Impacts of AI on the Corporate Credit Department

2024 Wisconsin Annual Meeting

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Agenda

- What is AI?
- Current advances in AI technology
- What's next
- Applications to credit department
- Risks and challenges

What is AI?

- Generative AI – term used to describe computer technology that simulates human intelligence to analyze data so that it can:
  - Reach conclusions
  - Make informed judgments
  - Recognize patterns
  - Predict future behavior
  - Generates text, images, and other data

What is AI?

- Most people probably do not realize how much their lives are already AI-assisted:
  - YouTube suggests videos
  - Gmail finishes your sentences
  - Alexa and Siri answer your questions
  - Spotify learns the music you love
  - Amazon predicts your next purchases
  - Google Maps routes you to your destination
  - Tesla Autopilot steers, accelerates, and brakes your car

What is AI?

- AI technology is RAPIDLY evolving
- Open AI (ChatGPT) is perhaps the best known company developing AI language models, but many of the companies your enterprises work with are developing their own models and integrating them into their existing software
- GPT – Generative Pretrained Transformer
- Objectives of this AI technology include:
  - Intelligently automate repetitive tasks
  - Enhance creativity, innovation and decision making
  - Personalize experiences

What is AI?

- What can it do now?
  - Creative content generation
    - Art, music, logos, designs, images, videos – SAG/AFTRA
  - Articles, stories, books, emails, letters
  - Summarizing articles, books, text

What is AI?

- Examples:
  - Microsoft Copilot
    - Integrates with commonly used Microsoft apps, including Word, PowerPoint, Outlook, OneNote, Excel, and Teams
    - Applications include: (i) summarizing Word and Excel documents; (ii) using those documents to almost instantly create PowerPoint presentations; (iii) taking transcriptions and providing summaries of Teams meetings,; (iv) assistance with drafting e-mails and summarizing Outlook e-mail threads, etc.

What is AI?

- Examples:
  - Salesforce GPT (Einstein)
    - Several different GPTs being developed and improved upon by Salesforce include:
      - Sales GPT
      - Service GPT
      - Marketing GPT
      - Commerce GPT
      - Slack GPT
      - Tableau GPT
    - These products offer real-time access to customer data, powerful analytics, and automation of numerous business functions

What is AI?

- Examples:
  - SAP
    - SAP has been investing in AI technologies and incorporating them into its enterprise software solutions, now offering AI capabilities in various areas, including finance, supply chain, and customer relationship management
    - SAP S/4HANA: next-generation ERP suite includes embedded AI capabilities, designed to automate processes, provide predictive analytics, and improve overall efficiency in areas such as finance, supply chain, and human resources
    - SAP Leonardo: umbrella brand for SAP's digital innovation services, including AI and machine learning
    - Intelligent Robotic Process Automation: allow for streamlining of repetitive tasks, including those related to credit management
    - SAP Analytics Cloud: allows users to gain insights from data through features like smart data discovery, augmented analytics, and predictive analytics
    - SAP Cash Application: uses machine learning to automate and optimize cash application process, including in the efficient matching of incoming payments to open receivables

What is AI?

- Examples:
  - Dun & Bradstreet (D&B.AI Labs)
    - D&B's Credit Intelligence incorporates AI to enhance its existing services related to credit reporting, pre-screening applicants and making decisions on credit requests, portfolio risk reporting, and real-time reporting on credit risk quality (including automatically flagging accounts where significant changes have occurred)
    - D&B's Receivables Intelligence features advanced AI-based applications and capabilities to aid in receivables management, collections, payment processing, and cash applications, among other things

How can AI be used?

- Vetting new customers (allows for faster data gathering and more robust due diligence); AI algorithms can be used to develop sophisticated credit scoring models
- Faster decision making: real-time analysis enables quicker response times in credit approvals or denials, improving overall operational efficiency
- Risk mitigation: predictive analytics and machine learning algorithms help identify potential credit risks early, allowing for proactive risk management and mitigation strategies
- Tailored AI applications: Specific AI applications have been developed for corporate credit and collections, including credit scoring models, predictive analytics for payment behavior, and automated debt recovery systems

How can AI be used?

- Predictive analytics for payment behavior: using historical payment patterns and other factors to predict the likelihood of timely payments, or identify customers at risk of delayed payments
- Automated debt recovery systems: can automate the process of identifying overdue accounts, sending reminders, and initiating collection actions. Systems may use natural language processing (NLP) to personalize communications and improve the chances of successful debt recovery

How can AI be used?

