



# IBS VIGYAN

## VISIONING BANKERS



### Evangelistically Speaking

**Dear Stakeholders,**

In our August issue I had meandered on the impact of Artificial Intelligence (AI) in BFSI sector. September and October columns were dedicated to culling Gandhian quotes from RBI Governor's monetary policy statements. This month, as much water has flowed under the bridge during the interregnum, I am forced to put some more thoughts on AI. The recognitions from Nobel awarding committee to works related to AI have been articulated in this month's Curated Cube.

AI is synonymous with "thinking fast". The enhancements in AI veer around "thinking slow". The shift is towards reasoning at inference time than quick firing pre-trained responses. The focus is shifting to the development and scaling of the reasoning layer, where "System 2" thinking takes precedence. Inspired by models like AlphaGo, this layer aims to endow AI systems with deliberate reasoning, problem-solving and cognitive operations at inference time that go beyond rapid pattern matching. And new cognitive architectures and user interfaces are shaping how these reasoning capabilities are delivered to and interact with users.

The most important model update of 2024 goes to OpenAI with o1, formerly known as Q\* and also known as Strawberry. This is not just a reassertion of OpenAI's rightful place atop the model quality leaderboards, but also a notable improvement on the status quo architecture. More specifically, this is the first example of a model with true general reasoning capabilities,

which they've achieved with inference-time compute. What if you could teach a model to reason more directly? This is essentially what's happening with Strawberry. "Inference-time compute" is like asking the model to stop and think before giving you a response, which requires more compute at inference time (hence "inference-time compute"). The "stop and think" part is reasoning. This leap from pre-trained instinctual responses ("System 1") to deeper, deliberate reasoning ("System 2") is the next frontier for AI. It's not enough for models to simply know things—they need to pause, evaluate and reason through decisions in real time.

Thanks to agentic reasoning, the AI transition is "services as a software (SaaS). Software companies turn labour into software. That means the addressable market is not the software market, but the services market measured in the trillions of dollars. The advent of AI driven bots that chat with the users is an example of SaaS. Back in the research lab, reasoning and inference-time compute will continue to be a strong theme for the foreseeable future.

For more inputs, the source for this information is given below.

<https://www.sequoiacap.com/article/generative-ais-act-01/>

Looking forward to a sustaining engagement with all.

**Sincerely yours**

**Sathesh Kumar. S**  
Managing Director

## Curated Cube

A fourteen year boy committed suicide in Florida, USA. His last chat on phone was with his close friend, a lifelike AI chatbot. While his mother has sued Character.AI, there is now a booming, largely unregulated industry of artificial intelligence companionship apps designed to simulate intimate relationships.

Elsewhere, two pioneers of Artificial Intelligence (AI), John Hopfield and Geoffrey Hinton were awarded the 2024 Nobel Prize in Physics. They too had regrets over the far reaching effects of applications that could spinoff from their research. Hinton quit his advisory role at Google after seeing the ease at which deepfakes were churning out and how AI could disrupt professions that were vulnerable to automatization. Hinton's research student Sutskever was Chief Scientist at OpenAI that developed ChatGPT. He was among those who voted to oust Sam Altman from the Company. Sutskever realized that the company was drifting from its professed goal of building "safe and responsible" AI.

Nvidia, the chip maker, has pushed Microsoft behind to be the second largest company by market capitalization and chasing Apple, leveraging on AI potential in its business. Their Graphical Processing Units (GPU) are chips that render graphics for display on an electronic device. In 2009, Hinton's attempt to get a GPU free from Nvidia was turned down. In 2012, he and his students developed an artificial neural network using a GPU he purchased from Nvidia that could teach itself to recognise images. Today's Nobel laureate was a Cassandra then.

We have articulated the bias that creeps into AI from the data that goes into the neural network in our earlier issues. Hinton's co laureate Hopfield added hidden layers to neural networks, allowing machines to analyse data in more sophisticated ways. These hidden layers act like a "subconscious," helping computers not just recognise things but also make predictions, strengthening the "G" and "P" of GPT. This is how Alexa and Siri turn us indolent.

Elsewhere, Demis Hassabis and John Jumper shared one half of the Nobel prize for chemistry for their work in developing AI embedded AlphaFold2 that could predict the structures of millions of proteins. Human scientists have so far analysed 1.70 lakh proteins only.

The fear whether AI could turn apocalyptic lingers in the laureates' mind. Albert Einstein harboured similar fears when atomic power was invented. Is it ironical that this year's Nobel prize for peace has been awarded to Nihon Hidankyo (the Japan Confederation of A- and H-Bomb Sufferers Organizations), for their activism against nuclear weapons, assisted by victim/survivors (known as Hibakusha) of the atomic bombings of Hiroshima and Nagasaki in 1945? As the world witnesses less than 10% of nuclear power being harnessed for electricity, the apprehensions about its destructive capability get reinforced. AI might need strict regulations globally, more effective than the scarecrow-like NPT (Nuclear non-Proliferation Treaty) for nuclear weapons.

