INTRODUCTION

The technology industry is one of the major contributors to the Scottish economy with a contribution in excess of £6bn or £4bn or 3% of Scotland’s GVA. 80,000 people are employed in the technology industry, which equates to one in every twenty fifth person employed in Scotland.

There are more than 1,000 workplaces in Scotland’s IT and telecoms industry providing a vast range of products and services to many sectors including: health and social work, education, financial services, construction, the energy industry and the public sector.

Each year the Scottish Technology Industry Survey provides information on the health of the digital technologies industry. Once again the analysis breaks down the results by size of company: small, medium and large. Also included at the end of this report is an analysis of the employment and skills outlook for the year.

This survey fieldwork was carried out by ScotlandIS in early 2015, with subsequent analysis and commentary provided by ‘the Research Unit’ within Aberdeen & Grampian Chamber of Commerce.

Nine Twenty generously sponsor the survey.

ScotlandIS would like to thank all the businesses that participated in the survey.

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ScotlandIS and Nine Twenty would like to thank everyone who took part in this year’s Scottish Technology Industry Survey for their invaluable input, providing feedback on performance in 2014, and their forecasts for 2015.
INDUSTRY GROWTH & OPTIMISM CONTINUES

- This 2015 report shows high levels of confidence for businesses with 87% reporting themselves as being optimistic or very optimistic about the year ahead.
- Sales growth in 2014 was reported by 70% of businesses, half of these reporting growth in turnover of over 20%.
- 86% of businesses expect sales to increase over the next 12 months (an increase of 2% from 2014) with only 6% forecasting a decrease in sales.

EMPLOYMENT GROWTH

- The demand for graduates continues to rise with 74% of business likely to recruit in 2015. This is up 8% from last year.
- 59% of businesses predict the majority of talent will come from Scotland while 20% predict talent will come from the rest of the UK.
- Businesses reported relatively low expected levels of Modern Apprentice recruitment with 33% reporting they will recruit and 67% unlikely to recruit.
- 83% of businesses expect employee numbers to increase over the next 12 months with only 5% expecting a decrease.

KEY MESSAGES

- Businesses reported the biggest skills requirement to aid business growth was for ‘people’ with software and web development skills.
- In terms of commercial skills businesses expect to have the greatest demand for: sales and marketing roles, business development and project management.
- Businesses expect the greatest demand in terms of technical skills to be for software and web development skills, in particular Java.
The Scottish Technology Industry Survey provides an annual health check for the digital technologies industry. This year’s report provides insight on company performance in 2014 and predictions for 2015.

Figure 2

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Results also show 2014 was as good as or better than most expected at the outset of the year. 73% of businesses reported that their actual results were as good as or better than budgets set at the beginning of 2014. Clearly most respondents had expected a strong set of results because, although a high percentage reported increased sales from 2013 (70%), we still found 27% stating outturn results were worse than expected (a net balance of +11%)

Figure 1

Responses show 2014 was another strong year for the technology industry with 70% of businesses reporting an increase in sales from 2013 and only 17% reporting a decrease. Perhaps as significantly 35% of businesses reported an increase in turnover of 20% or more, the largest percentage since the report has been published.

Figure 3

In addition to an increase in sales, businesses reported growth in profit margins. In total 36% reported increased margins with a further 36% reporting stable profit margins.

In 2013 nearly 48% of respondents saw tighter margins compared to the previous year. Results this year are far improved with 22% reporting margin squeeze (an historic low). Again the outturn results for 2014 show the sector had a strong year across the board in comparison to any year the survey has previously been undertaken.
87% of businesses have a very optimistic or optimistic view on the outlook for 2015, with only 5% noting they were pessimistic or very pessimistic. After a strong year of growth confidence is clearly high.