- Fraud detection: AI helps in detecting potential fraudulent activities, by analyzing patterns in transactions, identifying anomalies, and raising alerts for further investigation
- Customer segmentation and targeted communications: AI can segment customers based on credit behavior, payment history, and other relevant factors, allowing for personalized communication strategies
- Cash flow forecasting: AI-powered cash flow forecasting models analyze historical data and external factors to predict future cash flows, thereby assisting credit professionals in anticipating cash needs, optimizing working capital, and making informed decisions about credit terms.

How can AI be used?

- Automated invoice processing: AI can be used to automate the processing of invoices, reducing manual effort and minimizing errors. Optical Character Recognition (OCR) technology, coupled with machine learning, enables systems to extract relevant information from invoices and update records accurately
- Regulatory compliance: AI applications that ensure regulatory compliance by incorporating features that make the decision-making process transparent and explainable
- Blockchain integration for secure transactions: integration of AI with blockchain enhances the security of credit transactions, ensures the integrity of financial data and reduces the risk of tampering or fraud

Benefits of AI in Credit Management

- *Improved Efficiency:* Automation of routine tasks such as data entry, document verification, and basic customer communications, freeing up valuable time for credit professionals to focus on more strategic tasks.
- *Enhanced Accuracy:* AI-powered algorithms analyze vast amounts of data to make accurate and consistent credit decisions, reducing the risk of human error in assessments.

Challenges and Risks Involving AI

- *Data Privacy and Security:* Given the sensitive nature of financial data, maintaining robust cybersecurity measures is crucial to safeguard against potential breaches.
  - For instance, any data fed into ChatGPT is by policy the property of OpenAI and will be used by OpenAI in "training" its current and new GPT models
  - This introduces risk of proprietary and confidential customer data being made available to competitors or other third parties
  - Workaround: development of a custom, proprietary GPT that has access ONLY to your company's data and is not accessible outside of your enterprise

Challenges and Risks Involving AI

- *Legal Implications:* Defamation, privacy laws (HIPAA, consumer privacy, FTC, etc.), trade secret laws (18 USC 1839(3)), copyright infringement, employment laws, liability based on inaccuracies
- *Skill Gap:* The adoption of AI may require upskilling the existing workforce to effectively utilize and manage the new technology, ensuring a smooth transition.
- *Explainability and Transparency:* It's essential to address concerns about the lack of transparency in AI decision-making processes. Ensuring understandable and explainable AI models is critical, especially in regulatory environments.

Challenges and Risks Involving AI

- *Implementation Costs:* While the long-term benefits are substantial, the initial investment in AI technology and infrastructure may pose a challenge for some organizations. However, a strategic approach can help balance costs and benefits.
- *Integration Challenges:* Integrating AI solutions into existing systems and workflows may face resistance or encounter technical challenges. A comprehensive change management strategy is necessary for successful implementation.

Limitations on AI

- AI is only as good as the quality of the data set
  - Recent test on legal cases – asking for an analysis – data set wasn't recent enough
  - Same test – got certain aspects of a case wrong and had contradictory answers depending on which AI was used (Chatbot, Bing, Alexa, ChatLaw, Bard, ChatGPT)
  - AI "Hallucinations"
- Reputational Damage
- While the technology has grown by leaps and bounds in just the last few years, it is still in its infancy
  - Moore's Law is believed to apply to AI: the power and capability of the technology is expected to double every 18 months (if not more quickly)

Limitations on AI

- Even if you use AI, you still need people
  - Companies will still have liability – so even if a credit department were to try and fully automate, as of now, decisions still need to be made
    - As of now: AI is not yet capable of making a human-level decision (but it's getting closer every day)
  - Let's be honest, where is the blame laid? If a CFO implements AI, he/she will still need employees to evaluate AI decisions or reports
  - What if automated communications are incorrect and are sent?
  - Legal actions based on incorrect AI conclusions?
- Will the use of AI lead to an overreliance on it?

Limitations on AI

- Will lapses in the data set lead to AI litigation or business failures?
  - If using outside aggregators of information, and they have incorrect or incomplete data and it causes a bad business move, who is responsible?
  - What if your company solely uses its own data?
  - How long will it take to get your own data in useable format to provide meaningful results?
- Regulatory compliance
  - Ensuring that AI applications comply with various financial regulations can be complex
  - Organizations must navigate regulatory challenges to implement AI solutions while meeting legal requirements

Limitations on AI

- Implementation costs and integration challenges
  - Implementing AI solutions in credit departments requires a significant initial investment in technology, infrastructure, and training. Integration with existing systems and workflows can be complex, leading to potential disruptions during the adoption phase

Create a Policy

- AI is coming – like it or not
  - Create a policy to address issues
    - Who is allowed to use AI
    - What type of information may be submitted to AI?
    - Do you have a private instance?
    - Is it possible for that instance to be “hacked”?
    - When is the use of AI appropriate? For what types of tasks?
      - When is human intervention/review needed?

Presenter Contact Information

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