TUG is TeX users helping each other

Jonathan Fine

1 What is a user group?

If you are reading this, then you are most likely a
TeX user, and a member of the TeX Users Group.
The essence of TUG is TeX users helping each other.

For this to happen, we must ask for and offer
help to each other. *TUGboat* articles mostly offer
useful information. Online forums allow questions to
be asked and answered, sometimes in close to real
time.

2 The rise and fall of TUG

TUG was founded around 1982. Membership grew
rapidly until about 1992. Since then it has declined,
with a clear temporary reversal between 1998 and
2003, and a few minor ups and downs. TUG mem-
bership is now at its lowest point since about 1985,
about 1/3 its peak.

3 TUG's finances

All figures are in thousands, rounded. In 2016 TUG's
income was $104. Running the office cost $75, and
producing *TUGboat* $25. Legal fees were $14. There
were other expenses. At year's end, there was a loss
of $21, reducing TUG's assets to $195.

4 Communication is the essence

The essence of TUG is helpful communication be-
tween TeX users. Here, of course, Board members
have a special responsibility. I ask the Board to do
more to encourage and participate in helpful member-
to-member communication.

5 The TUG members mailing list

There's already a mailing list for this: http://tug.org/mailman/listinfo/members. Sadly, it's close
to dead. In 2017 there were just 2 threads, and 3
solitary messages. Earlier years are similar.

6 You and the revival of TUG

Without helpful open communication between mem-
bers, TUG will continue to decline. And with helpful
open communication, we'll make the best of what
there is. Please, if you're a TUG member, email
postmaster@tug.org and ask to be placed on the
TUG members list. And then a future will be possi-
ble.

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LaTeX and Jupyter, TikZ and Vega

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1 Then and now

When Don Knuth created TeX in the 1970s and 80s,
publishing was mostly on paper. TeX was created to
solve the problem of computer typesetting, particu-
larly for technical content. The portable computers,
including the mobile phone, have changed publishing.
Many people prefer laptop and notebook computers
to paper books.

2 Laboratory and scientific notebooks

The great experimental physicist Michael Faraday
(1791–1867) kept a lab diary. Today we might do
this on a computer, as a private blog, or a scientific
notebook, such as Jupyter.

TeX and LaTeX solved the problem of typeset-
ting, for printing on paper. Today, Project Jupyter
develops "open-source software, open standards, and
services for interactive and reproducible computing".

3 Jupyter and LaTeX

In many ways, Jupyter is now what LaTeX was in the
1980s. It's got a growing and well-funded community,
and making steady and rapid progress. It is a major
and well-respected force.

4 PGF/TikZ and D3/Vega

PGF/TikZ is a deservedly popular TeX-based techni-
cal drawing package. In it, PGF/TikZ is a low-level/
high-level language pair.

In the parallel universe of scientific web publish-
ing, D3/Vega is a similar language pair, based not
on TeX but on HTML5.

Many would benefit from a bridge between TikZ
and Vega, particularly those who want high-quality
visualisation in both PDF and interactive HTML5.

5 Further reading (and browsing)

In January 2018 Nature published a Toolbox article
*Data visualization tools drive interactivity and repro-
ducibility in online publishing.* The URL is https://www.nature.com/articles/d41586-018-01322-9.

Inspired by this Nature article, I gave a talk
at the March 2018 London PyData meetup. The
URL is https://jfine2358.github.io/slides/2018-nature-jupyter-altair-vega-binder.html.

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