Breaking ground:
unravelling the DeepTech potential in Indian B2B SaaS

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Breaking ground: unravelling the DeepTech Potential in Indian B2B SaaS
# Table of contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Foreword</td>
<td>04</td>
</tr>
<tr>
<td>2</td>
<td>Executive summary</td>
<td>05</td>
</tr>
<tr>
<td>3</td>
<td>Introduction</td>
<td>06</td>
</tr>
<tr>
<td>4</td>
<td>Methodology</td>
<td>07</td>
</tr>
<tr>
<td>5</td>
<td><strong>Part 1:</strong> DeepTech in the realm of Indian B2B SaaS</td>
<td>08</td>
</tr>
<tr>
<td>6</td>
<td><strong>Part 2:</strong> Deep dive of DeepTech use cases In Indian B2B SaaS</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td><strong>Part 3:</strong> Accelerating Indian B2B SaaS via inventive DeepTech</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td><strong>Part 4:</strong> Enabling the DeepTech advantage for Indian B2B SaaS</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>Conclusion</td>
<td>28</td>
</tr>
<tr>
<td>10</td>
<td>Appendix</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>Glossary and References</td>
<td>37</td>
</tr>
<tr>
<td>12</td>
<td>Acknowledgements</td>
<td>38</td>
</tr>
</tbody>
</table>
Macro-economic uncertainty and the subsequent funding winter has led many tech companies to abandon the “Growth-at-all-costs” mindset and replace it with “Sustainable Growth”. For most SaaS (Software-as-a-Service) companies, this manifested into a commitment to conserve cash, cut burn and turn profitable. However, Sustainable Growth in the long haul needs to extend beyond operational efficiency and focus on unlocking growth through breakthrough innovation and invention using DeepTech.

B2B software/SaaS as an industry is built on the foundation of commercialization of DeepTech advancements. New generation B2B SaaS companies are leveraging the power of DeepTech such as AI/ML, AR/VR, Blockchain, etc. to orchestrate transformation use-cases that deliver value to clients. The challenge, however, is that DeepTech eventually becomes regular tech in about a decade of its commercial debut. Therefore, it is crucial for B2B SaaS enterprises to not only embrace but also be pioneers of innovation and inventors of novel applications utilizing DeepTech. This is essential to ensure that they not only survive but thrive in the long run.

The aim of this joint nasscom-EY report is to unravel the role of DeepTech and its contribution to Indian B2B SaaS growth. Specific focus areas include understanding nature of DeepTech in Indian B2B SaaS, emerging use cases, potential opportunities, and enablement levers.

The report confirmed four crucial findings. Firstly, Indian B2B SaaS companies are inherently DeepTech and AI-centric. Secondly, Indian B2B SaaS companies can leverage DeepTech more extensively across a wide array of use cases. Thirdly, prioritizing innovative and inventive DeepTech can propel accelerated growth for Indian B2B SaaS Indian companies over the next decade and beyond. Lastly, strategic ecosystem enhancements can remove barriers to success in DeepTech endeavours.

Indian B2B SaaS enterprises are poised to seize a prominent role in the global B2B tech market, empowered by growing democratization and accessibility of deep technology. Realizing India's aspiration to become a "Product Nation" would require a collective effort from investors, entrepreneurs and industry/govt bodies etc. to foster the "Invent in India" narrative and usher in next generation of global software products from the country.
Executive Summary

1 Present state overview

**Indian B2B SaaS companies are inherently DeepTech and AI/ML centric at present**

- 99% of Indian B2B SaaS companies are leveraging DeepTech for customer use cases
  - ~201 cos. working on 109 distinct use cases*
- AI/ML is the most leveraged DeepTech (54% of use cases), followed by big data/descriptive analytics (39%) and intelligent automation (7%)**

DeepTech deep-dive

**DeepTech can be leveraged even more extensively by Indian B2B SaaS companies**

- Top 10% of distinct use cases have an average of ~20 companies working on each of them
  - Bottom 60% of distinct use cases have less than 2 companies each working on them
- Majority of Indian B2B SaaS companies leverage DeepTech to serve horizontal application areas (63% of use cases), with top functional coverage across sales and marketing, HR and operations and supply chain

2 Potential opportunity

**Focus on inventive DeepTech is key to future growth of Indian B2B SaaS companies**

- Sustainable growth of B2B SaaS companies is directly proportional to scale of inventive DeepTech
  - Analysis of 20 public global B2B SaaS companies# demonstrates a positive correlation of ARR growth with scale of inventive DeepTech (number of patents filed)
- 25% of Indian B2B SaaS companies are presently inventive with 2,000+ filed patents
  - ~2.5x growth in number of patents filed in the past five years (2018 onwards) as compared to the prior decade (2008 to 2018)

3 Ecosystem enablers

**Growth can be accelerated by a nurturing ecosystem for inventive DeepTech**

- Availability of DeepTech talent (80%), patient capital (40%) and DeepTech infra (27%) are the top three challenges highlighted by Indian B2B SaaS companies
- Increased access to open data, greater collaboration with academia and government-supported DeepTech funds can potentially accelerate DeepTech in Indian B2B SaaS

The way forward: premium valuations and M&A opportunities

- As the ‘Invent in India’ narrative takes shape, Indian B2B SaaS companies with inventive DeepTech focus can look forward to sustaining price competitiveness and thereby attractive valuations, especially with the rise of DeepTech focused funds
- With rising scale of inventive DeepTech, Indian B2B SaaS will become potentially even more lucrative targets for global M&A

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* A total of 507 B2B SaaS use cases including overlaps analyzed for this report
** Each use case may encompass multiple DeepTech areas, thus the percentages would not add to 100%
# ARR CAGR computed from IPO till 2023 based on a) IPO between 2009-2019 and b) revenues at IPO between US$10 million to US$400 million,
Introduction

Within the global B2B tech landscape, Indian B2B SaaS enterprises are assuming an increasingly prominent position, fuelled by the expanding accessibility and democratization of advanced technologies. DeepTech, encompassing AI/ML, AR/VR, and more, forms an integral component of the next wave of software products. Consequently, pioneering innovative applications that harness such DeepTech becomes pivotal for enhancing India’s market share in the realm of global B2B SaaS.

As we embark on this trajectory of growth, the purpose of this report is to formulate a perspective on the current status and potential opportunity that can be unlocked through leveraging DeepTech in Indian B2B SaaS. Specifically, the following four key questions served as the basis for this report:

- What is the extent of DeepTech adoption within the Indian B2B SaaS landscape?
- What are the prevailing and emerging use-cases of DeepTech in Indian B2B SaaS?
- What is the potential impact of DeepTech for Indian B2B SaaS?
- What strategic ecosystem factors can elevate the role of DeepTech in Indian B2B SaaS to the next level?

The subsequent sections of the report endeavours to delve into each of these areas with greater depth.