This optimism is mirrored in the expected changes in sales over the next 12 months with 87% also expecting an increase in sales and only 6% expecting a decrease. Figure five also shows over 40% of respondents expect growth of over 20% which is all the more significant given the strong results in 2014.
GREATEST BUSINESS IMPACT
The range of issues unsurprisingly varies widely between macro and micro economic issues as well as sector specific and general environmental factors.

Businesses were asked what they considered would have the greatest impact on their business for the year ahead. Respondents highlighted the following major issues:

RETAINING AND RECRUITING NEW STAFF...
“The ability to recruit, motivate and regain talent.”
“Finding the best possible staff.”

DOWNTURN IN THE OIL PRICE...
“The low oil price will have a significant effect on most businesses working in Aberdeen and the North-East. Companies are looking to make cost savings and projects are being delayed or cancelled.”

THE STATE OF THE GLOBAL AND LOCAL ECONOMY...
“State of the world-wide economy.”
“Local Government need to significantly improve efficiency.”

INVESTMENT...
“Availability of capital investment.”
“The investment landscape in Scotland.”

PRODUCT DEVELOPMENT CHALLENGES...
“Product being in the right space to meet market trends.”
For the first time we have made an assessment of percentage sales by geography. Our analysis shows that 25% of turnover comes from Scotland, 24% from the rest of the UK, and 42% from outside Europe. This analysis suggests respondents are undertaking a significant amount of international activity using both activity and financial measures.

Figure 8

INTERNATIONAL OPPORTUNITIES

Export Levels

57% of businesses are already exporting, with 16% planning to do so in the future. 27% reported they do not export and have no plans to do so. The results show consolidation from 2013 following a rise between 2012 and 2013.

Figure 6

Business from Different Geographical Locations

For the second year running, businesses reported the rest of the UK (82%), Europe (74%) and USA & Canada (60%) as their most attractive geographical markets.

Figure 7

Attractive Geographical Markets Businesses Are Exporting To

For the second year running, businesses reported the rest of the UK (82%), Europe (74%) and USA & Canada (60%) as their most attractive geographical markets.
The technology industry in Scotland is spread across Scotland with clusters in Edinburgh & Lothian, Glasgow, Lanarkshire, Renfrewshire, Dumbartonshire and Aberdeen & Grampian. Edinburgh & the Lothians has seen an increase in popularity as a ‘headquarter location’ with 37% of businesses headquartered there, this is an increase of 8% from last year’s results.

Software products’ (22%) and ‘software solutions and services’ (15%) continue to be the most significant activity of respondents. More businesses in 2014 classed their main activity of business as ‘other’. Of the 17%, ‘education’ accounted for 2%, and ‘public sector’ accounted for 3%. The remainder of the results show remarkable year on year consistency.

The sectors that are supplied by the technology industry vary widely by company, yet results in 2014 are similar to those in 2013. Financial services (44%), public sector (44%), IT and telecommunications (43%), Energy and utilities (43%), professional services (42%) and healthcare and pharmaceuticals (42%) continue to be the technology industry’s main client sectors.

Businesses forecast in 2015 the following sectors will see a decrease in activity: Media and entertainment (10%), public sector (8%), energy and utilities (7%), food and drink (4%) and retail (3%).
Figure 12 shows the net balance when we ask respondents which sectors they expect to ‘grow’ or ‘decrease’.

Life Sciences is the sector most respondents expect to see growth in during 2015. 44% reported ‘finance’ as a key sector and it is also expected to be a growth sector in 2015.

The net balance is the difference between respondents who expect an increase in 2015 minus those who expect a decrease.

Figure 13 provides a visual summary of which sectors were most important in 2014 and which shows the most scope for growth.

Size of Customer Base

Multinationals or very large organisations with over 1000 employees continue to be respondent’s main customer base in 31% of cases. Large organisations follow closely behind with 28% an increase from 21% in 2013.
2014 was another positive year for smaller businesses. 72% reported an increase in sales, 41% saw their profit margins increase. 85% have an optimistic outlook for 2015.

