



GT SOFTWARE'S ANNUAL INDUSTRY SURVEY



2020
SURVEY

2020 MAINFRAME MODERNIZATION SURVEY

OVERVIEW

For decades, mainframe computers have operated in well-established organizations across the globe. Offering power, stability, and security as a single unit, mainframes play a unique role in the tech space. However, that role is changing.

While the actual hardware might be new, the technology behind the mainframe is over 70 years old. However, mainframes offer benefits that have kept the massive machines relevant to businesses throughout the decades. In fact, many companies' mission-critical applications were born and raised on green screen technology.

Regardless, markets demand faster, more agile processes, and companies find it difficult to meet these demands. As businesses continue to modernize, more than just "the mainframers" are getting involved in the IT architecture discussion. Now, board members and senior executives choose to join in on these critical decisions.



ABOUT GT SOFTWARE

GT Software empowers many of the world's largest banks—such as JP Morgan Chase, and Natixis—to accelerate their IT modernization efforts. By enabling companies to connect legacy mainframe assets with modern, cloud-based systems, GT removes a major roadblock for Fortune 1000 companies looking to elevate their customer experience. Pioneering the Open Banking movement in Europe and the US, GT Software allows mainframes to rapidly create inbound calls and call out. Now, legacy systems can perform functions such as real-time payment, fraud detection, KYC, and AML in real time. GT Software is proud to help lead innovation with their 35+ years of mainframe expertise.

KEY FINDINGS

With the knowledge that industries on the mainframe need to innovate, GT Software's survey seeks to measure the pace of legacy modernization. Here are highlights from the results:

- 54% of respondents say that cost reduction is a driver of modernization.
- 58% of respondents are actively migrating *some* applications off the mainframe or are planning to do so in the future, while 16% are currently or planning to migrate *all* applications.
- 59% of respondents are not satisfied with their company's ability to keep up with the API demand, and almost 55% believe their API development is not sufficient.
- Upgrades and modifications to existing integrations and internal attitudes pose the two greatest challenges to modernization efforts.
- 73% of respondents are currently experiencing mainframe API development backlog.
- 87% of finance and banking respondents are not at all familiar with FedNow, and 77% are not at all familiar with PSD2.



Based on survey results, GT Software expects the pace of legacy modernization to ramp up this year as more business leaders get involved in mainframe decision making. This is especially true for the finance and banking industries. In fact, the low awareness of the open banking movement happening now in Europe should improve over the next 12 months. For now, it is safe to say that the majority of modernization efforts involve keeping the mainframe around.

METHODOLOGY

Our online survey was conducted in Q4 of 2019 with responses from 160 mainframe users in 11 different countries. Respondents represent a wide variety of industries, job functions and seniority in both the public and private sectors.

SURVEY QUESTIONS

Migration and Integration Initiatives

1. Does your company have applications running on an IBM mainframe?
2. What mainframe integration initiatives are currently underway at your company?
3. What business goals are you trying to accomplish with your mainframe integration initiatives?
4. What mainframe migration initiatives are currently underway at your company?

Mainframe Integration Tools Utilized

5. What mainframe tools are you currently using to create APIs that support mainframe integration?
6. Do you use an ESB for connecting systems to your mainframe?
7. What ESBs do you use for connecting systems to your mainframe?
8. Do you use any pre-built mainframe connectors provided by your ESB?
9. What Red Hat products do you use?



87%

of finance and banking
respondents are not at all
familiar with FedNow

ESB Satisfaction

10. On a scale of 1-5, please rate your overall satisfaction with your ESB's pre-built mainframe connector.

11. On a scale of 1-5, please rate the extent to which you experience latency or slow response times from your ESB's mainframe connector.

Modernization Challenges

12. On a scale of 1-5, please rate your overall satisfaction with your company's ability to keep up with demands for APIs that support mainframe integration.

13. On a scale of 1-5, please rate the efficiency of your company's development team in creating APIs that support mainframe integration.

14. On a scale of 1-5, please rate the extent to which each of the following initiatives pose a challenge to your company: (a) Creating new APIs (b) Upgrades and modifications to existing integrations (c) Finding staff that can work with existing applications (d) Internal attitudes toward mainframe integration

API Drill Down

15. How many new or updated APIs that support mainframe integration get added to IT's project list on an annual basis?

16. How many active APIs that support mainframe integration are currently in development?

17. What is the current backlog of APIs that support mainframe integration?

18. How many full-time employees are dedicated to developing APIs that support mainframe integration?

19. On average, how many labor-hours does it take your company to develop APIs that support mainframe integration?

Open Banking Familiarity

- 20. On a scale of 1-5, please rate how familiar you are with FedNow.
- 21. On a scale of 1-5, please rate how familiar you are with with PSD2.
- 22. On a scale of 1-5, please rate how important preparation for Open Banking or FedNow is to your company.