**Key definitions used in the report**

- **DeepTech B2B companies:** These are active firms that create, deploy or utilize advanced technologies in their products offerings. Advanced technologies used in B2B SaaS include AI/ML, Big Data/Analytics, Intelligent Automation, AR/VR and Decentralized/Distributed Ledgers

- **Inventive DeepTech companies:** From the pool of DeepTech B2B firms, inventive B2B SaaS firms are creating new products or solutions that are generally backed by fundamental research. The technology innovations under this category largely develop new intellectual property (IP) that involve scientific or engineering advances

- **Innovative DeepTech companies:** All B2B SaaS companies that are not inventive DeepTech are classified as Innovative B2B SaaS and further categorized as Emerging, Advanced and Scaled as defined below

<table>
<thead>
<tr>
<th></th>
<th>EMERGING</th>
<th>ADVANCED</th>
<th>SCALED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;10</td>
<td>10-50</td>
<td>50+</td>
</tr>
</tbody>
</table>

- **Use case:** Business context-specific problem statement, related to a function or industry sector
Methodology

Objective
The objective of this report is to gain insights on the prevalence of DeepTech and its potential impact in unlocking future growth of B2B SaaS in India. The report delves into examination of types of DeepTech harnessed by Indian B2B SaaS enterprises, highlights prominent use-cases across diverse sectors, reveals potential growth differential achievable through inventive DeepTech, and elucidates collaborative efforts of ecosystem participants required to realize the DeepTech advantage for Indian B2B SaaS.

Data source
This report has been crafted through comprehensive primary and secondary research methodologies, involving interactions with leading Indian B2B SaaS companies and industry specialists, and through cross-referencing of existing literature on state of Indian B2B SaaS.

Detailed bottom-up analysis was conducted on a total of 201 Indian B2B SaaS companies (shortlisted based on funding >US$ 6 million or headcount of 100+, if bootstrapped) to serve as the foundational dataset for this report. Additionally, 15 in-depth interviews were conducted with CXOs from leading Indian B2B SaaS companies, representing a diverse spectrum of companies ranging from ARR of US$ 10 million to US$ 500 million. This collaborative effort, combined with consultations with SaaS industry experts, served to further corroborate the research insights.

Demographics of companies analyzed for the report

<table>
<thead>
<tr>
<th>Founding year period</th>
<th>No. of cos.</th>
<th>Funding (US$ million)</th>
<th>%age of cos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-2000</td>
<td>5%</td>
<td>Bootstrapped</td>
<td>2%</td>
</tr>
<tr>
<td>2001-2010</td>
<td>18%</td>
<td>6 to 100</td>
<td>70%</td>
</tr>
<tr>
<td>2011-2020</td>
<td>73%</td>
<td>100-500</td>
<td>25%</td>
</tr>
<tr>
<td>2021-2023</td>
<td>3%</td>
<td>500Mn+</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Headcount</th>
<th>%age of cos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1,000</td>
<td>82%</td>
</tr>
<tr>
<td>1,000-5,000</td>
<td>15%</td>
</tr>
<tr>
<td>5000-10000</td>
<td>2%</td>
</tr>
<tr>
<td>10,000+</td>
<td>1%</td>
</tr>
</tbody>
</table>

Use cases analyzed

| Total DeepTech use cases analyzed | 507 |
| Distinct DeepTech use cases analyzed | 109 |

Note: Use case numbers are for the sample of 201 Indian B2B SaaS companies analyzed for this report.
DeepTech in the realm of Indian B2B SaaS
99% of Indian B2B SaaS companies are leveraging DeepTech for customer use cases.

201* Indian B2B SaaS cos. are working on 109 distinct use cases leveraging DeepTech, implying significant overlap of use cases among the companies.

As companies mature, they tend to serve multiple use cases.

<table>
<thead>
<tr>
<th>Age of company (in years)</th>
<th>No. of Companies (By year of estd.)</th>
<th>Total Use cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 plus</td>
<td>16</td>
<td>76</td>
</tr>
<tr>
<td>13 to 18</td>
<td>26</td>
<td>67</td>
</tr>
<tr>
<td>8 to 13</td>
<td>61</td>
<td>147</td>
</tr>
<tr>
<td>3 to 8</td>
<td>80</td>
<td>184</td>
</tr>
<tr>
<td>0 to 3</td>
<td>18</td>
<td>33</td>
</tr>
</tbody>
</table>

A notable trend within Indian B2B SaaS landscape is the significant adoption of deep technology solutions to cater to customer use cases. Research of 201 Indian B2B SaaS companies indicate that an impressive 99% of them have embraced DeepTech innovations as a strategic approach to address their clients’ needs and challenges. As companies mature, they tend to invest even more in strategic integration of advanced technologies to serve multiple use-cases. This showcases industry's commitment to innovation and underscores the need to build more sophisticated and impactful solutions in response to evolving customer demands.

“Our approach to DeepTech development begins with empathy towards customers and strong intent to solve for them - our users are main street people not wall street people. We identify the problems that we can solve for them first and then choose the most optimum way to solve it e.g., RPA, ML or Generative AI”

Founder and CEO - Healthtech B2B SaaS company (funding > US$ 50 million)

*201 is the sample set of Indian B2B SaaS companies identified for the purpose of report
Refer to Appendix D for distinct use cases by age cohort
**DeepTech in Indian B2B SaaS is AI/ML centric**

- **AI/ML is the predominant DeepTech leveraged by Indian B2B SaaS companies**
- **Predictive analytics is the prevailing category of AI/ML DeepTech, particularly in non-real-time scenarios, followed by Conversational AI**
- **Within AI/ML, 70% of use cases are directed towards customer analysis, marketing operations, business analysis, and talent analysis**

More than half of total deep-tech use cases leverage AI/ML

<table>
<thead>
<tr>
<th>DeepTech type</th>
<th>%age of use cases</th>
<th>DeepTech subtypes</th>
<th>%age of use cases</th>
<th>Application area of AI/ML*</th>
<th>%age of use cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/ML</td>
<td>54%</td>
<td>Predictive analytics - Non-real time</td>
<td>20%</td>
<td>Customer Analysis</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conversational AI</td>
<td>11%</td>
<td>Marketing Operations</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Vision</td>
<td>7%</td>
<td>Business analysis</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Predictive analytics - Real time</td>
<td>6%</td>
<td>Talent analysis</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Generative AI</td>
<td>4%</td>
<td>Geospatial analysis</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prescriptive analytics - Non-real time</td>
<td>4%</td>
<td>Transactions</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prescriptive analytics - Real time</td>
<td>1%</td>
<td>Translation</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Descriptive analytics - Non-real time</td>
<td>30%</td>
<td>Image Analysis</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Descriptive analytics - Real time</td>
<td>8%</td>
<td>Predictive maintenance</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Workflow automation</td>
<td>4%</td>
<td>IT Operations</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intelligent document processing</td>
<td>3%</td>
<td>Event Management</td>
<td>1%</td>
</tr>
<tr>
<td>Augmented/ Virtual Reality (AR/VR)</td>
<td>0.78%</td>
<td>VR (Virtual reality)</td>
<td>0.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AR (Augmented reality)</td>
<td>0.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3D visualization</td>
<td>0.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data security and management</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decentralisation/Distributed ledger</td>
<td>0.19%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

a. The data mentioned in charts is break up of total 507 DeepTech use cases analyzed for the purpose of this report
b. Percentages mentioned in chart will not add up to 100% because of overlapping data

