

The Journey from Commercial to Open-Source Software

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Prof. Sunil S. Shirvaiker
NSOMASA - NMIMS University

Prof. Mahesh Mali
MPSTME - NMIMS University



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Agenda

Background

Market
Scenario

- Open-Source Software
- Commercial Software

Journey of
NMIMS

Hands-On-
Session

Conclusion



Background

The Birth of a Linux™



In 1991, Linus Torvalds created the Linux kernel due to frustrations with existing operating systems.

More developers joined the Linux project, propelling the concept of open-source software & demonstrating the power of collective effort & sharing knowledge and resources.





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Market Scenario

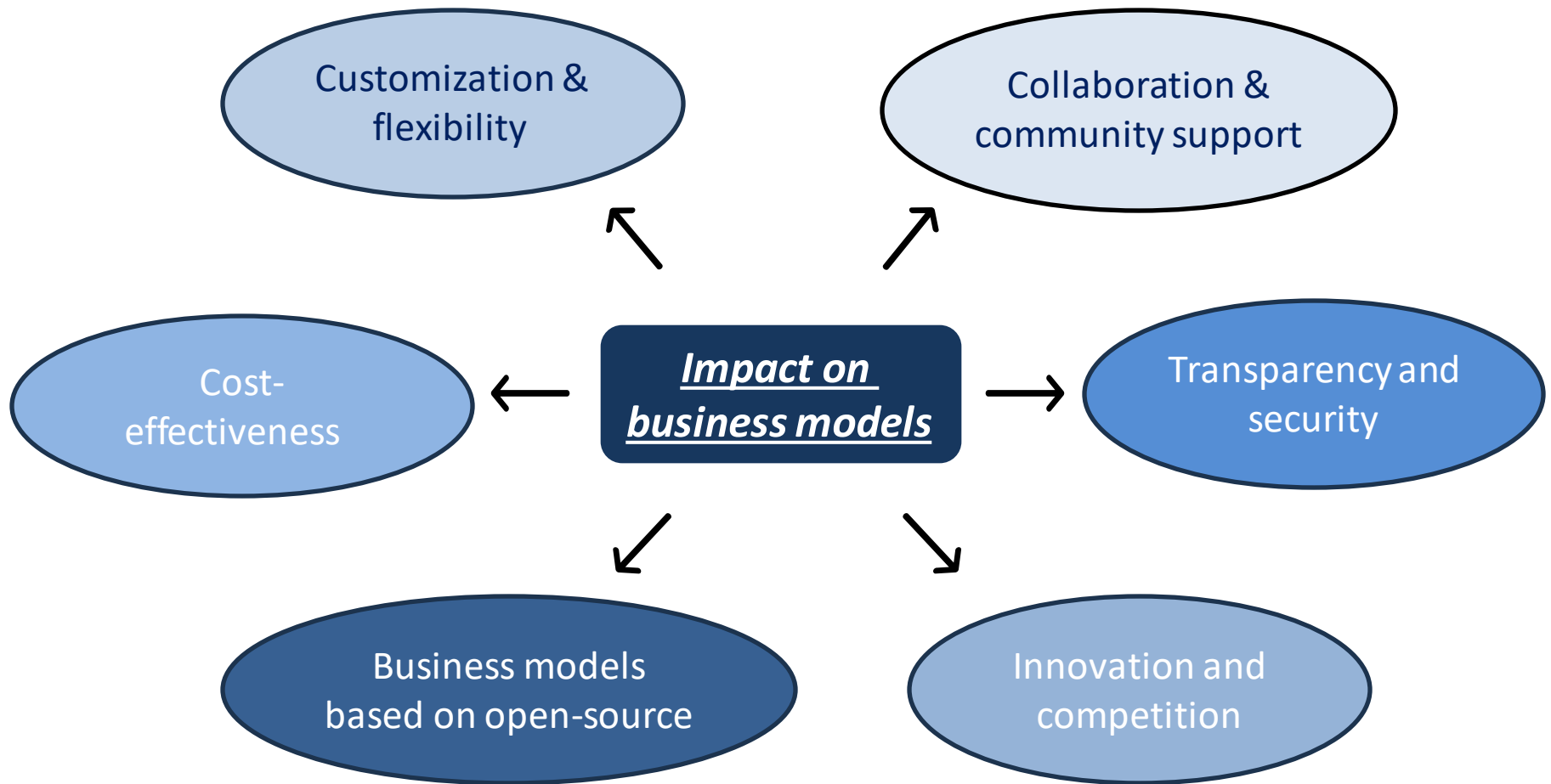


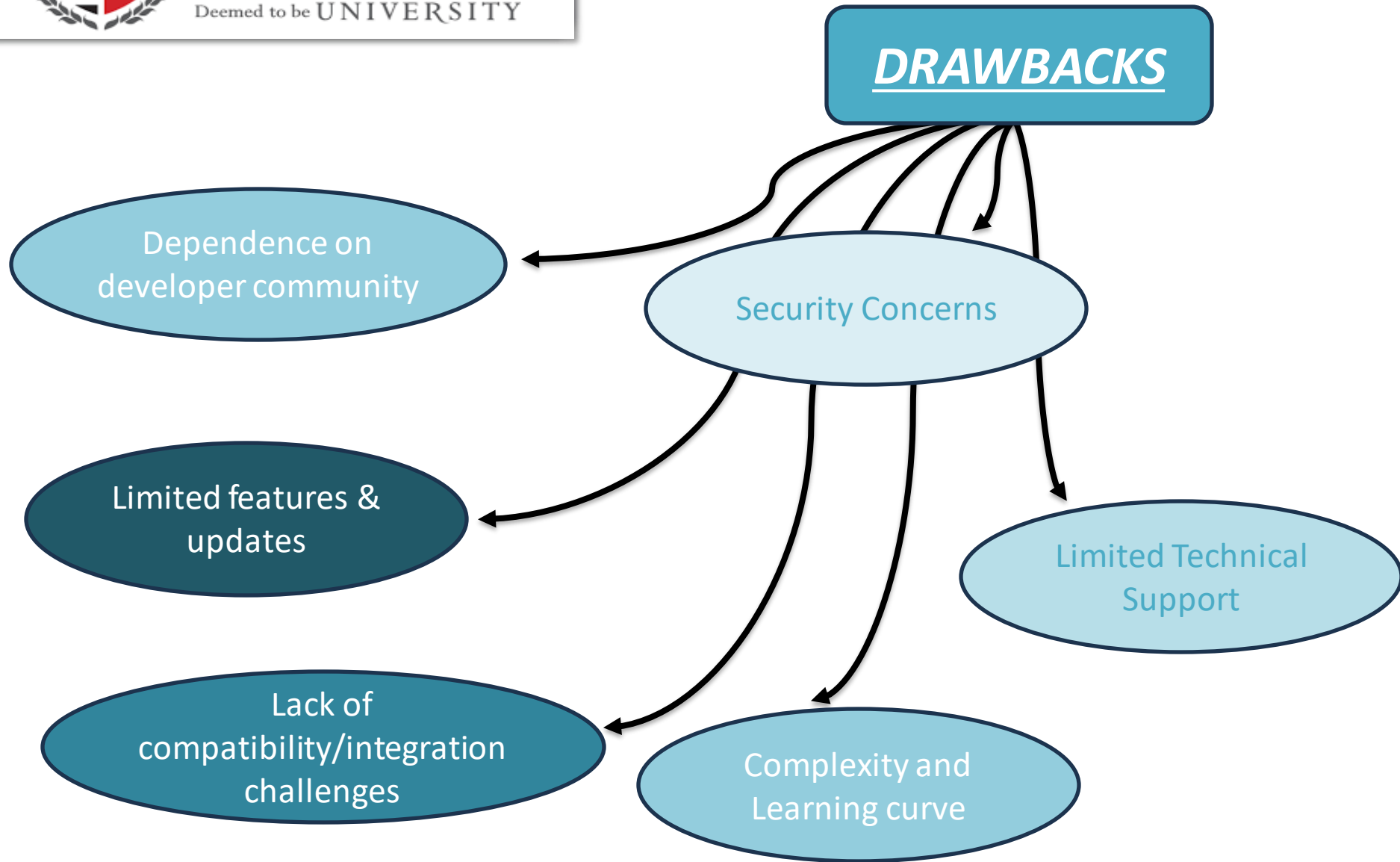


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Market Scenario

| | OPEN-SOURCE | COMMERCIAL |
|----------------------------|---|--|
| DATA PROGRAMMING |   NumPy  MySQL |   R Studio  |