Demographics

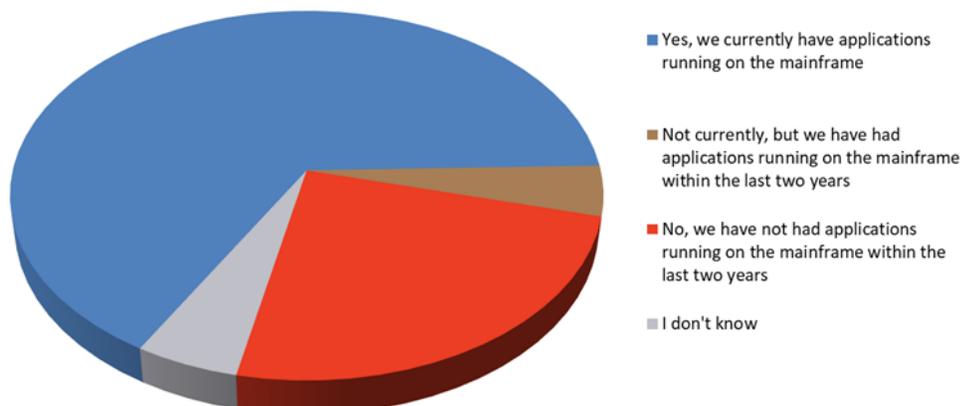
- 23. What best describes the industry that your company serves?
- 24. What best describes your job function?
- 25. What best describes your job level?

RESULTS

Migration and Integration Initiatives

1. Does your company have applications running on an IBM mainframe?

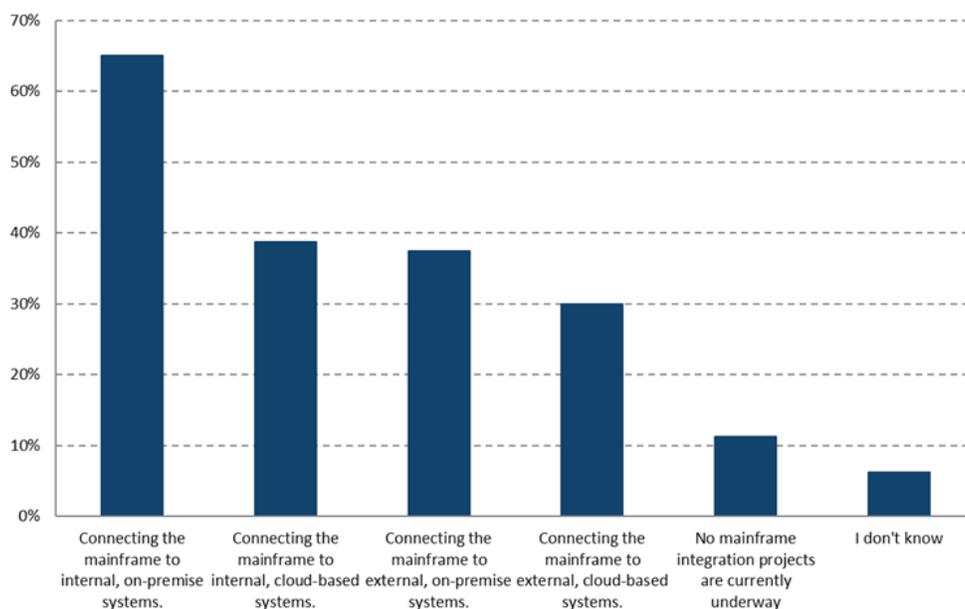
Yes, we currently have applications running on the mainframe.	66.3%
Not currently, but we have had applications running on the mainframe within the last two years.	4.4%
No, we have not had applications running on the mainframe within the last two years.	24.4%
I don't know.	5.0%



2. What mainframe integration initiatives are currently underway at your company?
(Check all that apply)

Connecting the mainframe to internal, on-premise systems.	65.0%
Connecting the mainframe to internal, cloud-based systems.	38.8%
Connecting the mainframe to external, on-premise systems.	37.5%
Connecting the mainframe to external, cloud-based systems.	30.0%
No mainframe integration projects are currently underway.	11.3%
I don't know.	6.3%

