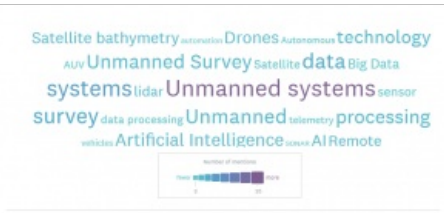
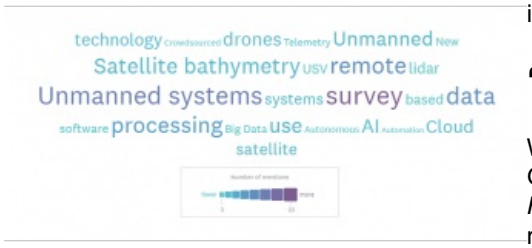
Forecasts for 2021: a Mixed Bag





Ready to invest, in equipment, staff and training, but unsure about future growth at this stage of the Covid-19 pandemic: that seems to be the outcome of our *Hydro International* Reader Survey 2021. For the past few years, we have asked our readers about their ideas for the future: are they optimistic or pessimistic, which technology do they believe will drive growth, will there be growth at all? Each year, we share the outcomes with you in our annual Business Guide, giving some insight into what the coming year will bring for the hydrographic industry.

‘Annus Horribilis’

Will the hydrographic market expand? This almost rhetoric question was asked by Jim Gardiner, research scientist with Valeport Ltd and guest author in last year’s edition of the *Hydro International* Business Guide. Gardiner was fairly optimistic, and there was no reason not to be, with the exception of the low oil price and corresponding slump in the offshore industry. Nevertheless, new application areas for hydrographic and oceanographic hardware and software in blue economies were expected to compensate for the negative effects of the low oil price. Although the first cases of Covid-19 were being reported in Wuhan, China, December 2019 was a rather optimistic month. People held their last meetings of the year, went to Christmas parties and dreamed of ski holidays later that winter. Now, a year on, we see that those first cases of this new disease were the start of an ‘annus horribilis’ for a large proportion of the world population, with lockdowns, deaths and illness, as well as a major economic setback. Will the hydrographic market expand in 2021? We wouldn’t dare to give a definite answer to that question today, but we can try to find some firmer ground with our annual reader survey.

Target Group

In November 2020, we sent emails to our readers asking them how they expect business and technology to develop in 2021 and, of course, to predict the impact of the Covid-19 pandemic on business. We received 214 completed surveys, giving us a good overview of the general feeling in the market. Some background information: most respondents clearly identified themselves as working in the hydrographic, engineering or construction surveying business. Somewhat more than a third (35%) works in a small company with 1-10 employees, 20% in a company with 11-50 employees, 20% in a company with 51-200 employees, 11% in a company with 201-1,000 employees, and 15.5% in a company with over 1,000 employees. This therefore represents a good cross-section of our readership and, therefore, of the opinions held in the business today.

Impact of Covid-19 Pandemic

Asked about the effects of the Covid-19 pandemic on overall business operations, 60% of the respondents answered that these effects are either somewhat negative (44.66%) or very negative (15.49%). A remarkable 30.05% said that the pandemic has impacted neither positively nor negatively on their business, and over 10% answered that Covid-19 has had a positive impact on their business. It is hard to imagine how, but perhaps through cost reductions due to less travelling by staff, lower costs as people work from home, and at a larger scale. Increased digitization and demand for geo-information could also play a role, and we should not forget that air cargo almost shut down for a while, leaving shipping as a safe alternative. While we still need to see how the final consequences – adding up and detracting factors – pans out, it is safe to say that most respondents do not see any positive effects of the pandemic on their business. The factor that has caused the biggest negative impact on business is the restriction on travel and therefore the closing of many countries to visits for business, sales or service trips (52% of the respondents answered: ‘Travel restrictions’ to the question: ‘Which implications of Covid-19 pandemic have impacted your business the most?’).

Figure 1. Word cloud: answer to question: â€˜Which technological development will be the main driver of hydrography in the coming years?â€™

Growth or Decline?