Refer to Appendix A for application areas by AI/ML subtypes
Data and text processing serve as the foundational layer for majority of the DeepTech use cases

A significant majority of companies are actively leveraging the power of deep technology to sharpen their focus on data and text processing information formats. This underscores the transformational potential it holds in enhancing the efficiency, accuracy, and insights extracted from vast volumes of data and textual information. By harnessing advanced algorithms and computational capabilities, companies are effectively unravelling intricate patterns, deriving meaningful insights, and helping make informed decisions. This paves the way for new horizons of advancement in data-driven decision-making, predictive modelling, and transformative business strategies.

Heat map of information formats leveraging DeepTech (no. of use cases)

<table>
<thead>
<tr>
<th></th>
<th>Data processing</th>
<th>Text processing</th>
<th>Image processing</th>
<th>Video processing</th>
<th>Audio processing</th>
<th>Document processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/ML</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big data and analytics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent automation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Augmented/Virtual Reality (AR/VR)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decentralization/Distributed ledger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

More than 20%          10 to 20%  5 to 10%  1 to 5%  <1%

“Our platform comes with multiple pre-integrations that allow us to build the intelligence layer on top of all the data from various systems to give visibility and prescribe what can be done”

VP Product Design - Logistics B2B SaaS company (funding ~US$ 10 million)
### Case examples: Predictive analytics for targeted marketing

<table>
<thead>
<tr>
<th>CASE EXAMPLE 1</th>
<th>Feature Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DeepTech subtype:</strong> Predictive analytics - real time</td>
<td>Utilize advanced pattern prediction to intelligently segment the customer base, identify nuanced shopping behaviours and pinpoint target consumers aligning with specific products, enhancing precise cross-selling and upselling efforts.</td>
</tr>
<tr>
<td><strong>Input Type:</strong> Data processing</td>
<td></td>
</tr>
<tr>
<td><strong>Vertical:</strong> Multiple</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASE EXAMPLE 2</th>
<th>Feature Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DeepTech subtype:</strong> Predictive analytics - non-real time</td>
<td>Tailored dynamic content leveraging Generative AI for engagement and customer experience while efficiently scaling mobile ad performance – with immersive video ads for awareness, conversion and monetization.</td>
</tr>
<tr>
<td><strong>Input Type:</strong> Video and Data processing</td>
<td></td>
</tr>
<tr>
<td><strong>Vertical:</strong> Telecom, Media, and Technology</td>
<td></td>
</tr>
</tbody>
</table>
Breaking ground: unravelling the DeepTech Potential in Indian B2B SaaS
Deep dive of DeepTech use cases in Indian B2B SaaS
DeepTech can be leveraged even more extensively

61% of Indian B2B SaaS companies are engaged in developing at least one of the top 10% DeepTech use case. This reflects a strong commitment to innovation through harnessing of cutting-edge solutions to cater to complex challenges.

60% of DeepTech use cases have ~2 companies working on each of them. This signifies the strategic selectiveness that companies exercise in choosing their focus areas.

**Top 10% use cases**

<table>
<thead>
<tr>
<th>No.</th>
<th>Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>AI-powered business intelligence</td>
</tr>
<tr>
<td>02</td>
<td>AI-based conversational intelligence</td>
</tr>
<tr>
<td>03</td>
<td>Conversational AI for customers</td>
</tr>
<tr>
<td>04</td>
<td>AI-driven customer segmentation</td>
</tr>
<tr>
<td>05</td>
<td>Targeted marketing</td>
</tr>
<tr>
<td>06</td>
<td>AI-enabled lead generation</td>
</tr>
<tr>
<td>07</td>
<td>Intelligent routing</td>
</tr>
<tr>
<td>08</td>
<td>AI-based workforce analytics</td>
</tr>
<tr>
<td>09</td>
<td>AI-based recruitment system</td>
</tr>
<tr>
<td>10</td>
<td>AI-enabled campaign management</td>
</tr>
</tbody>
</table>

**Upcoming 30% use cases**

- Intelligent logistics
- Intelligent inventory management
- AI for content generation and editing
- Conversational AI for employees
- Document processing
- Recommendation engine for customers
- Intelligent sales assistant
- AI based customer service agent assist
- AI-driven financial reconciliation
- AI-based cyber threat intelligence
- Predictive equipment maintenance
- AI based pricing intelligence
- Sales enablement
- AI-enabled attendance system
- AI-enabled workflow automation
- AI-enabled security
- AI based IT operations
- AI-based payment routing
- AI-based fraud detection
- AI-enabled loyalty management
- AI-powered software development
- AI-based supplier management
- AI-based social media intelligence
- AI-based retail store intelligence
- AI-enabled geospatial analytics
- Employee lifecycle management
- AI powered employee engagement
- AI-based compliance management
- AI-based contract analytics
- AI driven talent marketplace

**Emerging 60% use cases**

- Intelligent logistics
- Intelligent inventory management
- AI for content generation and editing
- Conversational AI for employees
- Document processing
- Recommendation engine for customers
- Intelligent sales assistant
- AI based customer service agent assist
- AI-driven financial reconciliation
- AI-based cyber threat intelligence
- Predictive equipment maintenance
- AI based pricing intelligence
- Sales enablement
- AI-enabled attendance system
- AI-enabled workflow automation
- AI-enabled security
- AI based IT operations
- AI-based payment routing
- AI-based fraud detection
- AI-enabled loyalty management
- AI-powered software development
- AI-based supplier management
- AI-based social media intelligence
- AI-based retail store intelligence
- AI-enabled geospatial analytics
- Employee lifecycle management
- AI powered employee engagement
- AI-based compliance management
- AI-based contract analytics
- AI driven talent marketplace

(Refer to Appendix B for details on emerging use cases)
Majority of Indian B2B SaaS companies leverage DeepTech to serve horizontal application areas

DeepTech solution type (by %age of use cases, N=507)

<table>
<thead>
<tr>
<th>Solution Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal-specific solutions</td>
<td>63%</td>
</tr>
<tr>
<td>Vertical-specific solutions</td>
<td>37%</td>
</tr>
</tbody>
</table>

Vertical-focused solutions

- Advanced manufacturing and mobility: 10%
- Health care and life sciences: 4%
- Energy: 1%
- Consumer (E-commerce/retail, FMCG, FMCD): 41%
- Financial services: 17%
- Government and real estate: 13%
- Telecom, media, and technology: 14%