The relevance of these Nobel related thoughts fits in financial space as McKinsey has estimated AI could inject \$ 4.4 trillion to global economy every year!

*(Cube gives a third dimension in geometry. Curated Cube endeavors to conflate events in the market over the past month.)*

**JAIIB/CAIIB - MAY/JUNE 2025 - ADMISSION STARTED**

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## FOURTH PILLAR

**WHAT IS A MICROFINANCE LOAN?** A Microfinance loan is defined as a collateral-free loan given to a household having annual household income up to ₹3 Lakh, where the household means an individual family unit, i.e. husband, wife and their unmarried children.

**AUTO TOP-UP FACILITY ON UPI-LITE:** W.e.f., 1st Nov 2024, UPI-Lite users' wallet will automatically reload when their balance falls below the specific threshold, which will ensure uninterrupted transactions for low-value payments. Users can set a minimum balance in their UPI Lite wallet with this new auto top-up feature. For example, if a user sets a minimum balance of ₹100, the wallet will automatically reload from their bank account whenever the balance drops below that amount. Users can choose the reload amount, but it cannot exceed the current limit of ₹2,000, and up to five top-ups are allowed per day.

**MAXIMUM TRANSACTION LIMIT UNDER UPI-LITE:** The earlier limit of ₹500 per transaction has been increased to ₹1000. The overall wallet balance limit also goes up to ₹5000 from the earlier balance of ₹2000.

**e-KYC SETU SYSTEM:** As per the directions issued by MeitY, NPCI has recently enabled e-Setu system facilitating Regulated Entities (RE) of RBI to do e-KYC for verification of identity of a client or its beneficial owner through online Aadhaar authentication under the Aadhaar act. All REs of RBI can now avail this facility by being member of NPCI's e-KYC-Setu system through a simplified single window on-boarding process.

**ONE STATE ONE RRB:** Government of India is aiming to consolidate Regional Rural Banks (RRBs) into a single entity per state. This is being considered to streamline operations, improve efficiency and reduce unnecessary competition among banks that sponsor RRBs. By merging multiple RRBs within a state into a single entity it is expected to enhance service delivery in rural areas and also promote financial inclusion.

**FREE HEALTH INSURANCE SCHEME FOR SENIOR CITIZENS ABOVE 70 YEARS OF AGE:** Union Cabinet has approved a free health insurance coverage scheme up to ₹5 Lakh per year for all senior citizens above 70 years under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJBY), which is expected to benefit around 6 crores of senior citizens above 70 years of age.

*(Fourth Pillar strives to position beyond the three pillars of Basel and is culled from the Four Estates)*

## INQUISITIVELY SPEAKING

1. As far as review of wilful defaulters' account is concerned, lenders must examine the 'wilful default' aspect in all NPA accounts with outstanding amount ₹ ..... and above:

- a) 10 Lakh                      b) 25 Lakh  
c) 50 Lakh                      d) 1 Crore

2. Lenders and ARCs must inform Credit Information Companies (CICs) within ..... days to remove a willful defaulter's name from the LWD if the outstanding amount falls below ₹25 Lakh or as notified by the RBI.

- a) 7                                      b) 10  
c) 14                                      d) 30

3. The Reserve Bank of India has exempted the requirement of Additional Factor of Authentication (AFA) for transactions up to ₹ ..... for the subscription to mutual funds, payment of insurance premium and payments of credit card bills.

- a) 10000                              b) 25000  
c) 50000                              d) 100000

4. National Pension Scheme Vatsalya is implemented in collaboration with state governments, with cost-sharing ratio of \_\_\_\_\_ (Centre-State) for states and 90:10 for northeastern states.

- a) 60:40                              b) 70:30  
c) 50:50                              d) 75:25

5. The Unified Payments Interface (UPI) has a very large user base of 424 million individuals. RBI has proposed to introduce \_\_\_ in UPI which would allow an individual (primary user) to set a UPI transaction limit for another individual (secondary user) on the primary user's bank account.

- a) Digitized Payments  
b) Deferred Payments  
c) Delegated Payments  
d) Structured Payments

6. As per revised guidelines issued by RBI, the minimum amount for offering Non-Callable Term Deposits has been increased from Rupees fifteen lakh to ₹ .... (also applicable for (NRE Deposit /NRO Deposits)

- a) 25 Lakh                              b) 50 Lakh  
c) 1 Crore                              d) 2 Crore

### ANSWER KEY

**1.B    2.D    3.D    4.A    5.C    6.C**

### Stretch n Speak

**VDA:** Variable Dearness Allowance

**WAY:** Weighted Average Yield

**KFS:** Key Fact Statement

**LWD:** List of Willful Defaulters