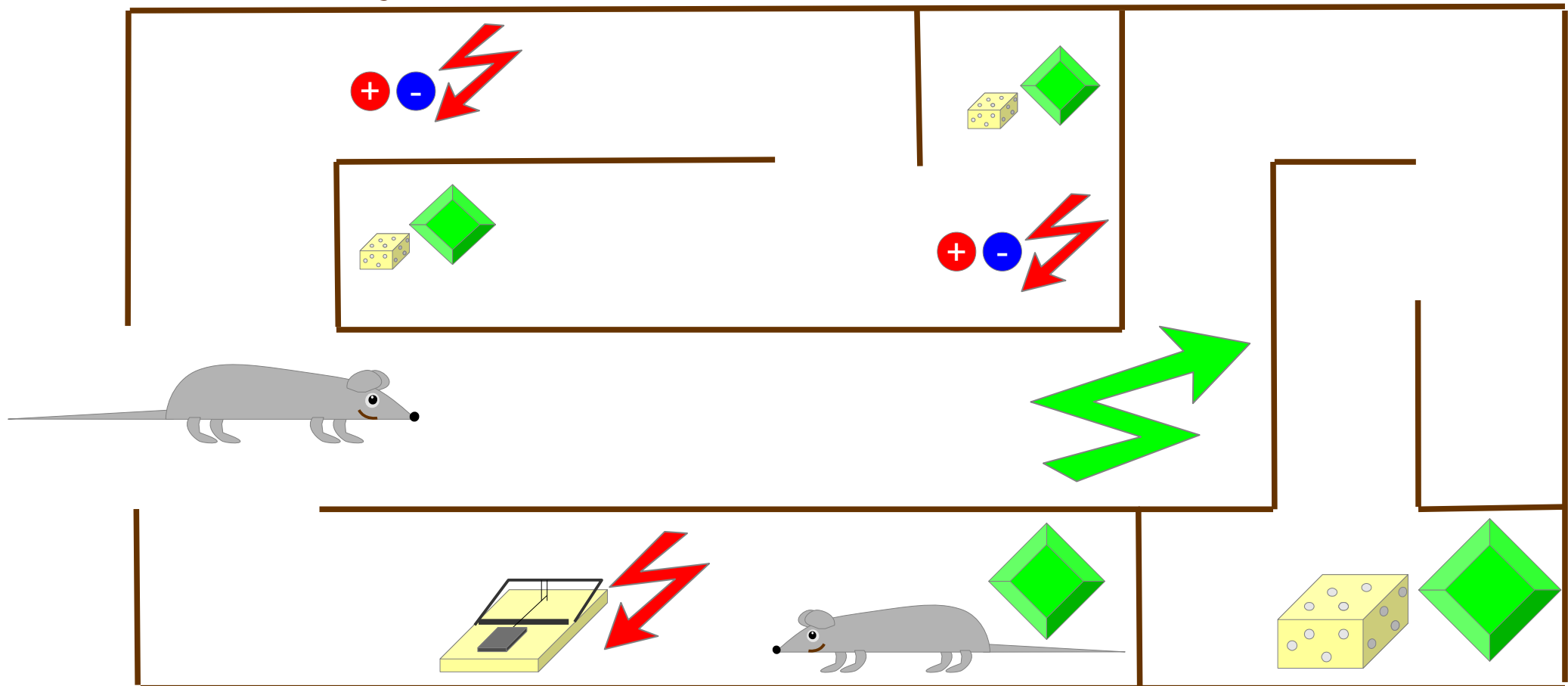
Capability to reach complex goals in complex environments using limited resources

(Ben Goertzel)