Horizontal-focused solutions

- Sales and marketing emerged as the top function leveraging B2B SaaS DeepTech; followed by human resources and operations

Top 3 use cases by verticals:
- Consumer goods and services vertical has the most B2B SaaS DeepTech use case instances followed by Financial Services
- Consumer vertical - Targeted marketing, AI-driven customer segmentation and intelligent inventory management
- Financial services - Conversational AI for customers, AI enabled campaign management and AI-powered debt collection

Top 3 use cases by horizontals:
- Sales and marketing - AI-enabled lead generation, AI-driven customer segmentation, AI-based conversational intelligence
- HR - AI-based recruitment systems, Conversational AI for employees and AI-based workforce analytics
- IT, data and automation - 12%
- Finance and legal - 9%
- Operations and supply chain - 14%
- Engineering, product and design - 6%
- Human resources - 18%
- Sales and marketing - 41%
### DeepTech use cases of horizontal Indian B2B SaaS cos. (1/2)

#### Sales and marketing (S&M)
- % of distinct use cases in S&M: 32%

- **Marketing and lead generation**
  - AI-enabled lead generation
  - AI-driven customer segmentation
  - Targeted marketing
  - AI-enabled campaign management
  - AI-based conversational intelligence
  - AI for content generation and editing
  - AI-based social media intelligence
  - Recommendation engine for customers
  - AI driven personalization
  - AI-enabled event management
  - Sales enablement
  - AI-driven omnichannel experience
  - AI-powered conversational commerce

- **Customer experience**
  - Conversational AI for customers
  - AI-based conversational intelligence
  - AI based customer service agent assist
  - Recommendation engine for customers
  - AI-enabled loyalty management
  - AI-driven customer segmentation
  - AI-powered conversational commerce
  - Real-time feedback management
  - AI for content translation
  - AI-based ticket management
  - AI for content generation and editing
  - AI-enabled workflow automation
  - AI-driven omnichannel experience

- **Sales**
  - Intelligent sales assistant
  - Sales enablement
  - AI-based conversational intelligence
  - AI-driven customer segmentation
  - AI-based fraud detection

- **S&M Intelligence**
  - AI-powered business intelligence
  - AI-powered consumer research

- **Pricing**
  - AI based pricing intelligence
  - Sales enablement

#### Human resources
- % of distinct use cases in HR: 18%

- **Human capital management**
  - AI-based workforce analytics
  - AI-enabled attendance system
  - Employee lifecycle management
  - AI driven talent marketplace
  - Conversational AI for employees
  - AI powered employee engagement
  - AI-based travel and expense management solution
  - AI-based conversational intelligence
  - Blockchain-based document management

- **Recruitment**
  - AI-based recruitment system

- **Help desk support**
  - Conversational AI for employees
  - AI-based conversational intelligence

- **Learning and development**
  - Intelligent Learning and Development
  - AI powered employee engagement
  - Conversational AI for employees
  - AI-based workforce analytics

- **Employee on-boarding**
  - Intelligent payroll management
  - Document processing
  - Employee lifecycle management
  - AI driven personalized user onboarding

- **Payroll**
  - Intelligent payroll management
  - Document processing

#### Operations and supply chain
- % of distinct use cases in operation and supply chain: 22%

- **Logistics and distribution**
  - Intelligent routing
  - Intelligent logistics
  - AI based video telematics
  - AI-based EV charging infrastructure
  - Predictive equipment maintenance
  - AI-based parking management
  - AI-enabled geospatial analytics

- **Enterprise asset and production management**
  - Predictive equipment maintenance
  - AI-enabled geospatial analytics
  - Workforce safety automation
  - AI-enabled security

- **Inventory management**
  - Intelligent inventory management
  - AI-powered business intelligence
  - AI-based supply chain management
  - AI-enabled workflow automation

- **Supplier management**
  - AI-based supplier management
  - RFP automation
  - AI-based procurement analytics

- **Facility management and admin**
  - AI-based travel and expense management solution
  - Intelligent workplace management
  - AI-enabled user authentication

- **Supply chain intelligence**
  - AI-based business intelligence
  - Intelligent logistics

- **Order management**
  - Intelligent order management

---

*Use case density (% of companies addressing the use case, N=201 cos.)*

Refer to Appendix C for DeepTech use cases across verticals.

<table>
<thead>
<tr>
<th>6% to 8%</th>
<th>4% to 6%</th>
<th>2% to 4%</th>
<th>1% to 2%</th>
<th>Less than 1%</th>
</tr>
</thead>
</table>

Each use case maybe leveraged across functions. Thus the % of distinct use cases will not add up to 100%.
DeepTech use cases of horizontal Indian B2B SaaS cos. (2/2)

<table>
<thead>
<tr>
<th>IT, data and automation</th>
<th>Finance and legal</th>
<th>Engg., product and design</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of distinct use cases in IT, data and automation: 22%</td>
<td>% of distinct use cases in finance and legal: 16%</td>
<td>% of distinct use cases in engg., product and design: 13%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Security</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-based cyber threat intelligence</td>
<td>AI-based contract analytics</td>
<td>AI-powered software development</td>
</tr>
<tr>
<td>AI-enabled security</td>
<td></td>
<td>AI for content generation and editing</td>
</tr>
<tr>
<td>Data backup and recovery</td>
<td>Document processing</td>
<td>AI-based API provider</td>
</tr>
<tr>
<td>AI-based fraud detection</td>
<td></td>
<td>AR and VR based mapping</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-driven data integration</td>
<td>AI-based payment routing</td>
<td>Event-based vision systems</td>
</tr>
<tr>
<td>Document processing</td>
<td>AI-driven financial reconciliation</td>
<td>Drone services</td>
</tr>
<tr>
<td>Database management</td>
<td>Document processing</td>
<td>AI platform to build, deploy and manage ML models</td>
</tr>
<tr>
<td>AI-enabled data extraction</td>
<td>AI-based fraud detection</td>
<td>AI-based code translator</td>
</tr>
<tr>
<td>AI-powered business intelligence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Operations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-based IT operations</td>
<td>AI-powered business intelligence</td>
<td>AI-powered testing</td>
</tr>
<tr>
<td>AI-powered business intelligence</td>
<td>Real-time call routing</td>
<td>AI platform to build, deploy and manage ML models</td>
</tr>
<tr>
<td>Conversational AI for employees</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication and Collaboration</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-enabled workflow automation</td>
<td>AI-powerd business intelligence</td>
<td>Application security intelligence</td>
</tr>
<tr>
<td>AI driven team communication</td>
<td>AI-driven real time captioning</td>
<td>AI-enabled security</td>
</tr>
<tr>
<td>AI-powered business intelligence</td>
<td>AI-enabled virtual meetings</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Automation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-enabled workflow automation</td>
<td>AI-powered business intelligence</td>
<td>AI-assisted medical analysis</td>
</tr>
<tr>
<td>AI based IT operations</td>
<td>Al driven real time captioning</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Device management</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AI based IT operations</td>
<td>AI-powered business intelligence</td>
<td></td>
</tr>
<tr>
<td>Intelligent ADM solution</td>
<td>AI-driven financial reconciliation</td>
<td></td>
</tr>
<tr>
<td>AI-based cyber threat intelligence</td>
<td>AI-powered policy generation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network and infra</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Network analytics</td>
<td>AI-driven financial reconciliation</td>
<td></td>
</tr>
</tbody>
</table>