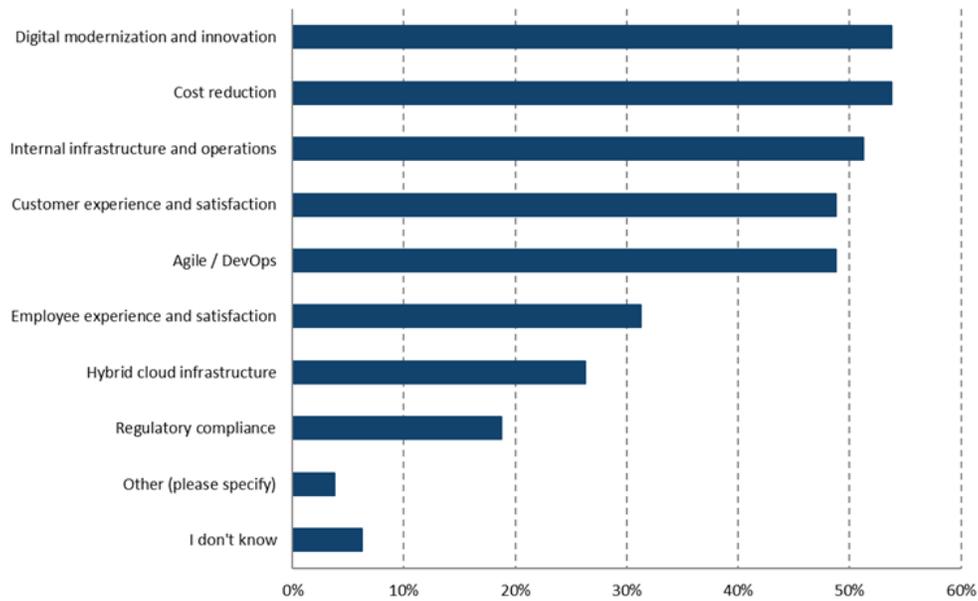
Answered: 80



3. What business goals are you trying to accomplish with your mainframe integration initiatives?
(Check all that apply)

I don't know	6.3%
Other	3.8%
Regulatory compliance	18.8%
Hybrid cloud infrastructure	26.3%
Employee experience and satisfaction	31.3%
Agile / DevOps	48.8%
Customer experience and satisfaction	48.8%
Internal infrastructure and operations	51.3%
Cost reduction	53.8%
Digital modernization and innovation	53.8%

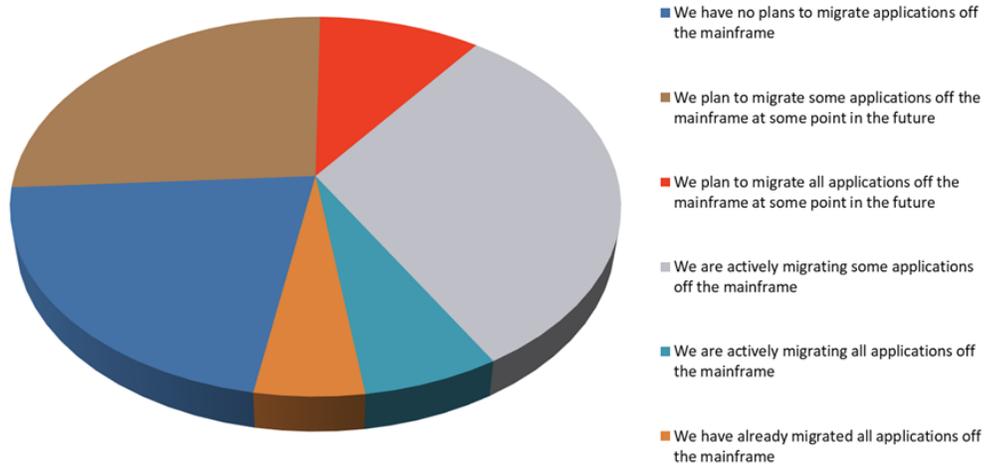
Answered: 80



4. What mainframe migration initiatives are currently underway at your company?
(Check all that apply)

We have no plans to migrate applications off the mainframe.	21.3%
We plan to migrate some applications off the mainframe at some point in the future.	26.3%
We plan to migrate all applications off the mainframe at some point in the future.	10.0%
We are actively migrating some applications off the mainframe.	31.3%
We are actively migrating all applications off the mainframe.	6.3%
We have already migrated all applications off the mainframe.	5.0%