| WEBSITE DEVELOPMENT |  WORDPRESS |  GoDaddy  |
| VISUALIZATION |  plotly  matplotlib |  +ableau  Qlik Sense  Power BI |
| VIDEO BROADCASTING |  OBS Open Broadcaster Software |  Microsoft Teams  Studio |
| AI/ML |  Keras  TensorFlow  PyTorch |  amazon LEX  IBM Watson  pypestream |
| OPERATING SYSTEM |  android  Linux |  iOS  Windows |







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Commercial Software

ADVANTAGES



Professional Technical Support



User-friendly Interface



Regular Updates and Features



Compatibility and Integration



Predictable Costs



Brand Reputation and Reliability



DISADVANTAGES



Higher Cost



Limited customization



Proprietary Nature



Technical Support



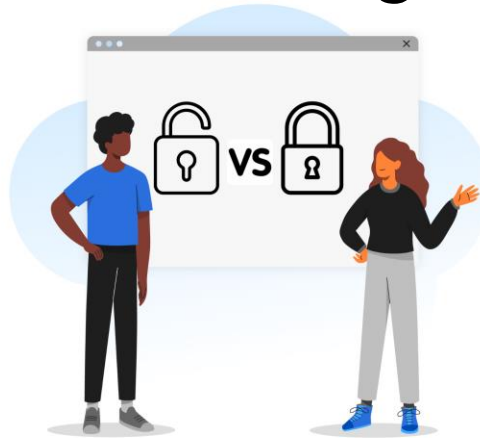
Vendor Lock-in



Updates and Development



- *Both have their own strengths and weaknesses*

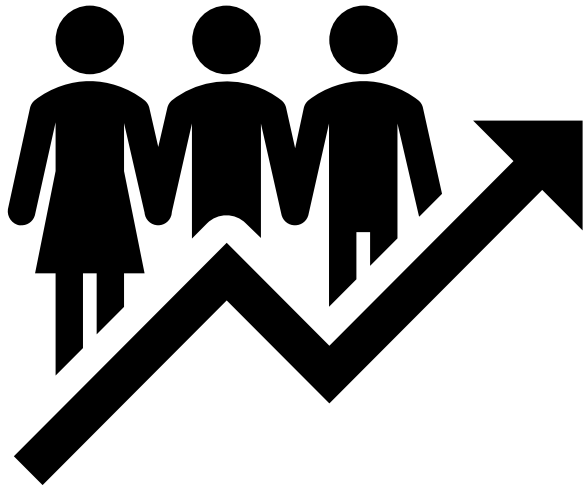


- *Choice between the two often depends on the specific needs and resources of the user*
 1. Cost considerations
 2. Accessibility and Availability
 3. Customization and Flexibility
 4. Community Support