Each use case maybe leveraged across functions. Thus the % of distinct use cases will not add up to 100%

- 6% to 8%
- 4% to 6%
- 2% to 4%
- 1% to 2%
- Less than 1%
Case example: DeepTech use cases for a MarTech SaaS company

Company overview
- AI-based customer engagement platform
- 500+ employees
- US$ 200+ million in funding
- 10+ years old

DeepTech type
- AI/ML
- Big data and analytics

DeepTech sub-types
- Descriptive analytics Non-real time
- Predictive analytics Non-real time

DeepTech use cases
- Intelligent sales assistant
- AI-driven customer segmentation
- AI-driven omnichannel experience
- AI-enabled campaign management

DeepTech application area
- Customer analysis
- Marketing operations

DeepTech features
- AI-driven capabilities to enable insights, such as channel and time preferences, lifestyle affinities to optimize customer journeys and predict future behaviours
- Engagement strategy using predictive analytics and AI-driven segmentation
- AI-powered journey orchestration and optimization to create seamless omnichannel experiences
- Identify best-performing campaigns and optimize them in real-time using AI
Accelerating Indian B2B SaaS via inventive DeepTech
25% of Indian B2B SaaS companies are inventive DeepTech focused

~1,400 patents filed during the last five years, a substantial increase compared to the preceding decade, which had 574 patent filings. This trend underscores a significant intensification in inventive efforts and intellectual property generation.

<table>
<thead>
<tr>
<th>Scale of inventive DeepTech</th>
<th>No. of Indian B2B SaaS cos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly IP focused (&gt;200 patents filed)</td>
<td>2</td>
</tr>
<tr>
<td>Moderately high IP focused (100-200 patents filed)</td>
<td>2</td>
</tr>
<tr>
<td>Regular IP focused (&lt;100 patents filed)</td>
<td>45</td>
</tr>
</tbody>
</table>

Innovative firms are poised to transition into inventive entities in the near future. They are increasingly directing their investments toward cultivating DeepTech teams, a key driver of novel IP development.

Inventive DeepTech represents the fusion of creative thinking and advanced technical acumen. By leveraging emerging technologies such as AI/ML, inventive DeepTech pioneers/forward-thinking entrepreneurs in India are devising ground-breaking solutions that address complex challenges and enhance customer experience.

Innovative firms are poised to transition into inventive entities in the near future. They are increasingly directing their investments toward cultivating DeepTech teams, a key driver of novel IP development.
Breakthrough Indian B2B SaaS companies, i.e. inventive deep-tech, can potentially unlock ARR CAGR of 30-50% on a sustained basis

Higher CAGR ARR growth is correlated with scale of inventive DeepTech

Highly IP focused inventive Global B2B SaaS cos. (>200 patents filed) have demonstrated 50% ARR CAGR growth on average, over 8-10 years

Analysis of 20 publicly listed B2B SaaS Global companies* revealed a positive correlation between ARR CAGR and focus on IP (no. of patents filed)

Patents filed vs ARR CAGR

<table>
<thead>
<tr>
<th>Scale of inventive DeepTech</th>
<th>Patents filed</th>
<th>Avg. CAGR ARR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly IP focused (25% of sample)</td>
<td>Above 200 patents</td>
<td>50%</td>
</tr>
<tr>
<td>Moderately IP focused (12% of sample)</td>
<td>100-200 patents</td>
<td>37%</td>
</tr>
<tr>
<td>Regular IP focused (60% of sample)</td>
<td>less than 100 patents</td>
<td>30%</td>
</tr>
</tbody>
</table>

*R2 (coefficient of determination) is a measurement used to explain how much the variability of one factor is caused by its relationship to another factor

IP data sourced from WIPO (World Intellectual Property Organization), accessed July 2023

Sample consisting of Workiva, Veeva, New Relic, Workday, Alteryx, Okta, Twilio, Shopify, Zendesk, Hubspot, Bazaarvoice, MobileIron, Coupa, Talend, Yext, MongoDB, Zuora, Domo, Cloudflare, Crowstrike, Minimum of 6 years to Maximum of 12 years CAGR for each company

Directing increased attention towards inventive DeepTech holds the potential to catalyze consistent and robust growth trajectories, projecting an CAGR of 30-50% in ARR for Indian B2B SaaS companies over the forthcoming decade. Embracing inventive DeepTech paves the way for sustained growth, characterized by demonstrated customer empathy and competitive differentiation.

“DeepTech is core to our product. We have developed multi modal emotion assessment AI – building for computer vision, then data and recently voice as well. It gives us a premium positioning with customers (in winning deals with higher margins) and investors (preferential valuations and funding amount)”

Founder - Indian B2B SaaS company focused on AI-powered consumer research
Breaking ground: unravelling the DeepTech Potential in Indian B2B SaaS
Enabling the DeepTech advantage for Indian B2B SaaS

**DeepTech Talent:** DeepTech requires specialized expertise, but finding and retaining skilled professionals is a challenge due to high demand and limited supply. Attracting talent necessitates creating a stimulating work environment and offering incentives to cultivate a culture of invention.

**Patient Capital:** DeepTech ventures involve longer development timelines and higher risks, making it tough to secure patient capital – funding that endures extended periods without instant returns. Striking a balance between investors' expectations and the need for sustained financial support is crucial for DeepTech start-ups.

**DeepTech Infra:** DeepTech solutions demand advanced infrastructure like open data, computing labs and specialized equipment. However, these resources are often costly and inaccessible, hindering companies’ progress. Collaborative efforts are required to provide shared access to vital infrastructure and a level playing field for all participants.

**Regulations:** The rapid pace of DeepTech advancements can outpace regulatory frameworks, leading to uncertainty and potential legal challenges.

**Market Access:** DeepTech innovations frequently face hurdles when trying to enter markets. Their complexity may lead to longer adoption cycles and require additional education for potential users.

