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No need to dive for this PEARL

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UNIVERSITY OF PLYMOUTH

No need to dive for this PEARL

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pearl

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PEARL (Plymouth Electronic Archive and Research Library) is the open access (OA) research repository for the University of Plymouth, safeguarding the University's research outputs, theses and data. In this poster, we reflect on the history of our repository, revisiting the milestones that have taken it from very humble beginnings to its current status as a core institutional resource.

2006: A GRAIN OF SAND

Many believe that pearls originate from a single grain of sand, which over time grows into a beautiful gem. That may not be the entire truth about the natural origin of these stones, but it is a good analogy for the history of our repository. PEARL was first set up in 2006. In the early days, most of the interest in the repository was from research groups looking for a place where they could store reports and other grey literature. Few could imagine that one day PEARL would become the key resource it is today.
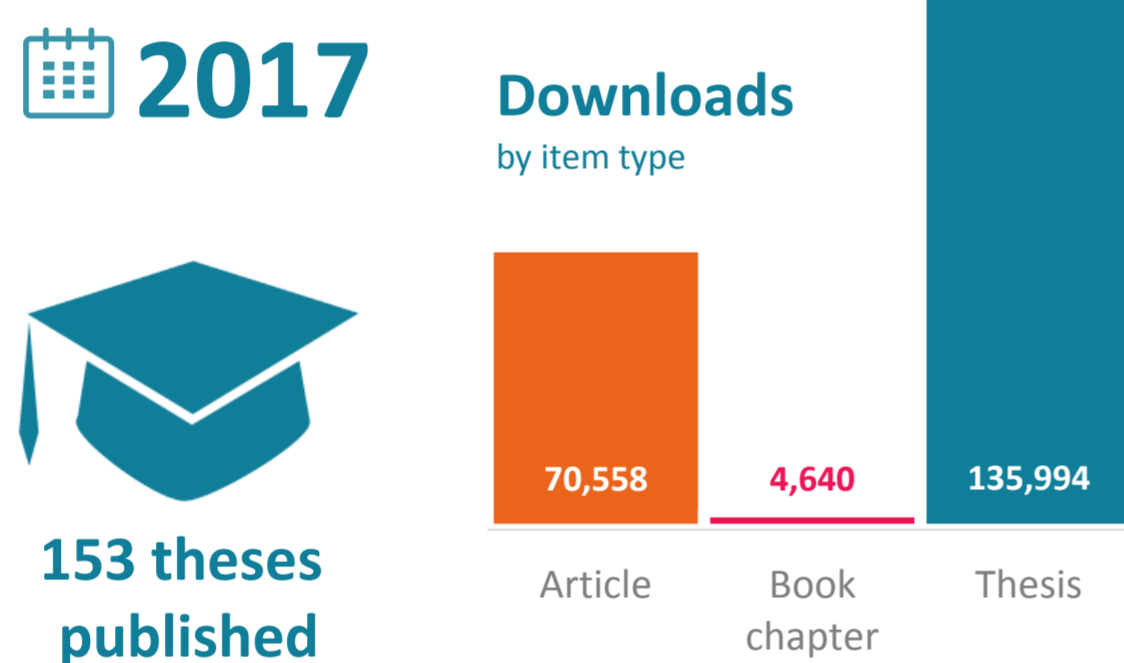
2010: RESEARCH THESES GO 'E'

The decision to move to electronic thesis deposit and make this a condition for the award of research degrees was a significant milestone in the life of PEARL. A year later, in 2011, the Library started to digitise its physical thesis collection. This piece of work was completed by 2013, contributing to a significant increase in the overall number of deposits. The Research Theses collection remains one of the most popular in PEARL, accounting for 62% of all item downloads in 2017 **(Figure 1)**. On average, every thesis deposited in PEARL last year has been downloaded 889 times, putting us in the Top 25 UK repositories by number of theses downloads.

Figure 1

A total of 153 theses were published during 2017. Theses were the most popular type of download, well ahead of articles (2nd most popular type) and book chapters (3rd).