Small businesses reported that they expect to increase their employee levels over the next 12 months with 82% sharing this view, compared to last year’s results of 70%. Smaller businesses expect to employ between 1 and 6 additional staff (66%) over the next 12 months and only 17% expect numbers to stay the same. 64% are likely to recruit graduates and 20% are likely to take on Modern Apprentices.

82% of businesses expect their sales to increase over the next 12 months, 12% anticipate they will stay the same while only 6% forecast a decrease in sales. The profile of growth shows a variance to the wider industry with a higher percentage (54%) forecasting growth of over 20% compared to 42% across the industry.

2014 saw a slight reduction of 2% in the percentage small businesses who currently export (49%). However, there is an increase in the percentage of smaller businesses who do not currently export, but plan to do so in the future, 29% compared to last year’s results of 21%. The sample size means these movements are not statistically significant.

Most small businesses supply ‘software products’ (24%), ‘software solutions and services’ (18%), ‘application development’ (10%), ‘IT business consultancy’ (10%) and ‘services to technology’ (10%). 78% of smaller businesses were formed in 2000 or after that date.

72% reported an increase in sales, 41% saw their profit margins increase. 85% have an optimistic outlook for 2015.

People & Skills

Optimism

85

Recruit More Staff

Start the Same

Decrease in Personnel

Looking Forward to 2015

In 2014, 82% of businesses expect their sales to increase over the next 12 months, 12% anticipate they will stay the same while only 6% forecast a decrease in sales. The profile of growth shows a variance to the wider industry with a higher percentage (54%) forecasting growth of over 20% compared to 42% across the industry.

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Figure 16

Figure 15

Increased Sales

Profit Margins

Optimism

Already Exporting

Don’t Currently Export but Are Planning To

Don’t Export and Are Unlikely To

Benchmark 1: Smaller Companies

1–35 Employees

BENCHMARK 1: SMALLER COMPANIES

Reflections on 2014

2014 was another positive year for smaller businesses.
95% of smaller businesses reported their turnover in the region of £0–£5M with 23% of those businesses reporting turnover in the region of £250K–£500K.

**Funding Model**

Funding for smaller businesses is generated from founders capital and retained profits in 75% of cases.

**Cash Flow Compared to Last Year**

Smaller businesses reported little change in their cashflow when compared to 2013. 44% reported improvements while just 5% reported substantial difficulties.

**2014 Sales Levels Compared with 2013**

In 2014, 72% of smaller businesses reported an increase in sales from 2013. Last year only 11% reported an increase of 50% or more, while in 2014 this has more doubled to 26%.

**Actuals Compared to Budget**

2014 actuals compared to budget only slightly differ from 2013. 33% stayed close to budget, 40% saw an increase, but 27% reported actuals were less than the original budget set. This represents a net balance of +13%.
**BENCHMARK 2: MEDIUM-SIZED COMPANIES**

Medium-sized companies supply services in: ‘software products’ (22%) and ‘software solutions and services’ (16%). 19% classed themselves as ‘other’ with IT recruitment noted as the most popular. 58% were formed in 2000 or after. Companies in this bracket are generally more mature than smaller companies.

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**REFLECTIONS ON 2014**

72% of medium-sized companies reported an increase in sales in 2014 compared to 2013. Success looks set to continue in 2015, with 96% expecting an increase in sales over the next 12 months.

- **Optimism**: 96%
- **Increased Sales**: 72%

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**PEOPLE & SKILLS**

A remarkable 97% of medium-sized businesses expect to increase employment over the next 12 months. Of the 97%, 10% expect to employ 50 or more employees. 82% said they would be likely to recruit graduates. 33% are likely to take on Modern Apprentices.

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**LOOKING FORWARD TO 2015**

97% expect to see an increase in sales over the next 12 months while only 3% expect a decrease in sales.

