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Date: 10-jun-2023

#### NOTICE

This is to inform all the Students that a workshop on The Future of Bidding: Harnessing Robotics for Entrepreneurial Advantage will be organized on 28.6.2023 from 9:30 AM to 5:30 PM in the auditorium of Catalyst College.

The workshop is completely free, and no money will be charged for the Training or Certification.

Interested students are instructed to meet the Activity In-Charge / Class Coordinator for more details and their registration.

By the order of

Principa Principal

CATALYST COLLEGE

Plot No. C.16(F) Pathiputra Industrial Area

Pathiputra, Patria-13

Plot No.C16(P), Patliputra Industrial Area Patliputra, Patna- 800013













Date: 28.6.2023

## Workshop Title:

The Future of Bidding: Harnessing Robotics for Entrepreneurial Advantage

Number of Students Participated: 46

### Objectives:

The world of bidding—whether in procurement, auctions, construction, or any other field—has traditionally relied on human expertise, negotiation, and decision-making. However, with advancements in robotics, automation, and AI, the future of bidding is being transformed. By integrating robotics into bidding systems, entrepreneurs can significantly increase the speed, efficiency, and accuracy of bid management, while also unlocking new business opportunities and competitive advantages.

This workshop, "The Future of Bidding: Harnessing Robotics for Entrepreneurial Advantage," will explore how robotics and automation technologies can reshape the bidding process across industries. Participants will learn how to leverage robotics to automate repetitive tasks, enhance decision-making, and optimize bidding strategies. Whether you're a business owner, startup founder, or procurement leader, this workshop will provide you with the knowledge and practical tools needed to harness robotics for your entrepreneurial success.

#### Module 1. Introduction to Robotics in Bidding

- A brief overview of robotics, automation, and AI technologies, and how they have evolved in recent years.
- Different types of robots: Industrial robots, collaborative robots (cobots), and software robots (RPA).
- The Changing Landscape of Bidding:
  - Why traditional bidding methods are being challenged by automation and robotics.
  - Key trends driving the adoption of robotics in the bidding process:
     Efficiency, speed, accuracy, and cost reduction.

Entrepreneurial Opportunities in Robotics:



- How robotics can open new opportunities for entrepreneurs in sectors like construction, procurement, auctions, and logistics.
- Case studies of successful businesses already using robotics to enhance their bidding processes.

Module2. Understanding Robotics in Bidding: Automation and Al Integration

- Automation in the Bidding Process:
  - How robotics and automation can automate repetitive tasks in bidding (e.g., data entry, document analysis, bid generation, and performance tracking).
  - Robotic Process Automation (RPA): What is RPA, and how it can be used in bidding to reduce manual errors, ensure faster responses, and streamline workflow.
- Al in Bid Decision-Making:
  - Leveraging Artificial Intelligence (AI) to predict bid outcomes, assess the quality of bids, and calculate the optimal bid amount.
  - How machine learning algorithms can analyze past bidding data to identify patterns, trends, and make smarter bidding decisions.
  - Intelligent bidding strategies: How AI can help businesses adjust their bidding strategies in real time based on market conditions, competitors' behavior, and internal factors.

#### Interactive Demo:

 Participants will explore a simple robotic bidding system (or simulation), showcasing how data from previous bids can be used to predict the success of future bids.

Module3. Robotics for Bid Management: Streamlining Operations

- Automating the Workflow of Bid Management:
  - Exploring how robotics can streamline the entire bid lifecycle, from initial document collection to final submission.
  - Collaborative robots (Cobots) in team environments: How robots can work alongside human teams to automate aspects like data collection, bid creation, and client communication.
- Building Smart Bid Dashboards:
  - How robots can integrate with cloud-based systems to manage large volumes of bid data, track changes in real time, and produce actionable insights.
  - Designing bid management dashboards that display key metrics and automate report generation for bidding managers and teams.



- Optimizing Resource Allocation with Robotics:
  - How robotics can assist in determining which resources (personnel, equipment, time) are most optimal for particular bids, leading to better decision-making.
  - Case example: Robotics in construction bidding, where automated systems help match the right tools and workforce with the right project.

Module4.Enhancing Competitive Bidding with Robotics: The Power of Predictive Analytics

- Predicting Competitor Behavior:
  - Using Al-powered robots to track and analyze competitors' past bids, understanding their patterns and strategies.
  - Predictive analytics: How AI tools can predict competitor bids based on historical data and market conditions, helping businesses to adjust their bids accordingly.
- Dynamic Pricing with Robotics:
  - How robots can enable dynamic pricing based on live data: fluctuating market conditions, competitor activity, and client preferences.
  - Case studies of dynamic pricing models being used in auctions or procurement, where robots adjust bid amounts automatically based on external factors.

#### Interactive Exercise:

 Participants will engage in a scenario-based activity where they will use predictive analytics to adjust their bid strategy in response to changing market conditions and competitor activity.

Module 5. Robotics in Auction Bidding: Automating and Enhancing Auction Strategies

- Robotics in Online Auctions:
  - How robots are used in online real-time auctions to automate bid placement, monitor competitors' moves, and ensure that bids are submitted at the optimal moment.
  - Bid sniping: How robots can place bids in the final moments of an auction to increase the chances of winning while minimizing human error.
- Al for Smart Auctions:
  - The role of Al algorithms in analyzing auction data to develop intelligent bidding strategies, predict auction outcomes, and suggest the best time to place a bid.
  - Automation of bid increments: How robots can adjust bid increments based on auction activity to maintain a competitive edge.