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Journey of NMIMS





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SAS – From Product Vendor to Academic Partner



2011-

1st
SAS EAS License
procured for 1
Campus of
SVKM'S NMIMS



2012-

Upgraded
to campus
license across 4
Campus of
SVKM'S NMIMS



2013-

SAS Education
Services got
incorporated for
3 SVKM'S NMIMS
Schools



2014-

Upgraded to
SAS E MINER
License in 4
Campus of
SVKM'S NMIMS



2015 / 2023-

- SVKM'S Trust + NMIMS University Upgraded across the SVKM'S Institutions for SAS Education Suite.
- 129 Faculties across nmims schools SAS Trained.
- 1100+ Statistics Students and students from various nmims schools trained .
- SVKM'S NMIMS Center of Excellence – Business Analytics & Data Sciences.
- SAS | NMIMS Data Mining Championship.
- SAS – First Distance Learning Program.

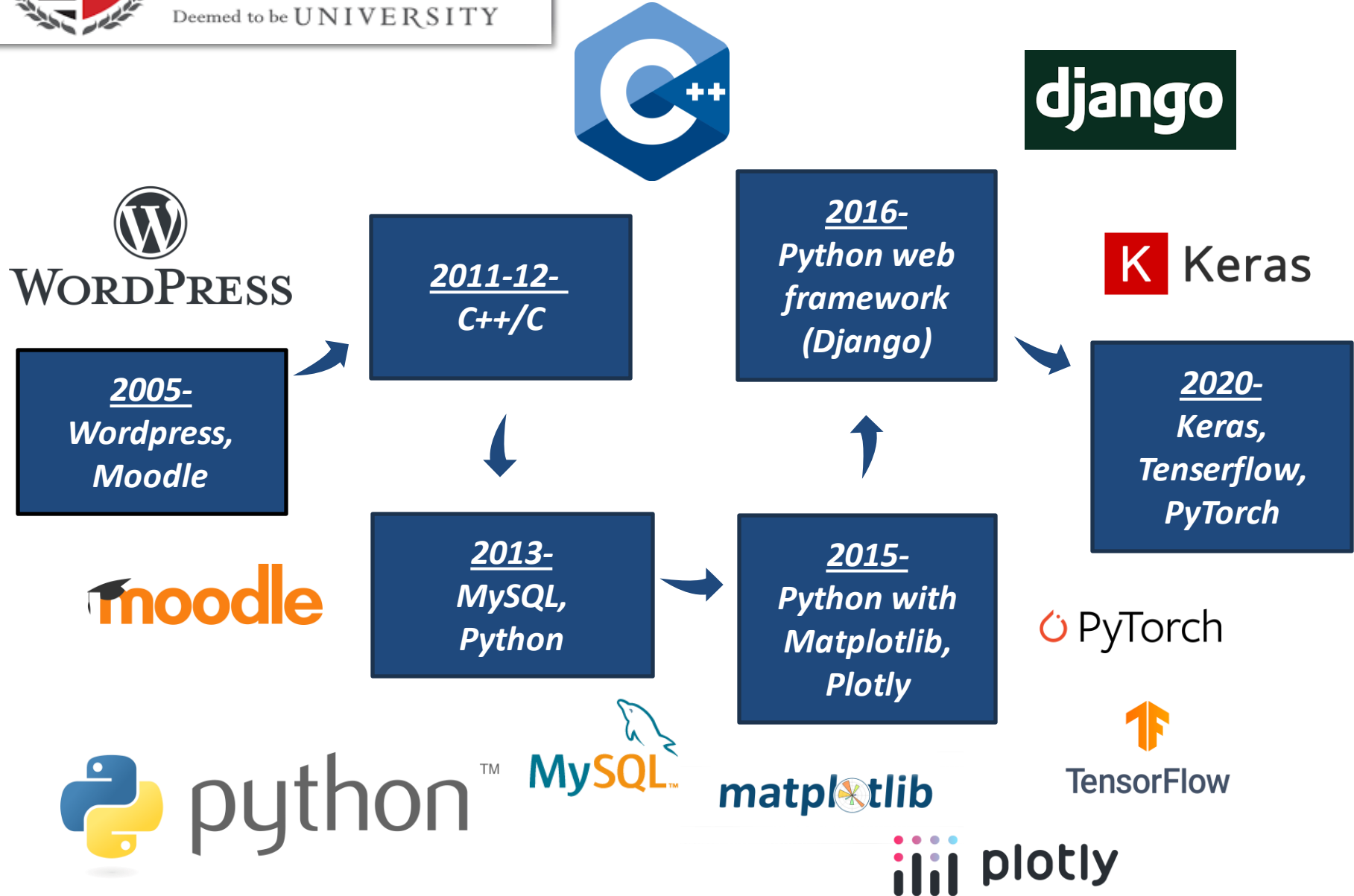


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Partnerships



***NMIMS and SAS join hands to propel India's leap in Analytics
– May 2014***



***Business Analytics & Data Mining
Championship (24 hours Hackathon)***

Conducted on October 12 to 14, 2017



- Exclusive partner SAS & Hindustan Unilever
- 1195 participants (350+ teams) including students from top institutes
- Covered by 3 media houses (Business Standard etc.)
- Job fair (HDFC,SAS,LTI, Fractal, Epoch, Indiabulls)