2017

Downloads by item type

153 theses published

Article	Book chapter	Thesis
70,558	4,640	135,994

2015: REPOSITORY SURGERY

With a focus on REF2014 putting the brake on upgrades, and internal reorganisations resulting in a loss of technical expertise, by 2014 PEARL was falling behind the curve. Both the repository, and the University's CRIS (Symplectic Elements) were running outdated versions and were in need of updates. It took the best part of a year to coordinate the work, but by spring 2015 both systems had been upgraded to the latest versions. This allowed us to start planning additional development to ensure that PEARL was able to support new funder requirements.
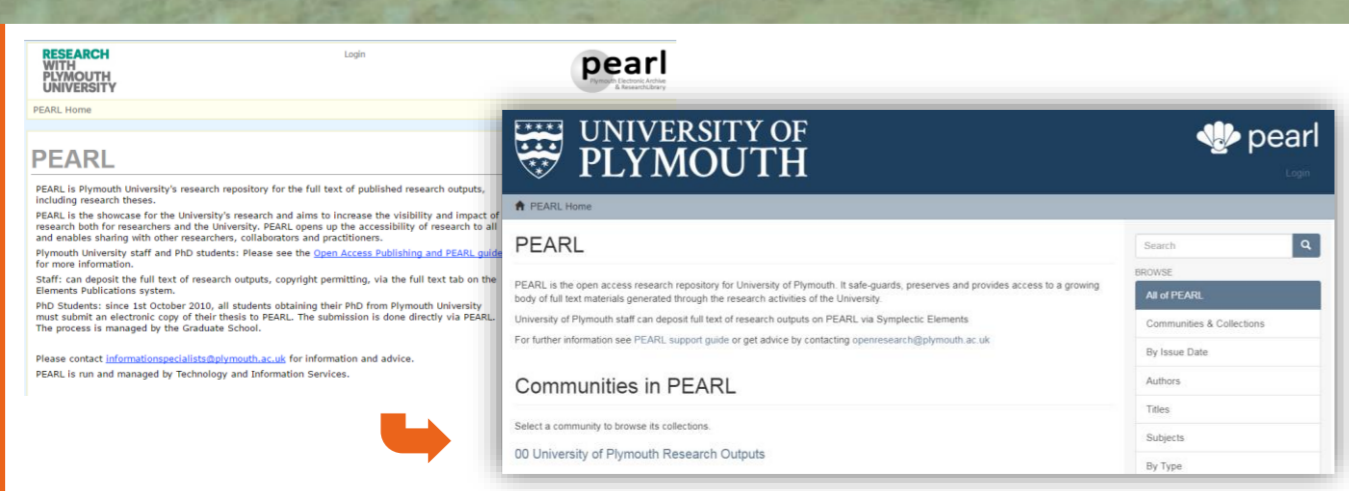
2016: A BEAUTIFUL PEARL

2016 saw the implementation of changes to ensure that we could meet funder mandates around open access and research data. Improvements included support for *RIOXX*[1] metadata, dataset deposit and enhanced research theses deposit, as well as setting up the connection with *IRUS-UK*[2] to help us track content usage.

The changes also reached the front-end, with PEARL getting a new and much sleeker interface **(Figure 2)**.

Figure 2

In 2016, to celebrate its 10th birthday, PEARL gets a makeover.

2017: COUNTING THE PEARLS

During 2017 we focussed on developing metrics capability. Deposit and usage data were collected from IRUS-UK, Google Analytics and the newly implemented *Content and Usage Analytics* module, developed by *AtMire*[3] for DSpace. We use the data to produce monthly infographics and provide evidence of engagement with the repository. OA deposit is growing healthily, encouraged by the HEFCE REF OA mandate and our institutional publications policy **(Figure 3)**. We can now demonstrate the benefits of open deposit by showing researchers how their work attracts interest all over the world **(Figure 4)**.