### Challenges for DeepTech in Indian B2B SaaS

(by % of respondents)

<table>
<thead>
<tr>
<th>Challenge</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep tech Infra</td>
<td>27</td>
</tr>
<tr>
<td>Patient capital</td>
<td>40</td>
</tr>
<tr>
<td>Deep tech Talent</td>
<td>80</td>
</tr>
<tr>
<td>Market Access</td>
<td>20</td>
</tr>
<tr>
<td>Regulations</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Primary interviews conducted by EY (n=15) with CXOs of Indian B2B SaaS companies

**“Having state-of-the-art digital infrastructure which is highly accessible is critical to long-term success”**

~CEO – US$ 20 million ARR B2B SaaS company

**“We have limited availability of specialized talent in DeepTech at present. We should scale up academic streams focused on DeepTech”**

~Co-Founder – Leading CRM company

**“DeepTech investment ecosystem is at a nascent stage in our country and requires support to be developed”**

~Founder – US$ 15 million funded B2B SaaS company
Growth can be accelerated by a nurturing ecosystem for inventive DeepTech (1/2)

Access to open data
- Developing innovative DeepTech talent at scale
- Democratizing research, design and training of AI/ML models

Access to open data as part of the underlying deep tech infrastructure plays a pivotal role in driving innovation. Open data repositories provide researchers, entrepreneurs, and developers with a vast pool of information to draw insights from. This data can be used to train advanced machine learning models, validate hypotheses, and uncover hidden patterns. By offering unrestricted access to datasets, governments and organizations foster an environment where startups and researchers can experiment, refine their ideas, and create breakthrough technologies. Open data not only accelerates the development of DeepTech solutions but also promotes transparency, collaboration, and knowledge sharing within the ecosystem.

EU Open Data Portal provides access to 1 million+ datasets covering 70+ institutions, agencies, and bodies across 36 countries. Datasets across policy, economy, employment, science, etc., are available for commercial and non-commercial uses.

Collaboration with academia
- Nurturing inventive DeepTech talent
- Improving accessibility to DeepTech infra

DeepTech ecosystems flourish when there is a strong collaboration between industry and academia. Universities are hubs of cutting-edge research and knowledge creation, providing a fertile ground for nurturing disruptive technologies. Collaborative initiatives between academia and industry enable the exchange of ideas, expertise, and resources. Research findings can be translated into practical applications, and industry challenges can drive focused research efforts. Such partnerships not only bridge the gap between theoretical advancements and real-world implementation but also cultivate a talent pipeline of skilled individuals ready to contribute to the DeepTech workforce.

Leading DeepTech start-ups in Europe have ~27% of their talent from top 100 universities, 51% higher than the sample average of 2,000 companies.

DeepTech companies with higher share of top researchers also receive 43% higher valuations.

**winning-formula-how-europes-top-tech-start-ups-get-it-right-vf.pdf (mckinsey.com)**
A thriving DeepTech ecosystem requires a symphony of stakeholders, including industry players and government bodies. Industry engagement brings practical insights into market needs and technical requirements. Startups and researchers can benefit from industry mentorship, investment, and access to potential customers. On the other hand, government bodies play a crucial role by creating conducive policies, funding mechanisms, and regulatory frameworks.

**Examples of govt. initiatives across countries**

- Deep tech-focused govt. funds: Earlier this year (2023) Germany and France launched DeepTech-focused funds of €1 billion³ and €500 million⁴ respectively.
- Special visa for specialized talent: Israel, which is a leader in DeepTech innovation, provides High-Tech Work Visa (HIT)⁵, allowing foreigners to work in Israel for five years.
- R&D tax credits: UK government allows ~18% tax rebate⁶ on R&D expenditure incurred by small and medium size companies.
Conclusion
Conclusion

Indian B2B SaaS is on the right path to becoming a “Product Nation”, powered by efforts of the entire ecosystem over the past 15+ years. In the past 3 years we have witnessed multiple landmark events in Indian B2B SaaS history, notable among them:

1. First US$ 1 billion ARR Indian B2B SaaS company
2. First Indian B2B SaaS company listed on NASDAQ, crossing US$ 0.5 billion in ARR in 2023
3. 12+ Centaurs (B2B SaaS cos. with ARR > US$ 100 million)
4. 75+ B2B SaaS companies with ARR > US$ 10 million

As we look forward to the next decade, the Indian B2B SaaS ecosystem has the potential to develop breakthrough software products leveraging DeepTech. Currently, Indian B2B SaaS enterprises demonstrate an innate focus on DeepTech and AI/ML. The potential for further and more comprehensive integration of DeepTech within Indian B2B SaaS operations can be further amplified. Prioritizing inventive DeepTech emerges as a pivotal factor in propelling the future growth of the Indian B2B SaaS landscape. This growth trajectory can be expedited through the establishment of a supportive ecosystem that fosters inventive DeepTech initiatives. This will enable India to further cement its position as a global “Product Nation” driven by an “Invent in India” mindset.

The way forward: premium valuations and M&A opportunities

- As the ‘Invent in India’ narrative takes shape, Indian B2B SaaS companies with inventive DeepTech focus can look forward to sustaining price competitiveness and thereby attractive valuations, especially with rise of DeepTech focused funds
- With rising scale of inventive DeepTech, Indian B2B SaaS will become potentially even more lucrative targets for global M&A
Appendix
## Appendix

### A. Top application areas within AI/ML subtypes

Customer analysis is the top application area being leveraged by AI/ML application types

Predictive analytics is the top application type of AI/ML use cases and majorly caters marketing operations, talent analysis and customer analysis

<table>
<thead>
<tr>
<th>DeepTech subtypes</th>
<th>Top three application areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictive analytics - Non-real time</td>
<td>Marketing Operations</td>
</tr>
<tr>
<td>Conversational AI</td>
<td>Customer Analysis</td>
</tr>
<tr>
<td>Computer Vision</td>
<td>Image Analysis</td>
</tr>
<tr>
<td>Predictive analytics - Real time</td>
<td>Geospatial Analysis</td>
</tr>
<tr>
<td>Generative AI</td>
<td>Marketing Operations</td>
</tr>
<tr>
<td>Prescriptive analytics - Non-real time</td>
<td>Customer Analysis</td>
</tr>
<tr>
<td>Prescriptive analytics - Real time</td>
<td>Business Analysis</td>
</tr>
</tbody>
</table>

**DeepTech subtypes**
- Predictive analytics
  - Non-real time
  - Real time
- Conversational AI
- Computer Vision
- Generative AI
- Prescriptive analytics
  - Non-real time
  - Real time
Appendix
B. Emerging 60% use cases