Answered: 80

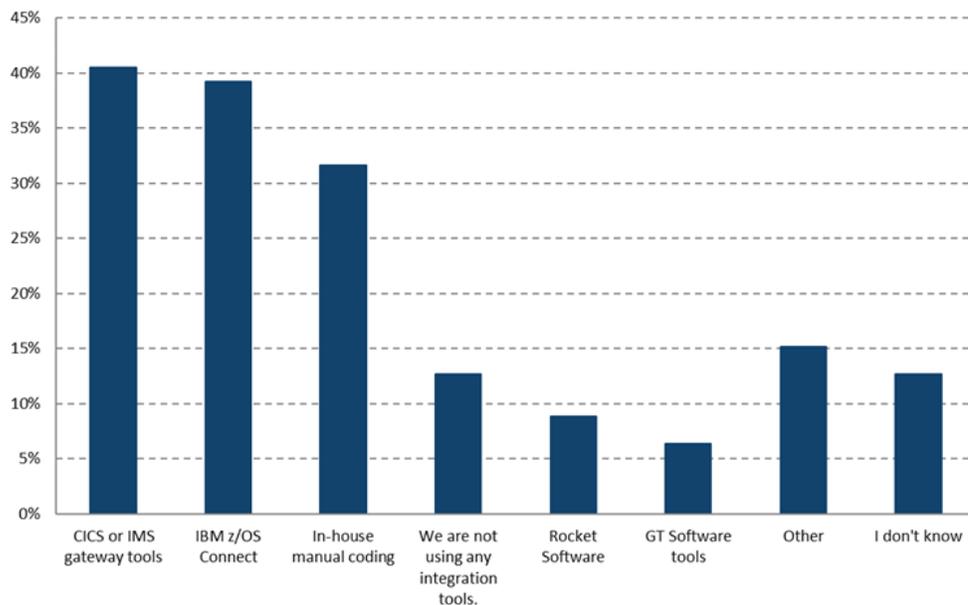


Mainframe Integration Tools Utilized

5. What mainframe tools are you currently using to create APIs that support mainframe integration? (Check all that apply)

CICS or IMS gateway tools	40.5%
IBM z/OS Connect	39.2%
In-house manual coding	31.7%
We are not using any integration tools	12.7%
Rocket Software	8.9%
GT Software tools	6.3%
Other	15.2%
I don't know	12.7%