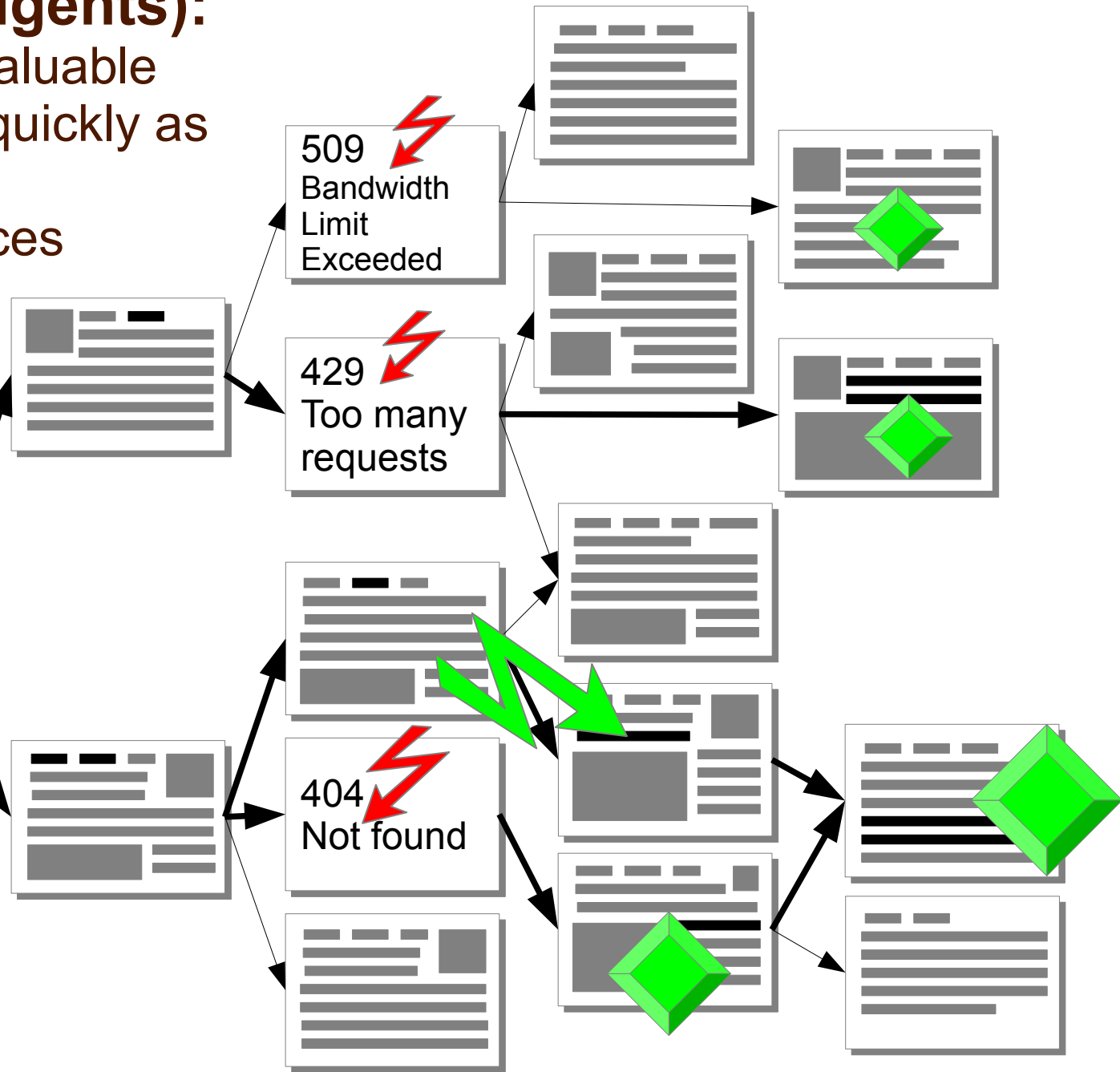
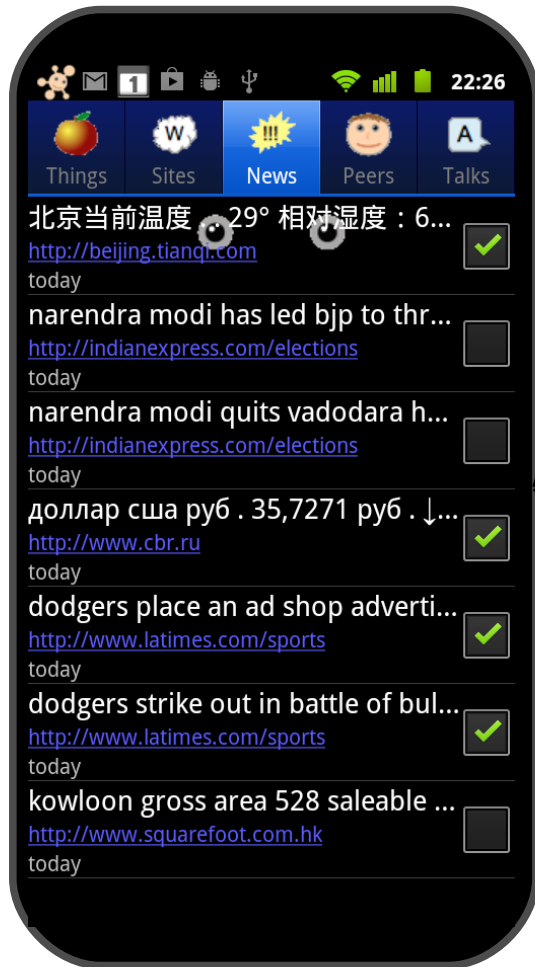
Biological Intelligence:

