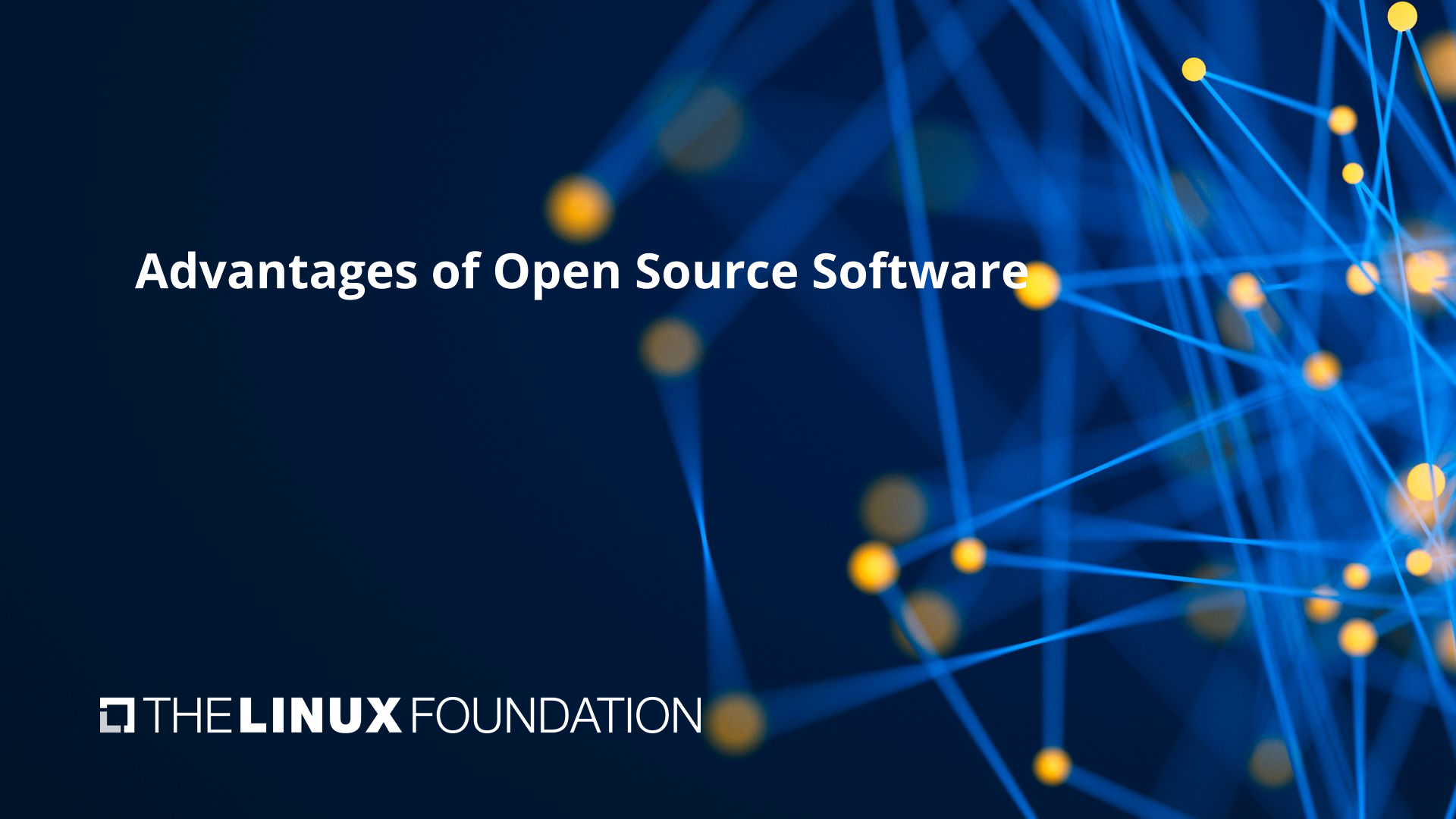
Advantages of Open Source Software



THE LINUX FOUNDATION

Collaborative Development

- Enables software projects to build better software
- When progress is shared, not everyone has to solve the same problems and make the same mistakes - faster progress and reduced costs
- Having more eyeballs viewing code and more groups testing it leads to stronger and more secure code
- It is often hard for competitors to get used to the idea of sharing, and grasping that the benefits can be greater than the costs
- Competitors can compete on user-facing interfaces - users see plenty of differentiation and have varying experiences

Security and Quality of Source Code

- Coding standards and styles tend to be cleaner and more consistent on community projects:
  - It's embarrassing to show ugly, sloppy code
  - More people have to understand and work on the code
- More eyeballs examining code looking for security weaknesses before they are discovered by bad actors
- More input in original design to avoid bad ideas
- No "security through obscurity"
- No "just trust me"
- Potentially faster bug repair

Stakeholders

Some of the stakeholders benefiting from Open Source Software include:

- Users
- Businesses
- Education
- Developers

Users: Flexibility

- Mix and match software from different sources
- Save money on buying or leasing software
- Avoid vendor lock-in, maintain choice
- Look under the hood - “trust but verify”
- Have more fun!

Business: Collaborative Development

- Lowers total cost of development
- Speeds up time to market
- Encourages community feedback: criticism, suggestions, contributions
- Supports upstreaming to reduce future costs for new products that reuse code
- Uses well-delineated APIs

Business: Marketing

- Customers know what they are getting, can have confidence in quality, no secrets
- Product is seen as being part of a large ecosystem of related products
- More flexible, possible modular construction
- Adoption by larger community can lead to customer confidence product is here to stay

Education: Elementary-High (El-Hi) School, Public Systems

- Very large amount of teaching resources at little or no cost
- Very wide range of areas available for: using, operating, system administration, and programming
- Students do not become locked into vendor products
- School systems don't have to pay for expensive software, even at a discount
- Lower hardware costs and easier to use old hardware
- Skills that students will need in the workforce
- Unleashes student creativity: more fun!

Education: University

In addition to already discussed advantages (El-Hi school level) students can:

- Study and work on the internals of operating systems, applications and libraries, and system administration utilities
- Enter the workforce where they are most needed
- Develop good habits
- Be easily evaluated by prospective employers since their work is publicly accessible

Developers

- Makes it easier to not have to re-invent everything
- Helps to make good early decisions on product design
- More eyeballs on code find and fix bugs faster
- Allows for suggestions/contributions from a larger group
- Helps to find the next job
  - Code is readily available for evaluation
  - Shows how well you work and play with others
  - Shows how good you are at mentoring and maintaining projects and sub-projects
- Builds community (you are not alone!)