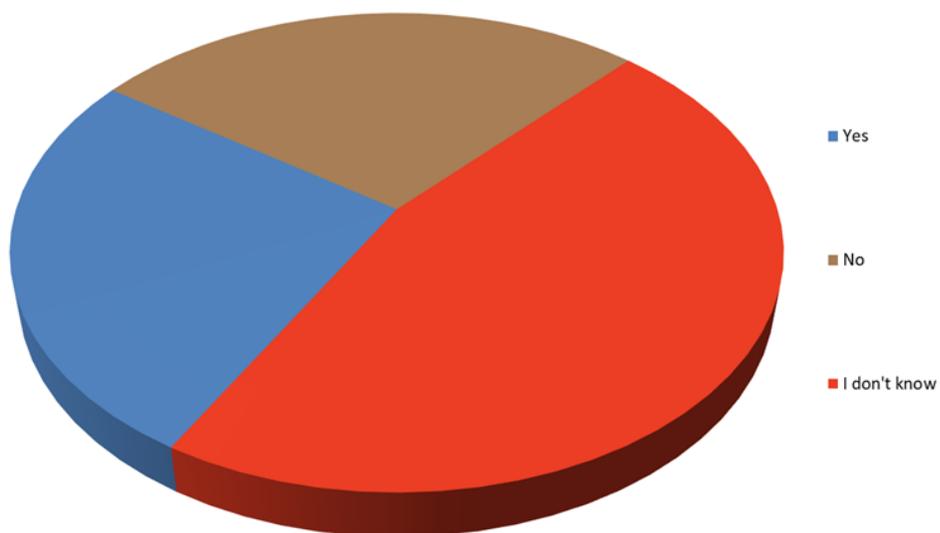
Answered: 80



6. Do you use an ESB for connecting systems to your mainframe?

Yes	26.3%
No	27.5%
I don't know	46.3%

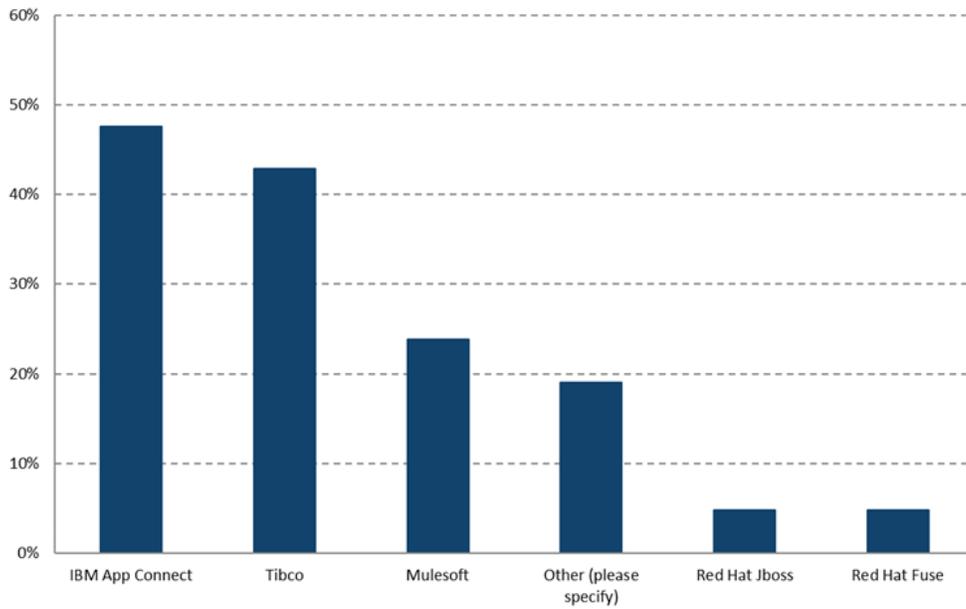
Answered: 80



7. What ESBs do you use for connecting systems to your mainframe?

IBM App Connect	47.6%
Tibco	42.9%
Mulesoft	23.8%
Other	19.1%
Red Hat Jboss	4.8%
Red Hat Fuse	4.8%