Search for nutrition and reproduction opportunities given multiple physical treats and limited physical resources

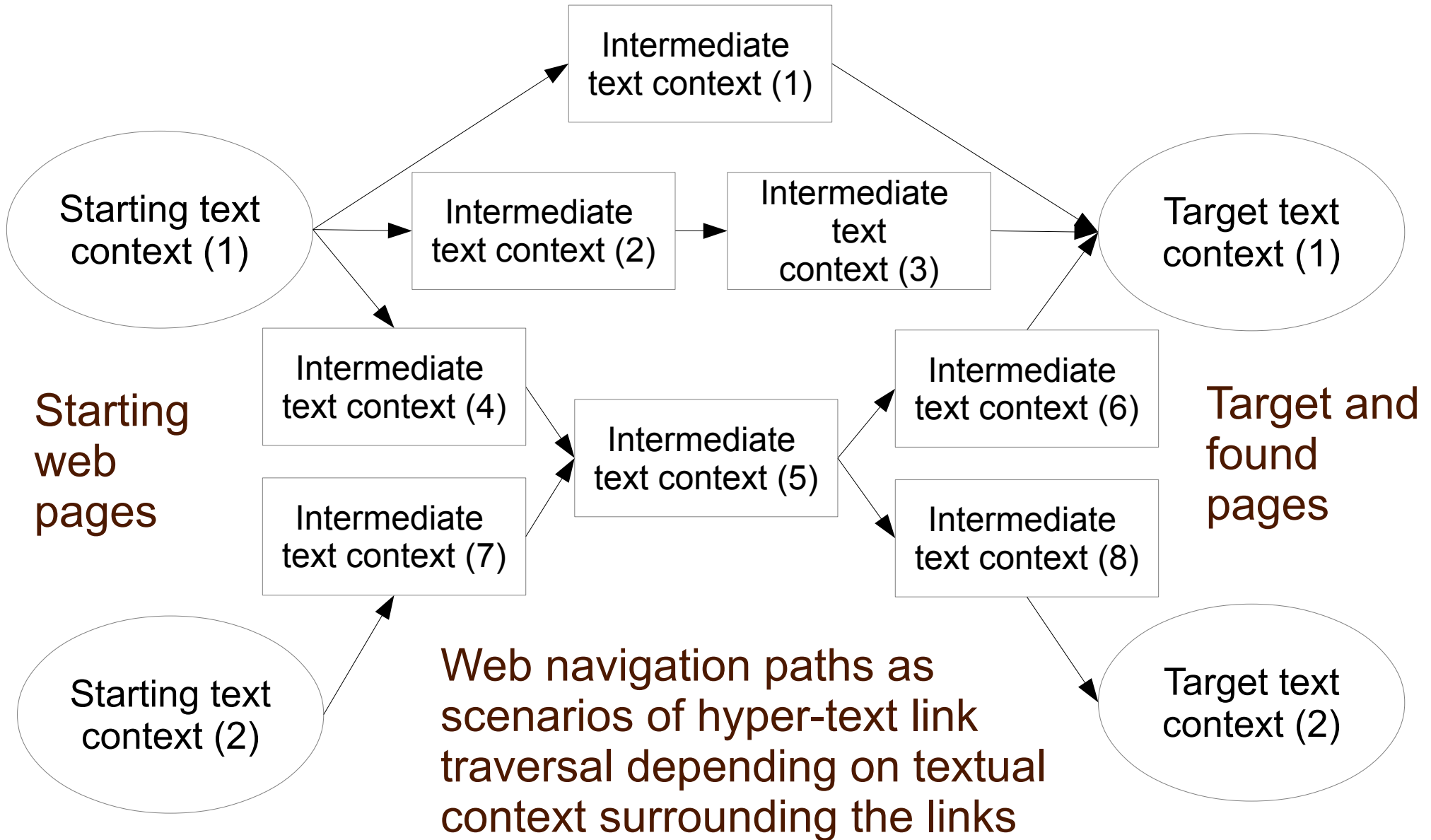


Internet-Agent (Aigents):