- AI for credit rating
- AI-based staff allocation
- Intelligent payroll management
- AI-driven data integration
- AI-based API provider
- AI-driven revenue intelligence
- Intelligent Learning and Development
- AI-based contract workflow automation
- AI platform to build, deploy and manage ML models
- AI-enabled user authentication
- AI-based farm intelligence
- AI-powered testing
- AI-driven real time captioning
- AI-based real estate marketplace
- Conversational AI for students
- AI-enabled data extraction
- AI-driven omnichannel experience
- AI-based debt collection
- Return analytics for e-commerce businesses
- AI-powered conversational commerce
- AI-based parking management
- Student admission workflow automation
- AI marketplace for developers
- AI enabled KYC
- Event-based vision systems
- AI driven personalized user onboarding
- Application security intelligence
- AR and VR based mapping
- Smart interior designing
- AI enabled cost management
- AI-enabled event management
- Intelligent ADM solution
- AI based competitive insights
- AI-enabled virtual meetings
- AR and VR gaming
- Intelligent workspace management
- Workforce safety automation
- Real-time feedback management
- Blockchain-based document management
- AI-based supply chain management
- AI driven personalization
- Behaviour analysis for students
- AI-assisted medical analysis
- RFP automation
- Intelligent order management
- AI-based travel and expense management solution
- AI-driven financial planning
- Connected Asset Lifecycle management
- Account receivables management
- AI based smart packaging
- AI-based ticket management
- AI based quality control
- AI-based procurement analytics
- AI based video telematics
- AI-enabled virtual dressing room
- AI for content translation
- AI-based EV charging infrastructure
- AI-enabled claims management
- AI-powered coaching
- Data backup and recovery
- Network analytics
- Database management
- Real-time call routing
- AI-based code translator
- AI-powered consumer research
- Drone services
## Appendix

### C. DeepTech use cases of vertical B2B SaaS cos. (1/3) - Consumer (FMCG, FMCD, E-Commerce/Retail)

<table>
<thead>
<tr>
<th>Sales and marketing (S&amp;M)</th>
<th>Operations and supply chain</th>
<th>Finance and legal</th>
<th>Human resources</th>
<th>IT, data and automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of distinct use cases in S&amp;M: 19%</td>
<td>% of distinct use cases in operations and supply chain: 10%</td>
<td>% of distinct use cases in finance and legal: 4%</td>
<td>% of distinct use cases in human resources: 2%</td>
<td>% of distinct use cases in IT, data and automation: 3%</td>
</tr>
</tbody>
</table>

- **Sales and Marketing Intelligence**
  - Targeted marketing
  - AI-driven customer segmentation
  - Recommendation engine for customers
  - AI for content generation and editing
  - AI-enabled virtual dressing room
  - AI-based social media intelligence
  - AI-based retail store intelligence
  - AI-enabled campaign management
  - AI-enabled lead generation
  - AI-driven financial planning
  - AI-enabled loyalty management
  - Conversational AI for customers
  - Document processing

- **Supply Chain Intelligence**
  - Intelligent inventory management
  - AI-powered business intelligence
  - Return analytics for e-commerce businesses
  - AI based quality control

- **Order Management**
  - AI-based retail store intelligence
  - AI-enabled campaign management
  - AI based pricing intelligence
  - AI based competitive insights
  - Sales enablement

- **Customer Experience**
  - AI-powered business intelligence
  - Return analytics for e-commerce businesses
  - AI based quality control

- **Pricing**
  - AI-powered business intelligence
  - Return analytics for e-commerce businesses
  - AI based quality control

- **Document Processing**
  - AI-powered business intelligence
  - Return analytics for e-commerce businesses
  - AI based quality control

Each use case maybe leveraged across functions. Thus the % of distinct use cases will not add up to 100%

**Use case density**

(% of companies addressing the use case, N=201 cos.)

- **Data**
  - 6% to 8%
  - 4% to 6%
  - 2% to 4%
  - 1% to 2%
  - Less than 1%

- **AI-based business intelligence**
  - AI-powered business intelligence
  - Return analytics for e-commerce businesses
  - AI based quality control

- **AI-enabled data extraction**
  - AI-powered business intelligence
  - Return analytics for e-commerce businesses
  - AI based quality control
## Appendix

### C. DeepTech use cases of vertical B2B SaaS cos. (2/3) - Financial Services

<table>
<thead>
<tr>
<th>Customer experience</th>
<th>Operations and supply chain</th>
<th>Finance and legal</th>
<th>Human resources</th>
<th>IT, data and automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of distinct use cases in S&amp;M: 11%</td>
<td>% of distinct use cases in operations and supply chain: 2%</td>
<td>% of distinct use cases in finance and legal: 4%</td>
<td>% of distinct use cases in human resources: 2%</td>
<td>% of distinct use cases in IT, data and automation: 3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Customer Experience</th>
<th>Operations</th>
<th>Finance</th>
<th>Human Resources</th>
<th>IT, Data and Automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI-enabled user authentication</td>
<td></td>
<td>AI-enabled user authentication</td>
<td>AI-based fraud detection</td>
<td>Conversational AI for employees</td>
<td>AI-powered business intelligence</td>
</tr>
<tr>
<td>AI for credit ratings</td>
<td></td>
<td>AI-based payment routing</td>
<td></td>
<td>Human Capital management</td>
<td>Data</td>
</tr>
<tr>
<td>AI enabled KYC</td>
<td></td>
<td>AI-based fraud detection</td>
<td></td>
<td>AI-based staff allocation</td>
<td>Document processing</td>
</tr>
<tr>
<td>AI-based conversational intelligence</td>
<td></td>
<td>AI-based debt collection</td>
<td></td>
<td></td>
<td>IT Security</td>
</tr>
<tr>
<td>AI-based conversational intelligence</td>
<td></td>
<td>AI-based compliance management</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each use case maybe leveraged across functions. Thus the % of distinct use cases will not add up to 100%

**Use case density** (% of companies addressing the use case, N=201 cos.)

- 6% to 8%
- 4% to 6%
- 2% to 4%
- 1% to 2%
- Less than 1%
**Appendix**

C. DeepTech use cases of vertical B2B SaaS cos. (3/3) - Technology

<table>
<thead>
<tr>
<th>Sales and marketing (S&amp;M) % of distinct use cases in S&amp;M: 7%</th>
<th>Engg, product and design % of distinct use cases in engg, product and design: 6%</th>
<th>Finance and legal % of distinct use cases in finance and legal: 3%</th>
<th>Human resources % of distinct use cases in human resources: 3%</th>
<th>IT, data and automation % of distinct use cases in IT, data and automation: 3%</th>
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<td><strong>Marketing and lead generation</strong></td>
<td><strong>Software development</strong></td>
<td><strong>Transaction management</strong></td>
<td><strong>AI-driven talent marketplace</strong></td>
<td><strong>Automation</strong></td>
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<td>Targeted marketing</td>
<td>Al-powered software development</td>
<td>AI-based payment routing</td>
<td>Al driven workforce analytics</td>
<td>AI-driven real-time captioning</td>
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<td>AI-driven customer segmentation</td>
<td>AI platform to build, deploy and manage ML models</td>
<td>Accounts receivables management</td>
<td>Al-based recruitment system</td>
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<td>AI-enabled lead generation</td>
<td>AR and VR gaming</td>
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<td>AI-enabled campaign management</td>
<td>Al-based APIs</td>
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<td><strong>Marketing and lead generation</strong></td>
<td><strong>Software development</strong></td>
<td><strong>Financial planning</strong></td>
<td><strong>Recruitment</strong></td>
<td><strong>IT, data and automation</strong></td>
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<td>Al-based software development</td>
<td>AI-powered business intelligence</td>
<td>Al-based recruitment system</td>
<td><strong>Device management</strong></td>
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<td>AI for content generation and editing</td>
<td>Al-enabled workflow automation</td>
<td></td>
<td></td>
<td>Al-enabled claims management</td>
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<td></td>
<td><strong>Software testing</strong></td>
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<tr>
<td>Conversational AI for customers</td>
<td>Al-powered testing</td>
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<tr>
<td>AI-based conversational intelligence</td>
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<td><strong>Software development</strong></td>
<td><strong>Human Capital management</strong></td>
<td><strong>Business Intelligence</strong></td>
<td><strong>IT Security</strong></td>
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<td>AI-powered business intelligence</td>
<td></td>
<td>Al driven talent marketplace</td>
<td>AI-based business intelligence</td>
<td>Al-based cyber threat intelligence</td>
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</table>

