Transitioning between various RMarkdown packages for workflow optimization in academic research; a graduate student’s perspective.

Brent Thorne
Hello useR! 2019

Github - brentthorne
Twitter - brentthorne18
Email - brentthorne18@gmail.com

Quick Facts:

- Started using R in 2014
- Hated it!
- Realized the value in FOSS
- Taught myself R
- Made the \{posterdown\} package
- Now known as the "you can do that in R!" guy in my lab!
Hello useR! 2019

Github - brentthorne
Twitter - brentthorne18
Email - brentthorne18@gmail.com

Quick Facts:

- Started using R in 2014
- Hated it!
- Realized the value in FOSS
- Taught myself R
- Made the \{posterdown\} package
- Now known as the "you can do that in R!" guy in my lab!
## What packages can I use?

<table>
<thead>
<tr>
<th>Grad Student's Needs</th>
<th>Possible R packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking notes</td>
<td>rmarkdown / pagedown</td>
</tr>
<tr>
<td>Manage Citations</td>
<td>rbbt / citr /</td>
</tr>
<tr>
<td>Conference Posters</td>
<td>pagedown / posterdown <em>(personal bias on this one)</em></td>
</tr>
<tr>
<td>Thesis/ Dissertation</td>
<td>bookdown / thesisdown / pagedown</td>
</tr>
<tr>
<td>Slide Shows</td>
<td>xaringan / beamer</td>
</tr>
<tr>
<td>Make a CV</td>
<td>rmarkdown / pagedown</td>
</tr>
<tr>
<td>Manuscripts</td>
<td>rticles / pagedown</td>
</tr>
</tbody>
</table>
### What packages can I use?

<table>
<thead>
<tr>
<th>Grad Student's Needs</th>
<th>Possible R packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking notes</td>
<td>rmarkdown/ pagedown</td>
</tr>
<tr>
<td>Manage Citations</td>
<td>rbbt/ citr/</td>
</tr>
<tr>
<td>Conference Posters</td>
<td>pagedown/ posterdown <em>(personal bias on this one)</em></td>
</tr>
<tr>
<td>Thesis/ Dissertation</td>
<td>bookdown/ thesisdown/ pagedown</td>
</tr>
<tr>
<td>Slide Shows</td>
<td>xaringan/ beamer</td>
</tr>
<tr>
<td>Make a CV</td>
<td>rmarkdown/ pagedown</td>
</tr>
<tr>
<td>Manuscripts</td>
<td>rtiicles/ pagedown</td>
</tr>
</tbody>
</table>
Run, or he's going to tell us about again!
New User's

- Show them, don't tell them
- Show them only 1 item at a time
- Ask them if they want help getting started
LaTeX or HTML?
LaTeX or HTML?

- Can be difficult to transition between the two.
- Often a person sticks with what they started with.
Can we simplify syntax?

It doesn't work...... why?

It works....... why?
Can we simplify syntax?

- New users are put off when needing to change what they know for little gain.

- I made `posterdown` to ensure a document written in `rmarkdown` could be immediately turned into a conference poster.
Why should your supervisors care?

1) Version control

2) Reproducible

3) More time for the important stuff, think of all the manuscripts!

4) Check up on progress from a distance....

5) No need to track down a student years after they're gone for data/analysis.
Why should supervisors care?

1) Version control
2) Reproducible
3) More time for the important stuff, think of all the manuscripts!
4) Check up on progress from a distance....
5) No need to track down a student years after they're gone for data/analysis.
Conclusion

- R markdown and other down packages are changing the way academia can become more streamlined for graduate students.

- When creating new packages/ templates for the downverse it will be important to consider how a template may be transitioned to or from by simplifying the syntax.

- Let's encourage all levels of academia to embrace reproducible research!
Thank you to useR! 2019 for providing a scholarship for me to attend this years meeting!