Search for the most valuable information found as quickly as possible given limited computational resources



Aigents approach: link traversal scenarios detection and replay



Targeted search: one problem – two algorithms

Path Tracker

(scenario player)

Input:

- Starting point (initial context)
- Goal (terminal context)
- “Path set” (set of paths over series of contexts possibly leading to the goal from starting point)

Output:

- Found goal context in success *or failure indicator to pass control to **Path Finder***

Goal + Starting Point + Path set
=> Goal | Failure

Path Finder

(scenario detector)

Input:

- Starting point (initial context)
- Goal (terminal context)

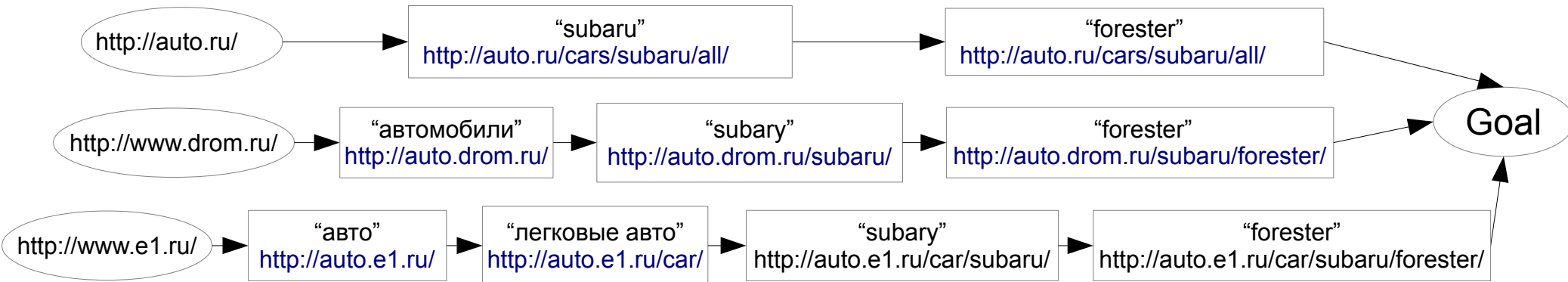
Output:

- “Path set” (set of paths over series of contexts leading to the goal from starting point)
- Found goal context

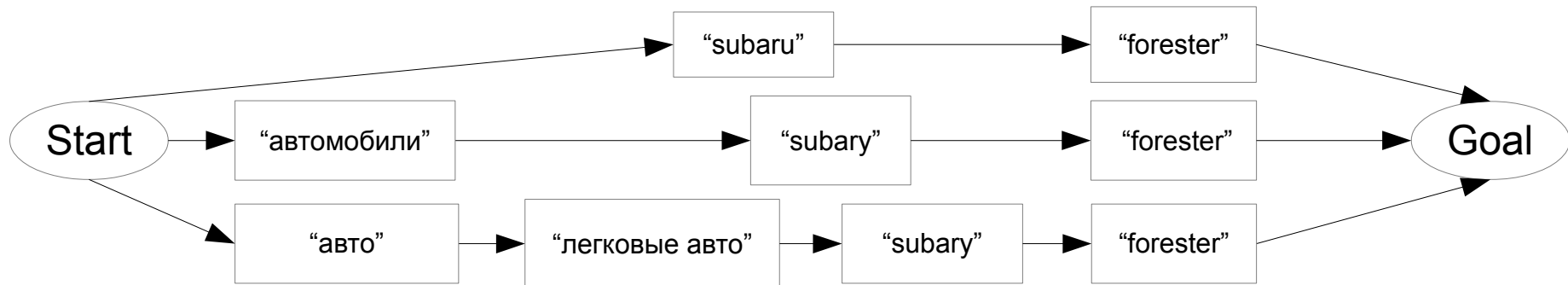
Goal + Starting Point
=> Path set + Goal

Search for offers of used cars on web sites in Russia

Web traversal paths along links while searching for Subaru “Forester” automobiles



Scenarios of textual context changes for link traversals searching for Subaru “Forester”



Generalized (reduced) scenario of textual context changes for link traversals