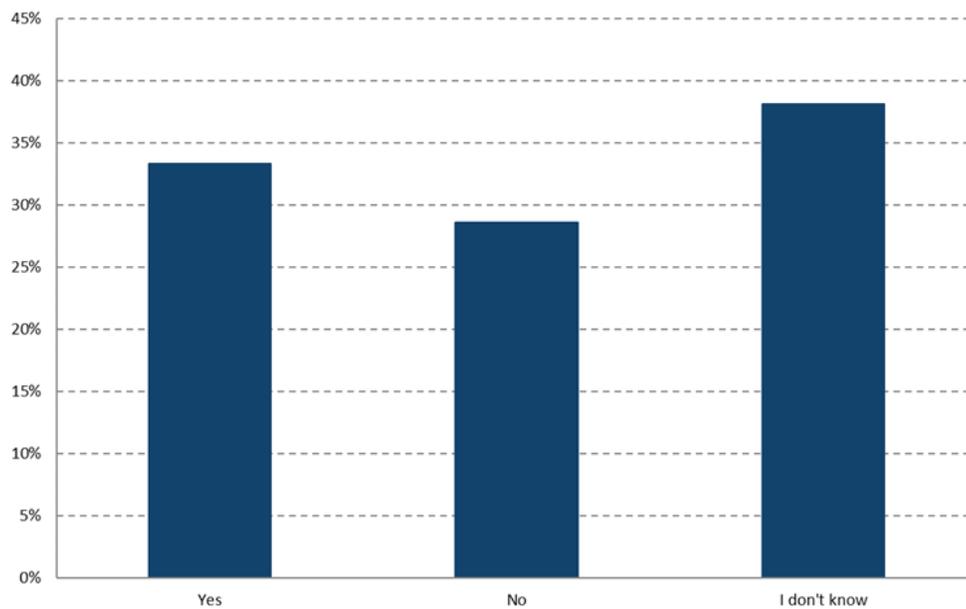
Answered: 21



8. Do you use any pre-built mainframe connectors provided by your ESB?

Yes	33.3%
No	28.6%
I don't know	38.1%

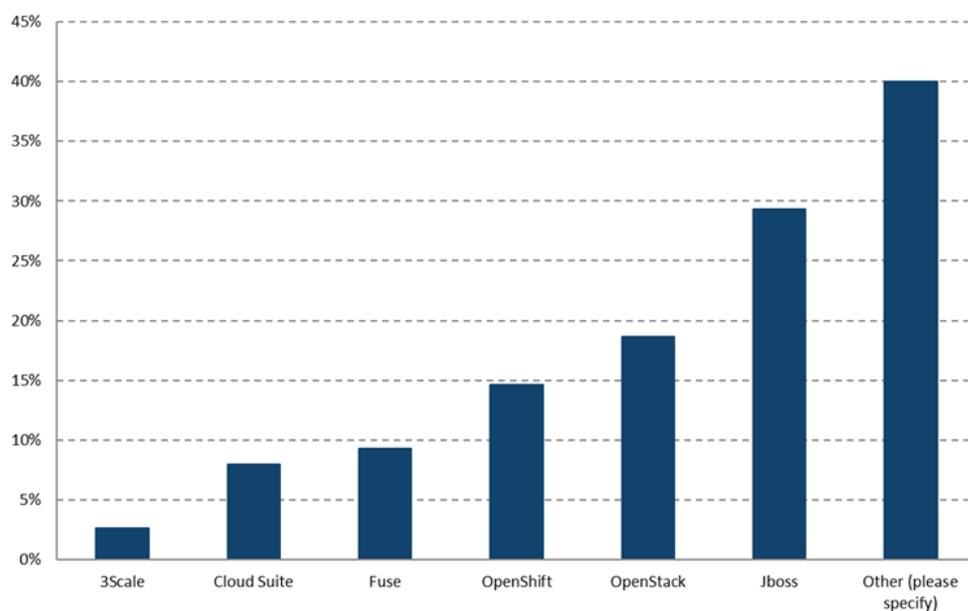
Answered: 21



9. What Red Hat products do you use? (Check all that apply)

3Scale	2.7%
Cloud Suite	8.0%
Fuse	9.3%
OpenShift	14.7%
OpenStack	18.7%
Jboss	29.3%
Other	40.0%

Answered: 75

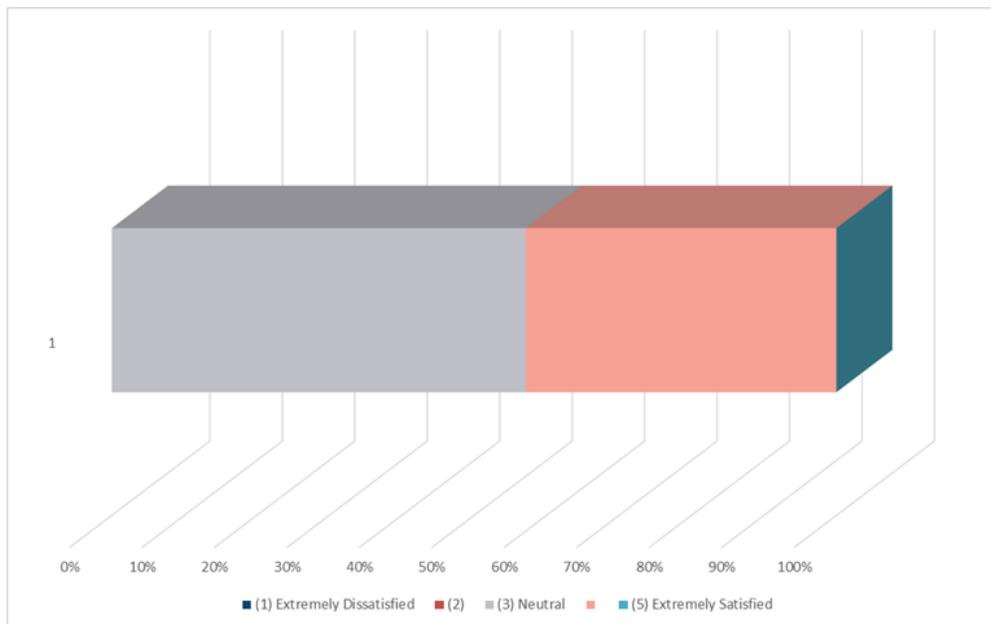


ESB Satisfaction

10. On a scale of 1-5, please rate your overall satisfaction with your ESB's pre-built mainframe connector.

(1) Extremely Dissatisfied	0.0%
(2)	0.0%
(3) Neutral	57.1%
(4)	42.9%
(5) Extremely Satisfied	0.0%
Weighted Average	3.4