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**EXPORT GROWTH**

Medium-sized companies who were exporting in 2014 increased to 63%, a rise of 6% from 2013. However there was a 5% increase in businesses who said they did not export and are unlikely to (34%). Again consideration should be given to the small sample size.

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**INCREASED SALES**

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**OPTIMISM**

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<tbody>
<tr>
<td>Optimistic</td>
<td>96</td>
<td>96</td>
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**EXPORT GROWTH**

- **Already Exporting**: 57%
- **Don’t Currently Export But Are Planning To**: 29%
- **Don’t Export And Are Unlikely To**: 14%

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**BENCHMARK 2: MEDIUM-SIZED COMPANIES**

- **50%+ Increase**: 13%
- **20–50% Increase**: 30%
- **10–20% Increase**: 33%
- **0–10% Increase**: 0%
- **Stay the Same**: 0%
- **10–20% Decrease**: 0%
- **20–50% Decrease**: 0%
- **50%+ Decrease**: 0%
Medium-sized companies are largely funded through founder’s capital and retained profits or from venture capital (26%). It is clear as these companies have grown so has their funding model changed. To demonstrate this, figure 23 also shows small company funding needs (comparison marked in white).

CASH FLOW COMPARED TO LAST YEAR

Cashflow compared to 2013 has improved. 2014 results show 51% of medium-sized businesses cashflow improved compared to 2013 and only 6% have experienced some difficulties. In 2013 19% experienced cash flow problems. The 2014 results represent a net balance of +45%.

2014 SALES LEVELS COMPARED WITH 2013

Medium-sized businesses continue to see an increase in sales with 72% reporting a rise and 9% seeing sales levels stay the same. 18% reported a decrease compared to 14% in 2013.
REFLECTIONS ON 2014

2014 was another good year for larger companies. 64% reported an increase in sales from 2013 and only 14% reported a decrease. 41% reported their actual 2014 performance was better than budget and 37% saw their profit margins increase in 2014 compared to 2013.

INCREASED SALES 64%

PROFIT MARGINS 37%

PEOPLE & SKILLS

74% of larger companies expect their employee numbers to increase over the next 12 months, 16% expect them to stay the same and 10% expect to see a decrease in employee numbers. Larger companies are the most likely to recruit graduates (89%) and 67% are likely to take on Modern Apprentices. Once again we see the larger the company becomes the more likely it is to recruit Modern Apprentices.

LOOKING FORWARD TO 2015

78% of larger companies expect an increase in sales over the next 12 months, this is slightly down from last year’s results where 96% expected an increase. 11% predict their sales will stay the same and 10% predict a decrease.

FOR LARGER COMPANIES growth forecasts are more measured and ‘steady’. Few expect growth over 20%, but nearly 75% expect growth of between 0–20%, still a substantial achievement if delivered.

EXPORT GROWTH

Exporting levels have slightly shifted for 2014. 68% already export, while 32% do not export and have no plans to do so in the future. Last year’s results reported 82% already export and only 12% unlikely to do so in the future. Note this year results represent a smaller sample size which should be taken in to consideration.

INCREASED SALES

-5% to 20%

0–10% increase

0–10% decrease

10–20% decrease

20–50% decrease

50%+ decrease

DON’T CURRENTLY EXPORT BUT ARE PLANNING TO

47

ALREADY EXPORTING

82

DON’T EXPORT AND ARE UNLIKELY TO

6

2014

2013
88% of larger companies have a turnover of £100 million or more, an increase of 10% from last year’s results. 61% are typically funded as an established quoted company. Businesses who reported they were funded through other means are mainly public sector organisations.

FUNDING MODEL
The need for additional finance is not an issue for larger companies with 96% reporting this, the 4% who need additional finance would seek this via private investment.

ACTUALS COMPARED TO BUDGET
41% of larger businesses reported exceeding their sales forecasts for 2014, with 36% reporting they had achieved their budget, 23% reported a decrease. The net balance between those who reported an increase and those who reported a decrease is +18%.