Indiabulls



HDFC BANK

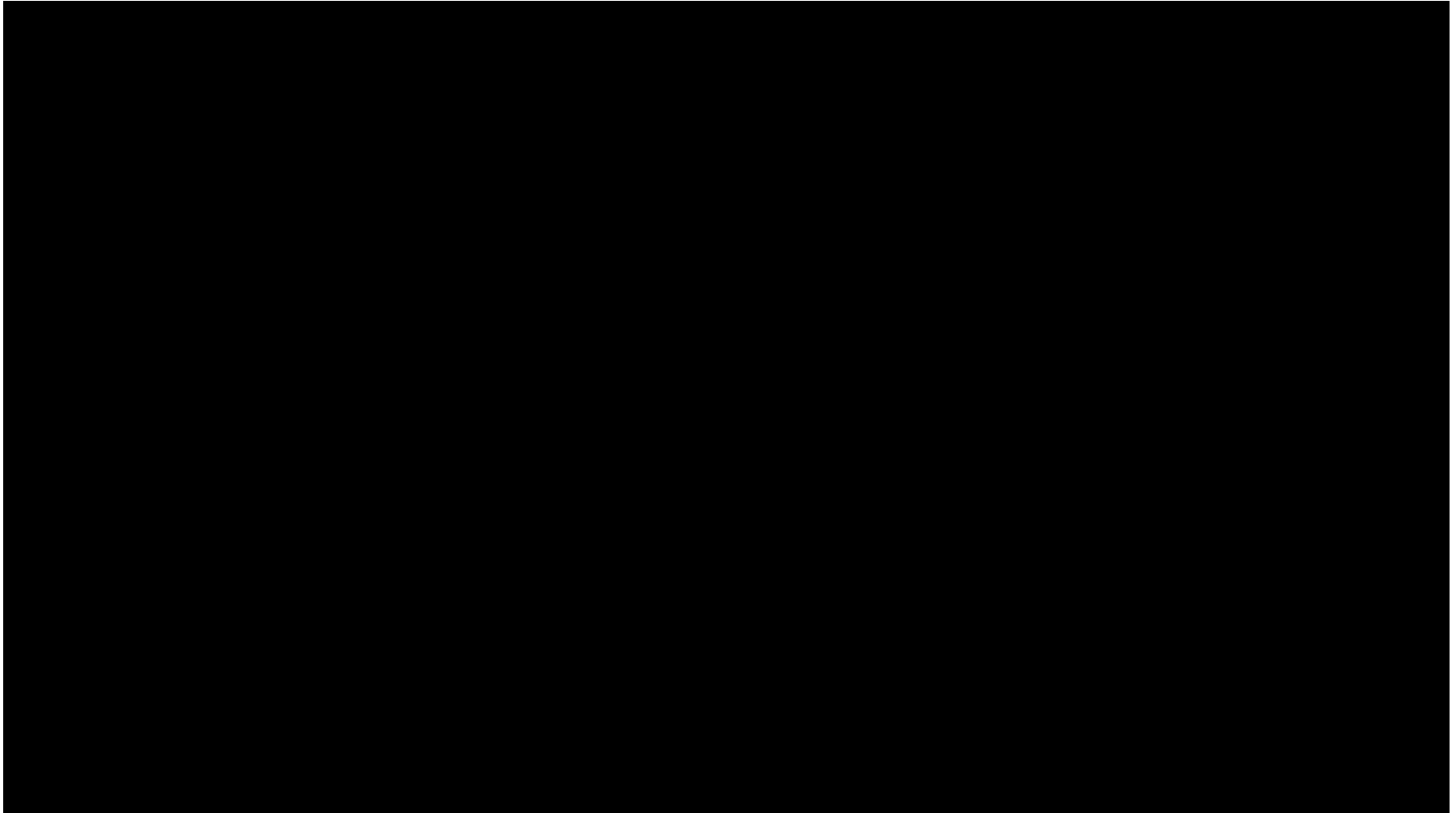
fractal
INTELLIGENCE FOR IMAGINATION

- Panel Discussion by eminent corporate leaders
- Venue – Mukesh Patel Auditorium, Mumbai
- Prizes worth INR 10 Lakhs & sponsored USA trip to compete with global teams



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BADM 2017





BADM 2018

***Business Analytics & Data Mining
Championship (24 hours Hackathon)***

Conducted on October 4 to 6, 2018

- Free SAS tools & e-learning /Open-source tools on data for good initiative
- Exclusive partner SAS
- 4300+ participants (750+ teams) including working professionals and students from top institutes
- Panel Discussion by eminent corporate leaders
- Venue – Mukesh Patel Auditorium, Mumbai
- Prizes worth INR 12 Lakhs & sponsored USA trip to compete with global teams