#### · Case Study:

 Examining the use of robots in online auction platforms (e.g., eBay or real estate auctions) and how entrepreneurs can leverage these systems for entrepreneurial success.

Module6. Overcoming Challenges: Implementing Robotics in Your Bidding System

- Technical and Operational Challenges:
  - Addressing the challenges of integrating robotics into existing bidding processes, including system compatibility, data security, and technology integration.
  - Overcoming resistance to change: How to manage the cultural shift when introducing robotics and automation into bidding teams.
- Scalability and Adaptation:
  - How to scale robotic systems in bidding processes as your business grows. From small-scale automation to enterprise-level robotic bidding systems.
  - Adapting to industry-specific requirements: Tailoring robotic systems for unique needs in industries like construction, procurement, or government contracts.

#### Interactive Discussion:

 Participants will work in small groups to discuss potential challenges they face when integrating robotics into their bidding systems and how to overcome them.

Module7. The Future of Bidding and Robotics: Trends and Innovations

- Emerging Trends in Robotics and Al for Bidding:
  - Al-driven decision-making: The shift from automated task management to Al systems making complex, strategic decisions based on vast datasets.
  - The rise of robotic automation in remote bidding environments: How robotics can help businesses participate in global bidding without being physically present.
- Ethical and Legal Considerations:
  - Addressing the ethical implications of automated bidding, such as transparency, bias in Al algorithms, and the impact on human workers.
  - Legal and compliance issues: How businesses can ensure their automated bidding processes comply with local laws, industry standards, and regulations.

The Role of Robotics in Disrupting Traditional Industries:



 Exploring how robotics will continue to disrupt industries like construction, logistics, government contracting, and finance, and the entrepreneurial opportunities this presents.

#### Key Takeaways

- Understanding how robotics and automation are revolutionizing the bidding process across industries.
- Practical insights into integrating robotic systems and AI tools to optimize bidding strategies.
- Knowledge of how to use predictive analytics and dynamic pricing to enhance competitive advantage in bidding scenarios.
- Strategies for scaling robotics in bidding processes and overcoming technical and operational challenges.
- Insights into the future trends of robotics and AI in bidding, and how entrepreneurs can stay ahead of the curve.



# The Future of Bidding: Harnessing Robotics for Entrepreneurial Advantage Date:-28/06/2023







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# Registration

For Workshops/Seminars/Conferences during Academic Year 2022-2023

# The Future of Bidding: Harnessing Robotics for Entrepreneurial Advantage

## (28 June 2023)

S. No.	ID	Name of the student	Student's Signature
1	445-7403	Sangam Mishra	Sangaro Michro
2	445-7416	Avinash Choubey	
3	445-7465	Sandeep Kumar	Avinash chousey
4	445-7493	Navnit Kumar Singh	Dandeep Kumars
5	445-7550	Suraj Kumar	110
6	445-7532	Vishnu Gauatm	Swraj Kumar
7	445-7582	Vikram Kumar	Manage Pradeil
8	445-7580	Anish Anand	Vikram Ken
9	445-1669	Amisha Kumari	Assish Amand
10	445-1666	Bambam Kumar	Amisha Kri
11	445-7255	Gautam Kumar	Bambam KR.
12	445-7324	Rohan Raj	Gardam Kr.
13	445-7130	Rohit Kumar	Kohon Ray
14	445-7466	Rohit Kumar	PRohit Kr
15	455-7118	Sania Zaffar	Johnt Kumar
16	445-7152	Swati Gupta	Sania Zakar
17	445-1668	Vikash Kumar	shard Cakabled
18	445-7107	Rajesh Kumar	Vikach Kumar
19	445-7192	Abhay Kumar	Kajesh Kumar
20	445-7223	Pawan Kumar	Approx Krisuas
21	445-7263	Md Intakhab Alam	tometh Kr
22	445-7261	Abul Kalam	Md. Intakhab Alam
23	445-7316	Samir Alam	Abul Kalam
24	445-7293	Nisha Kumari	Sassix Hass
25	445-7313	Sumit Kumar	Nisha Kumari
26	AAE 7221	Gid Kurnar	Sumit Kumar
27	445-7415	Raj Verma	Sid Kumar
28	445-7227	Sayma Praveen	Kay Verma
29	445-6981	Aditya Kumar Sahni	Sayma traveen
30	445-6762	Akshay Verma	Adit ta Kumar Sah
31	445-6915	Aman Kumar Gupta	AKSKAY Verrong
32	445-7272	Amit Kumar Thakur	Aman Kr Ujupta Amit Kr Thakur

33	445-7443	Ashutosh Kumar	101.1.01.1.
34	445-6725	Bipul Kumar	Birul Kyman
35	445-6767	Gautam Kumar Solanki	
36	445-6951	Golu Kumar	Mautan Kn Soland
37	445-6928	Harsh Raj	Gold Kymar
38	445-6937	Kamya Rani	Various D.
39	445-6939	Karishma Kumari	Krishma Kani
40	445-6750	Komal Kumari	
41	445-7390	Krishn Mohan Kumar	
42	445-7250	Manish Kumar	Krishon Moham Ker Merni &h Kumar
43	445-6977	Nur Alam	2)
44	445-6862	Prakash Raj	Dock Herry
45	445-6853	Prashant Kumar	Double with the
46	445-6974	Prince Kumar Singh	Prince Ker Civel

(Sign.)

Course Coordinator