Each use case maybe leveraged across functions. Thus the % of distinct use cases will not add up to 100%

Use case density (% of companies addressing the use case, N=201 cos.)

<table>
<thead>
<tr>
<th>6% to 8%</th>
<th>4% to 6%</th>
<th>2% to 4%</th>
<th>1% to 2%</th>
<th>Less than 1%</th>
</tr>
</thead>
</table>

*Breaking ground: unravelling the DeepTech Potential in Indian B2B SaaS*
### Appendix

#### D. Distinct use cases

Indian B2B SaaS companies founded between 2015-19 are working on 21 distinct use cases unique to their cohort.

<table>
<thead>
<tr>
<th>Founded before 2005</th>
<th>Founded b/w 2005-2009</th>
<th>Founded b/w 2010-14</th>
<th>Founded b/w 2015-19</th>
<th>Founded b/w 2020 onwards</th>
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</thead>
<tbody>
<tr>
<td>AR and VR based mapping</td>
<td>AI-driven real time captioning</td>
<td>Network analytics</td>
<td>AI-powered coaching</td>
<td>AI-enabled event management</td>
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<tr>
<td>AI-based EV charging infrastructure</td>
<td>AI-enabled virtual meetings</td>
<td>Account receivables management</td>
<td>Behaviour analysis for students</td>
<td>AI for content translation</td>
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<tr>
<td>Drone services</td>
<td>Intelligent workspace management</td>
<td>Real-time feedback management</td>
<td>Conversational AI for students</td>
<td>AI powered policy generation</td>
</tr>
<tr>
<td>Real-time call routing</td>
<td>Database management</td>
<td>Al-based ticket management</td>
<td>Application security intelligence</td>
<td></td>
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<tr>
<td>Blockchain-based document management</td>
<td></td>
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<td></td>
<td>Smart interior designing</td>
<td>AI-based debt collection</td>
<td></td>
<td></td>
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<td></td>
<td>AI-enabled Healthcare management</td>
<td>AI marketplace for developers</td>
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<td></td>
<td>AI enabled KYC</td>
<td>Workforce safety automation</td>
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<tr>
<td></td>
<td>AI based competitive insights</td>
<td>Intelligent ADM solution</td>
<td></td>
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<tr>
<td></td>
<td>Event-based vision systems</td>
<td>AI driven personalized user onboarding</td>
<td></td>
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<tr>
<td></td>
<td>AI driven personalization</td>
<td>AI enabled cost management</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Data backup and recovery</td>
<td>AI driven team communication</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AI based smart packaging</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AI based quality control</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AR and VR gaming</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AI based video telematics</td>
<td></td>
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<td></td>
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<td>AI-enabled virtual dressing room</td>
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<td></td>
<td></td>
<td>AI-based procurement analytics</td>
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<td></td>
<td></td>
<td>RFP automation</td>
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<td>AI-enabled claims management</td>
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<td>AI-based code translator</td>
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<td></td>
<td></td>
<td>AI-powered consumer research</td>
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</table>

40% of distinct use cases are unique to specific cohorts by year of establishment.
Glossary

<table>
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<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AI/ML</td>
<td>Artificial intelligence/Machine learning</td>
</tr>
<tr>
<td>B2B</td>
<td>Business to Business</td>
</tr>
<tr>
<td>Bootstrapped</td>
<td>Companies which rely on internal money rather than outside investments</td>
</tr>
<tr>
<td>CX</td>
<td>Customer experience</td>
</tr>
<tr>
<td>CXO</td>
<td>Denotes executive leadership level designation</td>
</tr>
<tr>
<td>GTM</td>
<td>Go to market</td>
</tr>
<tr>
<td>Horizontal Application SaaS</td>
<td>Horizontal business applications e.g., Customer Relationship Management (CRM), Enterprise Resource Planning (ERP)</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers and acquisitions</td>
</tr>
<tr>
<td>Product market fit</td>
<td>Degree to which a product satisfies a strong market demand</td>
</tr>
<tr>
<td>SaaS</td>
<td>Software as a service</td>
</tr>
<tr>
<td>SMB</td>
<td>Small and medium size business</td>
</tr>
<tr>
<td>S&amp;M</td>
<td>Sales and marketing</td>
</tr>
<tr>
<td>Vertical SaaS</td>
<td>Vertical-specific business applications e.g., hospitality management, banking applications</td>
</tr>
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References

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Reference</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Official portal of EU data, accessed August 2023</td>
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<tr>
<td>2</td>
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<td>3</td>
<td>“Germany launches €1 billion fund for climate and deeptech scaleups,” sifted backed by Financial Times (FT), February 2023</td>
</tr>
<tr>
<td>4</td>
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<td>5</td>
<td>Israel Innovation Authority website, accessed August 2023</td>
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<td>6</td>
<td>“UK Spring Budget: Government trumpets improved tax relief scheme for ‘R&amp;D-intensive SMEs’,” TechCrunch, March 2023</td>
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Acknowledgements

We are thankful for the support and guidance of nasscom, CXOs from Indian B2B SaaS companies who participated in the research and EY partners for their valuable inputs.

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<th>Phone Number</th>
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<td>Ahmedabad</td>
<td>22nd Floor, B Wing, Privilon Ambli BRT Road, Behind Iskcon Temple, Off SG Highway</td>
<td>+91 79 6608 3800</td>
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<tr>
<td>Bengaluru</td>
<td>12th &amp; 13th floor “UB City”, Canberra Block No. 24, Vittal Mallya Road Bengaluru</td>
<td>+91 80 6727 5000</td>
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<td>Chandigarh</td>
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<td>+91 172 6717800</td>
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<td>Chennai</td>
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<td>Hyderabad</td>
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<tr>
<td>Jamshedpur</td>
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