***Business Analytics & Data Mining
Championship (24 hours Hackathon)***

Conducted on October 10 to 12, 2019

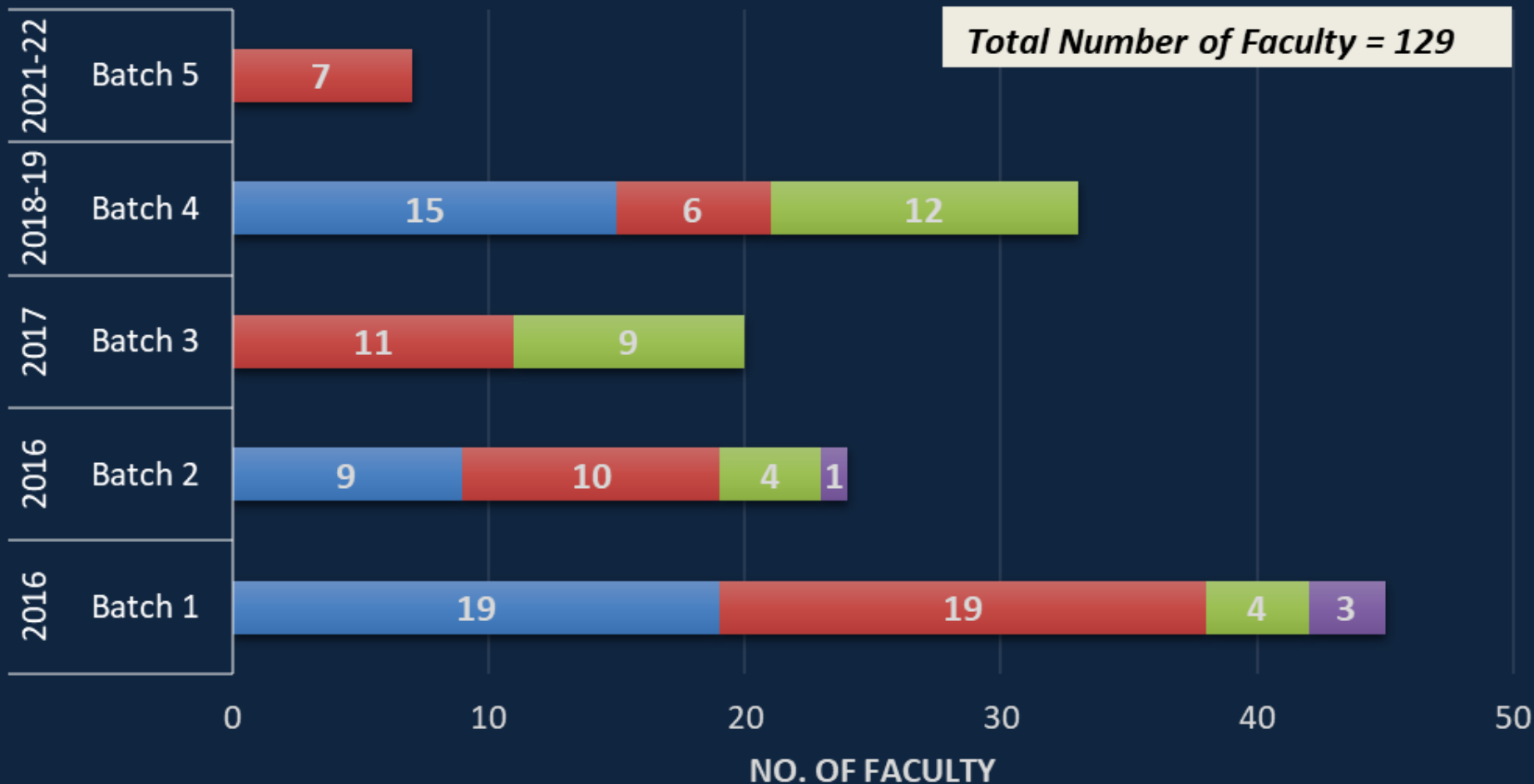


- Open-source tools
- 2600+ participants (400+ teams) including students from top institutes
- Panel Discussion by eminent corporate leaders
- Venue – Mukesh Patel Auditorium, Mumbai
- Prizes worth INR 12 Lakhs