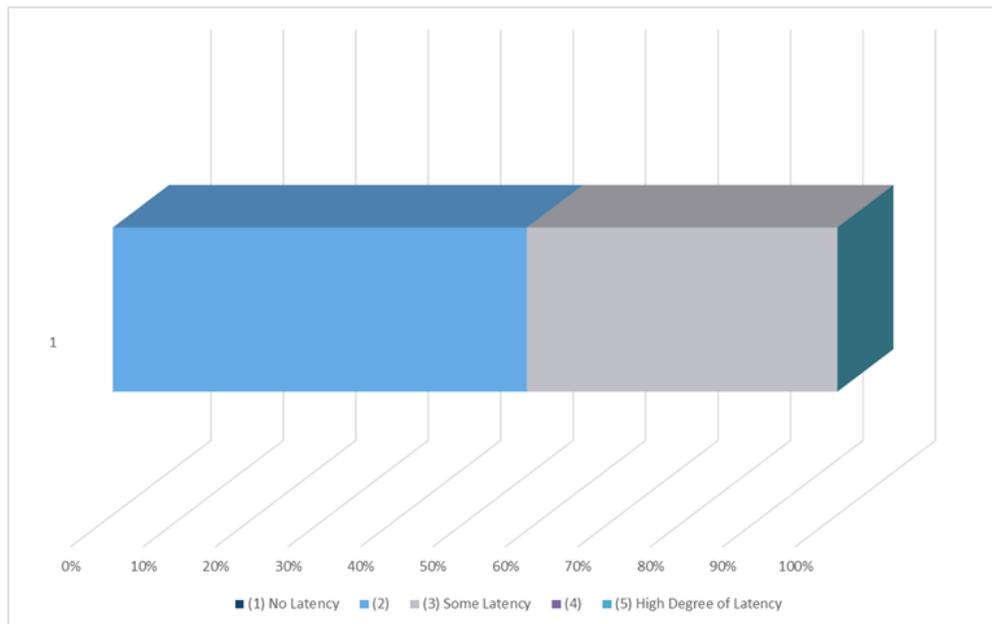
Answered: 7



11. On a scale of 1-5, please rate the extent to which you experience latency or slow response times from your ESB's mainframe connector.

(1) No latency	0.0%
(2)	57.1%
(3) Some latency	42.9%
(4)	0.0%
(5) High Degree of latency	0.0%
Weighted Average	2.4

Answered: 7

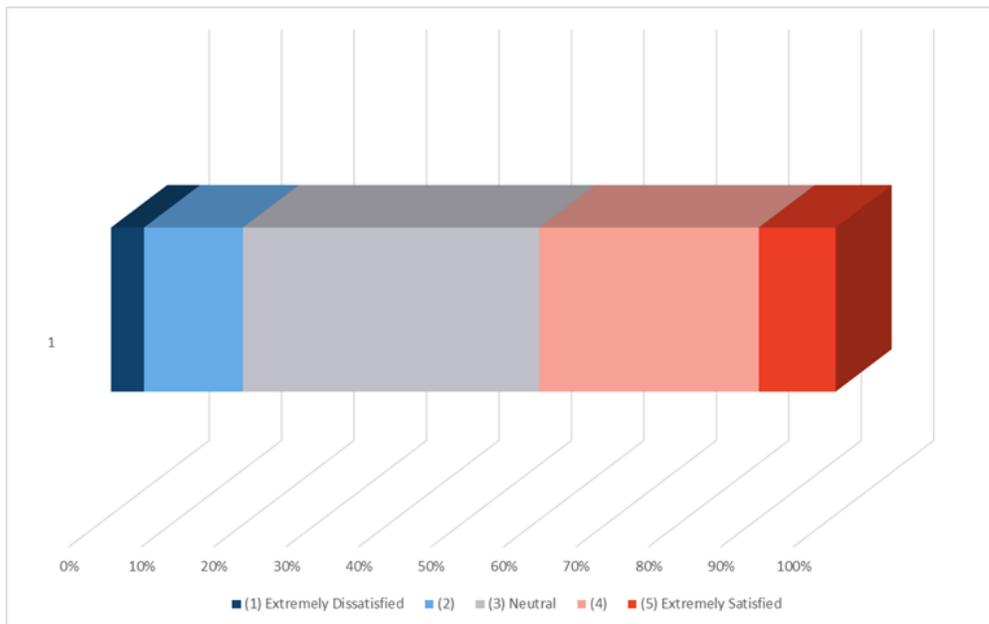


Modernization Challenges

12. On a scale of 1-5, please rate your overall satisfaction with your company's ability to keep up with demands for APIs that support mainframe integration.

(1) Extremely Dissatisfied	4.6%
(2)	13.6%
(3) Neutral	40.9%
(4)	30.3%
(5) Extremely Satisfied	10.6%
Weighted Average	3.3