Figure 3

The number of deposits has increased exponentially since the early days. The greatest drivers being the digitisation of research theses, REF 2014 and the HEFCE OA mandate.
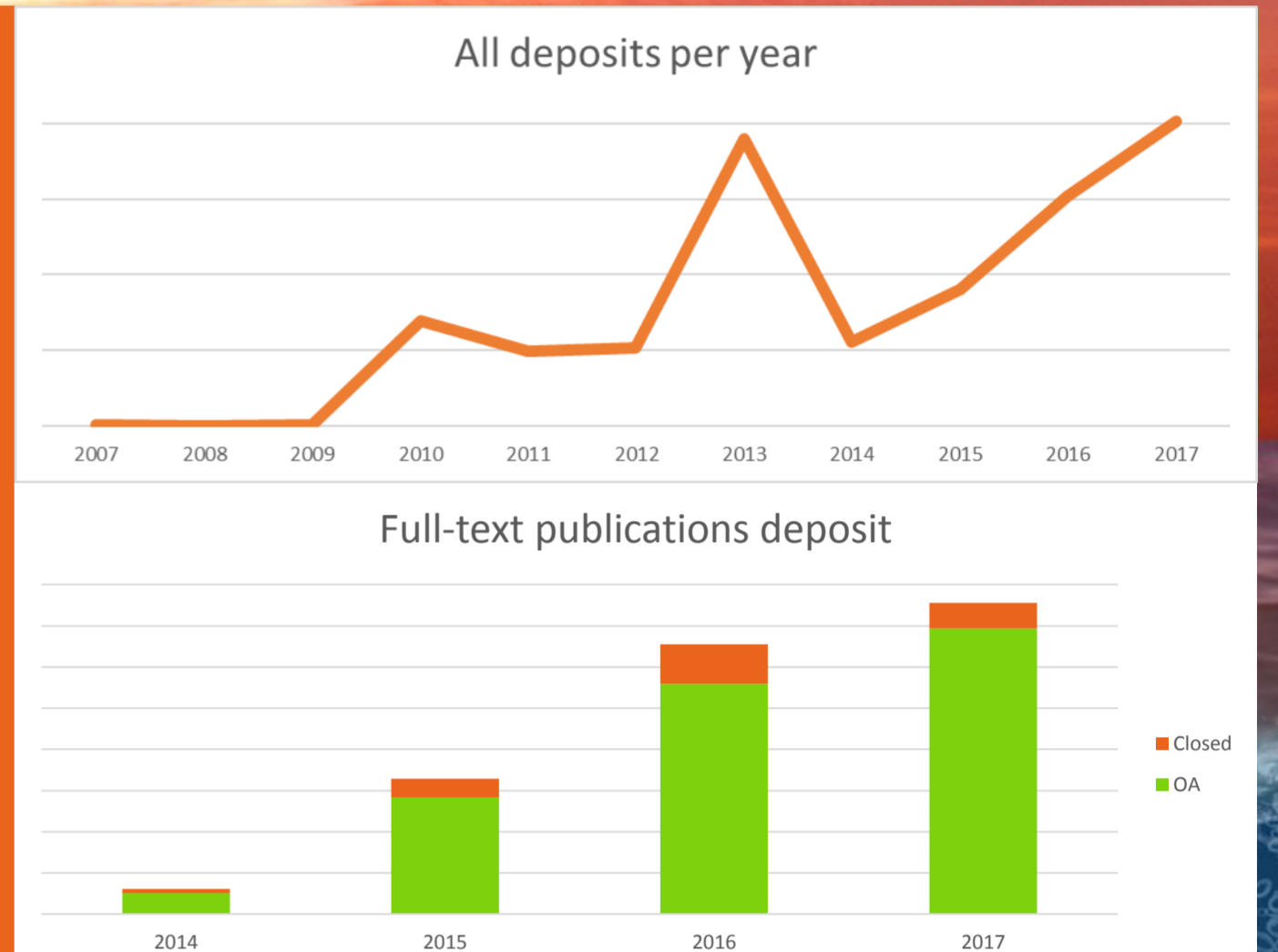

All deposits per year

Full-text publications deposit

- Closed
- OA

Figure 4

In 2017, there were a total of 178,282 active sessions on PEARL with 160,883 users from all over the world.

Sessions
- < 25
- 25 - 80
- 80 - 200
- 200 - 640
- > 640

2018: PEARL HUNTERS

With the deposit of articles and conference papers building up nicely, we are beginning to hunt for other types of *pearls*. Last year, we set up our first collections of open access journals, published by the University staff and students. PEARL offers improved discovery and improved preservation, reducing the risk of content loss when websites suddenly disappear! The new content has proven very popular – over the last 12 months, seven of the Top 20 articles came from the Journals Collection **(Figure 5)**.

In collaboration with the research community, we are also using PEARL to curate and showcase research portfolios, with diverse content types including reports, data and rich-media.

Figure 5

Over the last 12 months, seven of the Top 20 articles (by number of downloads) were from the new University Journals Collection.

THE FUTURE: A PEARLY BALL READING

As we increasingly stretch PEARL to meet new and more complex requirements, we are aware that the repository would look quite different if we were to design it from scratch today. Our wish list would include improvements in interoperability, ability to create hybrid and multi-layered collections of interrelated objects, resource interactivity, preservation workflows, access control, and analytics.

These requirements are starting to be addressed as vendors and developers adapt their systems to the recommendations of the *COAR Next-Gen Repositories* report[4]. In the not too distant future we will be reviewing how these new solutions can help us to move PEARL into new repository open waters.

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