FACULTY TRAINING PROGRAMS CONDUCTED

■ VA ■ BASE SAS ■ PM ■ Hadoop

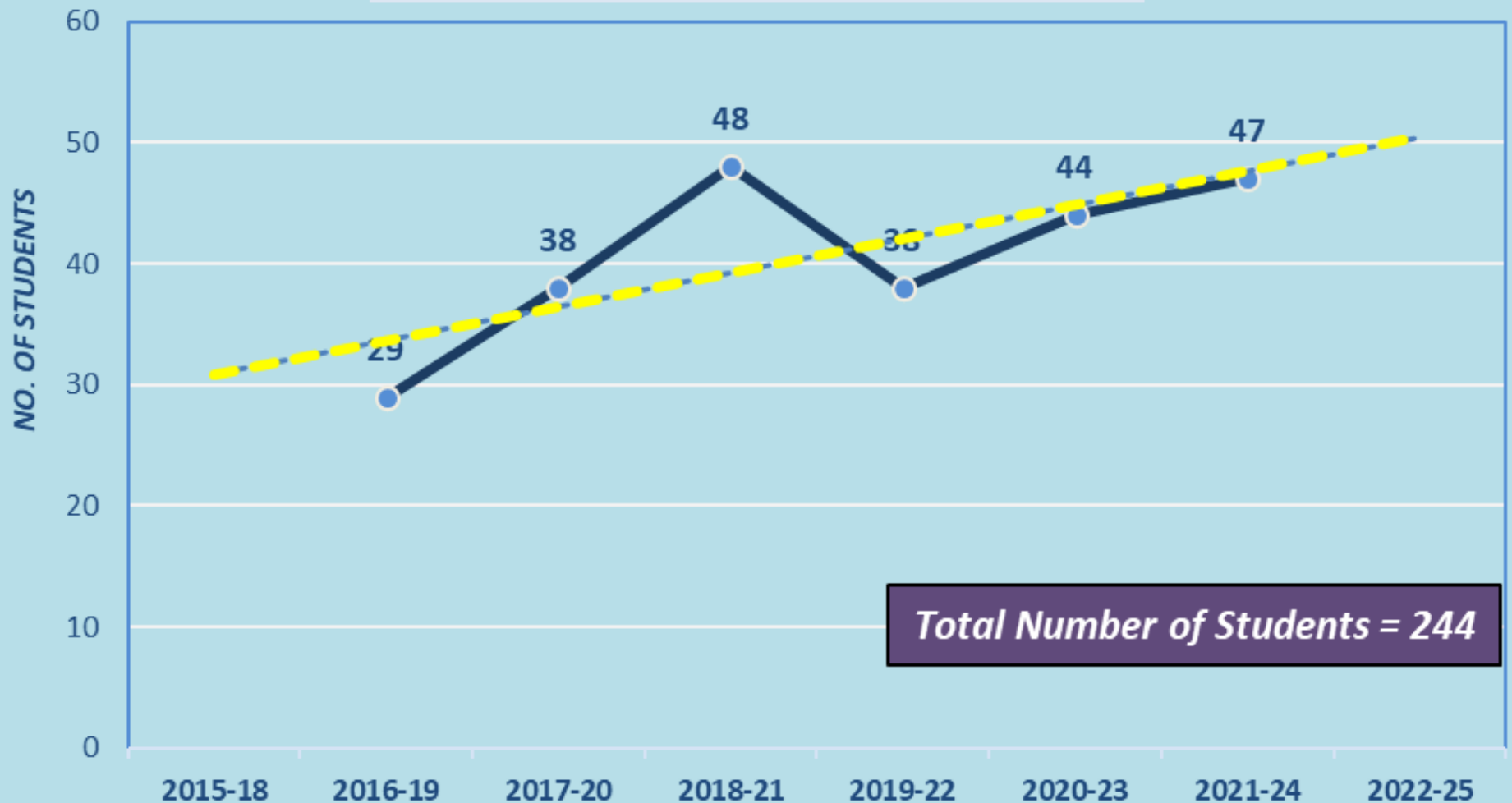
Total Number of Faculty = 129





BSc- SAS VA

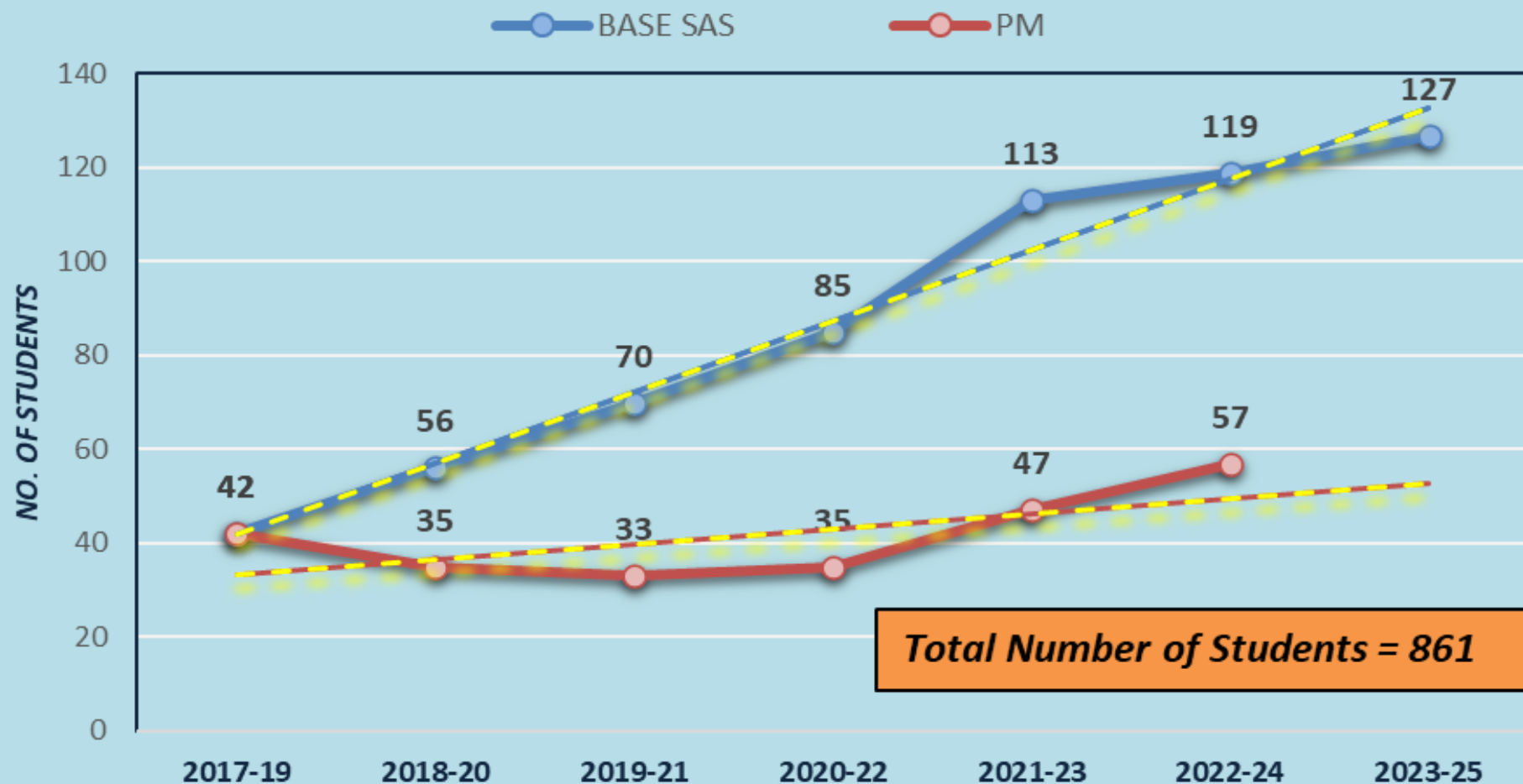
No. of statistics students from 2017 to 2023