Closely linked to the impact of the Covid-19 crisis, which after all dominated this year, is the growth rate that readers of *Hydro International* expect to see over the next four years. 35% of the respondents see the business declining (10%) or neither declining nor growing (15%). Another 12% expects marginal growth – between 0 and 2%, while 35% expects growth of 2-10%. The most optimistic bunch (15%) of the respondents expects double-digit growth. We can therefore conclude that there is a very cautious and conservative view on future growth, with a small minority expecting high figures above 10%.

Unmanned to Drive Growth

Unmanned is the driver of growth for the sector. Nearly 70% of respondents identified ‘unmanned systems’ as the most crucial key market trend in hydrography. Using survey data for multiple purposes also scored well, with almost 40% saying it is a key market trend. Real-time processing concludes the top three key market trends, with 35% of respondents seeing this as one of the most promising technologies. Figures 1 and 2 show word clouds for answers to questions relating to technological development (drawn automatically, showing the term that is named most often the biggest). Unmanned is clearly the word that stands out in both word clouds. This visualizes the importance that respondents attach to this technology and the role that it will play in the future of hydrography.

Figure 2. Word cloud: answer to question: â€˜Which technological advances will become key for your organization in the near future?â€™

Challenges and Opportunities

Although there are a lot of hopeful developments, we also asked respondents about challenges. Covid-19 was included in the list of possible answers to this question, and 23% of the respondents saw this as a pressing challenge. However, other challenges are even more pressing according to the readers. Top of the list is the availability of well-trained staff: 45% of the respondents see the lack of skilled professionals as a problem in hydrography. It is certainly not the first time that this enduring problem has topped the ranking; it is seemingly very hard to do something about it at the global scale. Number two: the decline in oil & gas (37%), although there is probably nothing that can be done about this. Number three and four are both related to data: efficient data management is a challenge according to somewhat more than 30% of respondents, close to the same percentage that sees market demands with respect to data accuracy and availability as the biggest challenge. One could argue that 60% of respondents therefore see difficulties in the way that data is handled and, at the same time, in how the market wants hydrography professionals to handle it: the discrepancy and difficulty in delivery of the right data. This is something to think about quickly in the sector.

The good news is that, where there are challenges, there must be opportunities around the corner, certainly in an innovative business such as hydrography. We did our best to identify a few, and asked respondents which one they thought was the most relevant. Perhaps unsurprisingly, coastal zone management is viewed as the biggest stand-alone opportunity for hydrographic surveying (57%). Renewables, both traditional such as wind farms (38%) and newer forms such as tidal and wave energy (30%), seem a good counter-opportunity to the major challenge, which is the decline of oil & gas. Deep-sea mining is not yet seen as a big winner, with only 16% of readers viewing this area as the most important growth factor.

Investment

The willingness to invest remains high, and companies are still ready to invest in 2021. There will be a lot of ongoing demand for the usual stuff: hydrographic equipment (sonar, GNSS receivers, underwater positioning), as 45% of respondents say that they plan to buy new equipment. Another 35% want to buy new or replace software. One third of the readers wants to invest in USVs or AUVs. Most striking in this section of the survey is the willingness to invest in staff and training: close to 75% of all respondents is planning to buy hydrographic / GIS training and/or hire new people. We have just read how hard that is, but we could also conclude that there’s a lot of interest in good skilled people and that the outlook for new entrants to the business – coming from college or from other sectors, is very good.

Conclusion

It’s always tricky to draw conclusions from a survey that gives a good overview, but of course it is not scientific in its purpose and execution. Still, we think that the outcomes give us a good sense of what is going on in the field of hydrography right now. However, ‘right now’ needs a bit of explanation before we come to that cautious conclusion. There’s a pandemic going on and, like all of us, business owners, managers and hydrographic surveyors have not experienced this before in their lifetime. None of us knows where this will go and what the economic consequences of the measures that respective governments have taken to contain the pandemic and to support the economy will be. All in all, the outlook from the survey is a little bleak, and respondents only expect slight growth, if any, but the readiness to invest in equipment, staff and training is still quite high and optimism about opportunities – coastal zone management and renewables – is also high. It’s a mixed bag, but again that might have a lot to do with today’s circumstances.