CASH FLOW COMPARED TO LAST YEAR
Cash flow in larger companies, remains relatively unchanged with 61% reporting little change. 22% report their cash flow compared to last year is ‘somewhat better’ which is an improvement from last year’s results, when only 9% reported their cash flow was better. 17% reported cashflow difficulties, representing a +5% net balance.

LARGER COMPANIES: SALES
Sales in larger companies are up from 2013 with 64% reporting an increase. Slightly more businesses reported a decrease in sales (14%) compared to last year’s results (9%).
CHANGE IN EMPLOYEE NUMBERS OVER THE NEXT 12 MONTHS

2015 looks set to be another strong year for the technology industry, with 83% of respondents forecasting an increase in the number of employees over the next 12 months, with only 5% forecasting a decrease.

RECRUITMENT OF GRADUATES

Demand for recruitment of graduates remains strong with 73% of all businesses reporting they will definitely recruit or are quite likely to recruit graduates in 2015.

When businesses were asked what level of experience their business needs to aid growth, ‘graduates’ was the most popular with 85% reporting there was ‘some’ or a ‘high requirement’.

RECRUITMENT OF MODERN APPRENTICES

Respondents are less likely to recruit Modern Apprentices than graduates with 33% stating they will ‘definitely’ recruit or ‘quite likely’ recruit. 67% said they were ‘unlikely’ or ‘very unlikely’ to recruit a Modern Apprentice. The percentage varies by company size as previously reported.

LOCATION OF TALENT IN 2015

59% predict new talent will come from Scotland, 20% in the rest of the UK, while 21% forecast talent will come from further afield in Europe and the rest of the world.
Businesses were asked an open question as to what technical skills they expect to have the greatest demand for and while there was no outright need for one particular skill, many said ‘software development’ and ‘web related skills’. It is therefore no surprise to see businesses reporting the highest requirement for people with software and web development skills (38%) in our series of closed questions.

Larger businesses have the highest requirement for software and web development skills with 71% reporting a requirement for these skills in the future.

Medium sized businesses have a greater requirement for people with infrastructure support and management skills (75%) and 80% have a requirement for people with project management skills.

Smaller businesses have a requirement for people with commercial and business support skills (79%) and 65% have a requirement for people with project management skills.

We asked our members to describe ScotlandIS in three words and the word cloud represents what members had to say.

When businesses were asked what they felt ScotlandIS should concentrate on to add value to membership; 50% of members said networking events were the most important; 48% said they would like more market trend information and 46% would like more special interest groups/technical meet ups.
Results from this survey are positive and 2015 looks set to be another good year for the technology industry. 87% of businesses are either very optimistic or optimistic about 2015 and 87% expect an increase in sales over the next 12 months. This level of positivity is translated into a forecast increase in employee numbers. 83% expect to increase the number of employees they recruit over the next 12 months. 74% are likely to recruit graduates.

Businesses last year reported barriers to recruiting and retaining staff and the responses this year and while this was mentioned again as a barrier, businesses mentioned other concerns for the year ahead including the downturn in oil prices and the lack of stability in the global economy.

ADVICE FROM FELLOW BUSINESSES

To conclude we asked respondents to give advice to fellow members. Popular themes included:

FOCUS...

“Focus on as core a service or product as you can. It’s easy to get distracted by opportunity.”

“Know who you are and what you do – focus.”

LISTEN...

“Listen to the customer and give them what they want and not just what you want to give them.”

“Listen to the team, they know what they’re doing better than anyone else.”

TAKE CHANCES...

“Seize the day!”

“Don’t be afraid to change direction and do something different.”

“Take chances and push yourself out there.”

ADVICE FROM FELLOW BUSINESSES

OPTIMISTIC

PREDICT SALES INCREASE

EXPECT STAFF INCREASE

LIKELY TO RECRUIT GRADUATES

87 87 83 74