MSc- BASE SAS and PM

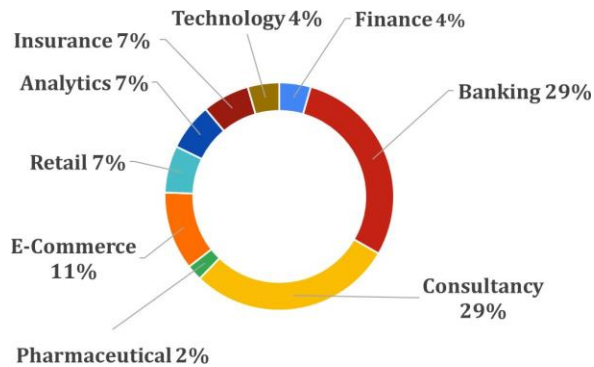
No. of statistics students from 2017 to 2023





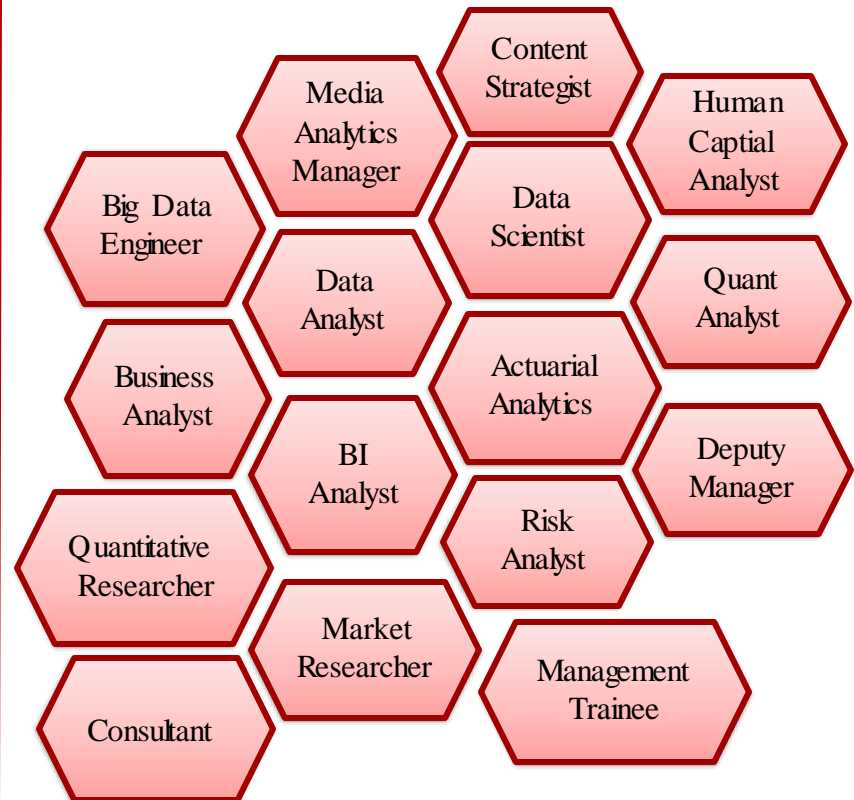
PLACEMENT OVERVIEW 2020-2022

SECTORS

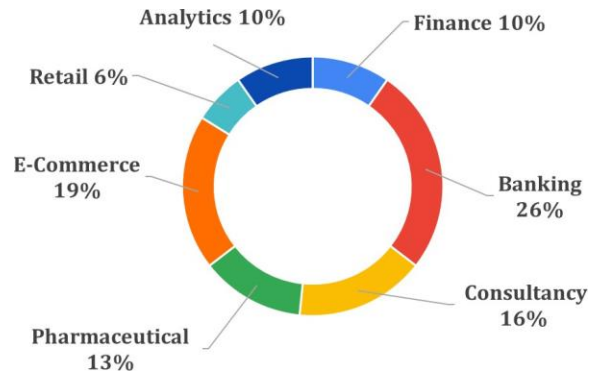


M.Sc. ASA

PROFILES OFFERED



M.Sc. Statistics



Hands-On-Session

- Imagine a world where knowledge is not confined to the walls of a few elite institutions but is freely shared and built upon by a global community. ***This is the essence of open-source software.***
- Our demonstration session today aims to take you on a captivating journey through the world of open source, ***showcasing its power, flexibility, and potential.***



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A Journey of Discovery and Collaboration











A Journey of Discovery and Collaboration













Demonstrations



| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|-------------------------|---|---|
| DATA PROGRAMMING | MySQL  | SAS  |
| WEBSITE | WordPress  WORDPRESS | WIX  |
| VISUALIZATION | Python: Matplotlib  | SAS VA  |
| VIDEO PROCESSING | OBS  | Camtasia  |



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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
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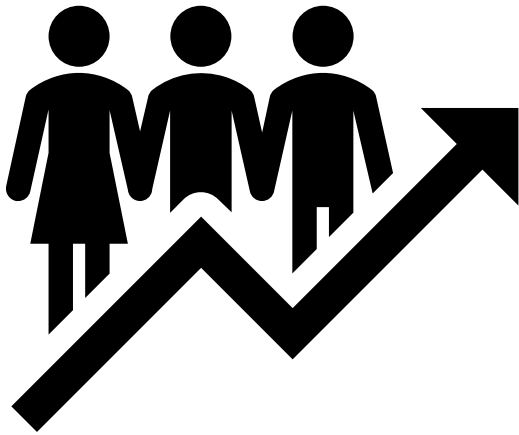


| | OPEN-SOURCE As of Oct 2022, Approx. 60% Market Share | COMMERCIAL As of Oct 2022, Approx. 40% Market Share |
|-------------------------|--|---|
| DATA PROGRAMMING | MySQL  | SAS  |
| Features | MySQL has a vast and active community | SAS Community (Limited) |
| | Allows users to modify the source code for unique needs of organization | Not Allowed |
| | Need ecosystem of third-party tools to extend its functionality | Own Ecosystem of Tools |
| | MySQL is platform-independent | limited to specific operating systems |





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Demonstration













| | OPEN-SOURCE As of Oct 2022, Approx. 60% Market Share | COMMERCIAL As of Oct 2022, Approx. 40% Market Share |
|-------------------------|--|---|
| DATA PROGRAMMING | MySQL  | SAS  |
| Experience | | |
| | | |
| | | |
| | | |



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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|-------------------------|---|---|
| <i>DATA PROGRAMMING</i> | MySQL  | SAS  |
| <i>WEBSITE</i> | WordPress  WORDPRESS | WIX  |
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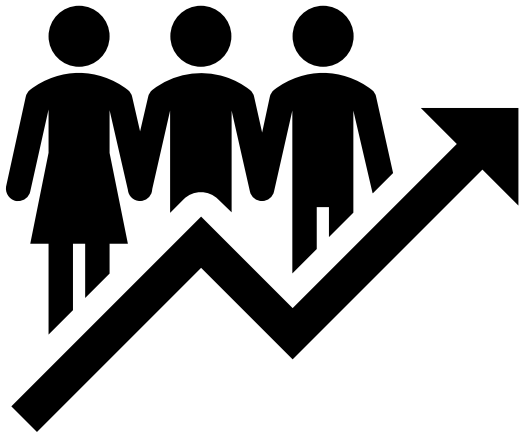


| | OPEN-SOURCE Approx. 78% Market Share | COMMERCIAL Approx. 22% Market Share |
|-----------------|---|---|
| WEBSITE | WORDPRESS | WIX |
| Features | WordPress allows users to modify the source code | As per company only |
| | vast and active community of developers, and experts | Dedicated support |
| | Handle large amounts of data and supports growing businesses | offer scalability and security at cost |
| | easily export it if they decide to switch to another platform | challenging for users to transfer their content |



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Demonstration













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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|--------------------------|--------------------|-------------------|
| <i>WEBSITE</i> | WORDPRESS | WIX |
| <i>EXPERIENCE</i> | | |
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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|-------------------------|---|--|
| <i>DATA PROGRAMMING</i> | MySQL  | SAS  |
| <i>WEBSITE</i> | WordPress  WORDPRESS | WIX  |
| <i>VISUALIZATION</i> | Python: Matplotlib  | SAS VA  |
| <i>VIDEO PROCESSING</i> | OBS  | Camtasia  Camtasia |

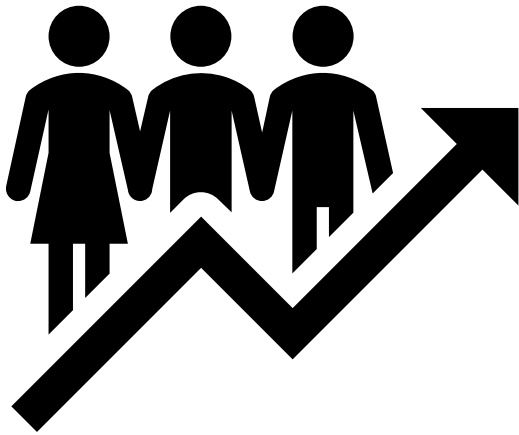


| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|-----------------------------|---|--|
| <i>VISUALIZATION</i> | Python: Matplotlib | SAS VA |
| <i>Features</i> | Availability and Accessibility | Licensing required |
| | high level of flexibility and customization | user-friendly interface, has limited customization options |
| | vast community of users and developers | Limited community and dedicated support |
| | integrates seamlessly with the Python | limited compatibility with other tools and platforms |



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Demonstration













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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|-----------------------------|---------------------------|--------------------------|
| <i>VISUALIZATION</i> | Python: Matplotlib | SAS VA |
| <i>Experience</i> | | |
| | | |
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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|-------------------------|---|---|
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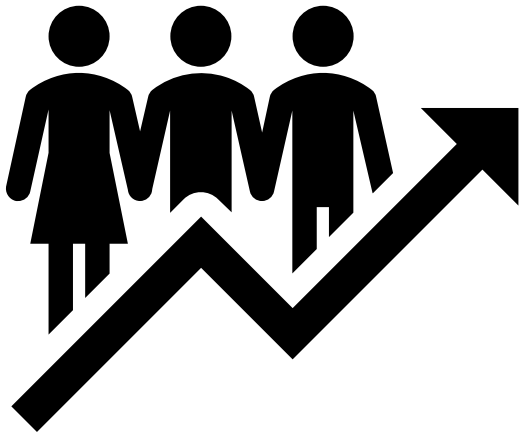
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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|------------------------|--|-----------------------------------|
| <i>VIDEO</i> | OBS | CAMTACIA |
| <i>Features</i> | Supports multiple platforms | Windows support |
| | Provides a range of customizable settings and output formats | Includes a vast library of assets |
| | learning curve due to its advanced features | User friendly |
| | Extensive community | Limited community support |



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Demonstration





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| | <i>OPEN-SOURCE</i> | <i>COMMERCIAL</i> |
|--------------------------|--------------------|-------------------|
| <i>VIDEO</i> | OBS | CAMTACIA |
| <i>EXPERIENCE</i> | | |
| | | |
| | | |
| | | |



- **Commercial System**

- Look and feel is better (Ease of use)
- Dedicated Support
- Specialized Features
- Security with vendor

- **Open System**

- Lot of Customization & Flexibility
- Reduced cost
- Innovations & Collaboration
- No Vendor Lock In (Any time we can transfer to other sw)

- In this session, we have provided insights and examples to help you navigate the decision-making process when selecting between open-source and commercial software.
- We encourage you to continue exploring these topics and stay updated on the latest developments in the world of software to make the best choices for your unique situation.



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*Thank
you*