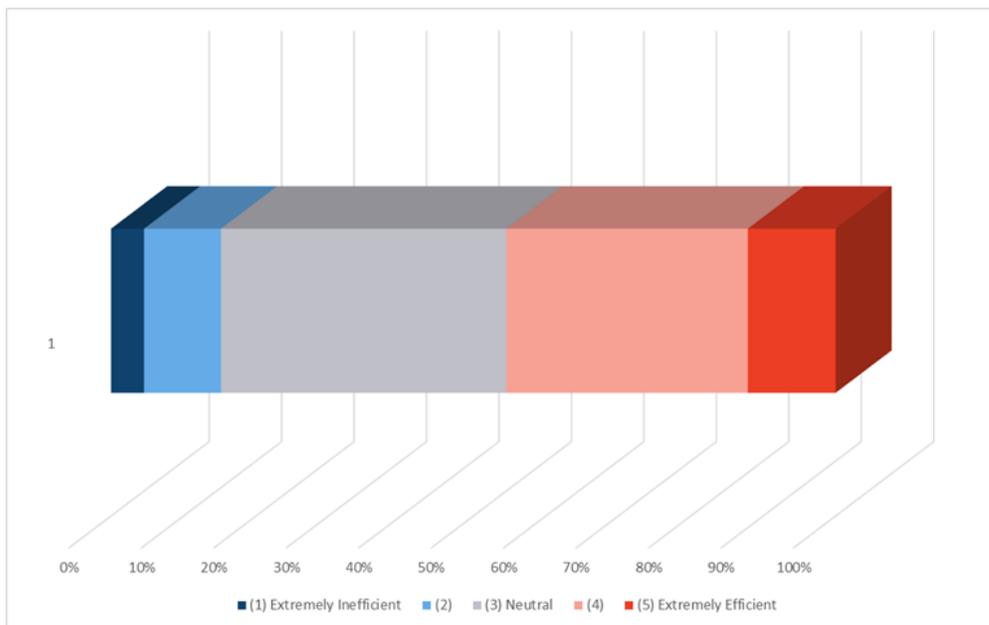
Answered: 66



13. On a scale of 1-5, please rate the efficiency of your company's development team in creating APIs that support mainframe integration.

(1) Extremely Inefficient	4.6%
(2)	10.6%
(3) Neutral	39.4%
(4)	33.3%
(5) Extremely Efficient	12.1%
Weighted Average	3.4

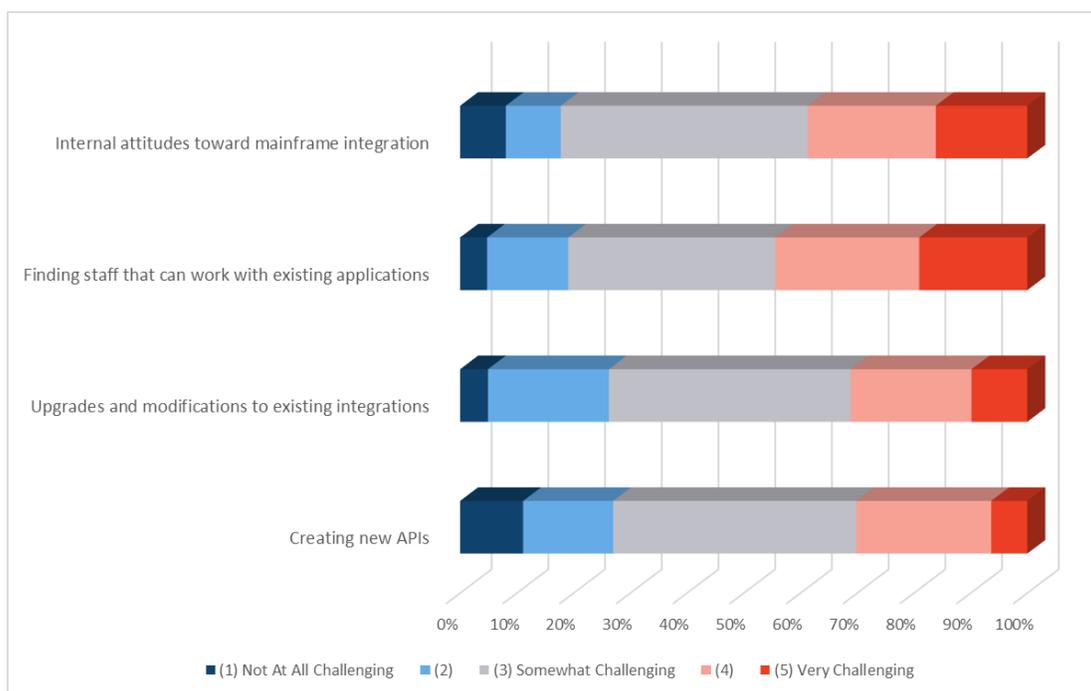
Answered: 66



14. On a scale of 1-5, please rate the extent to which each of the following initiatives pose a challenge to your company's mainframe integration efforts.

	(1) Not At All	(2)	(3) Somewhat	(4)	(5) Very	Weighted Average
Creating new APIs	11.1%	15.9%	42.9%	23.8%	6.4%	3.0
Upgrades and modifications to existing integrations	4.9%	21.3%	42.6%	21.3%	9.8%	3.1
Finding staff that can work with existing applications	4.8%	14.3%	36.5%	25.4%	19.1%	3.4
Internal attitudes toward mainframe integration	8.1%	9.7%	43.6%	22.6%	16.1%	3.3

Answered: 64

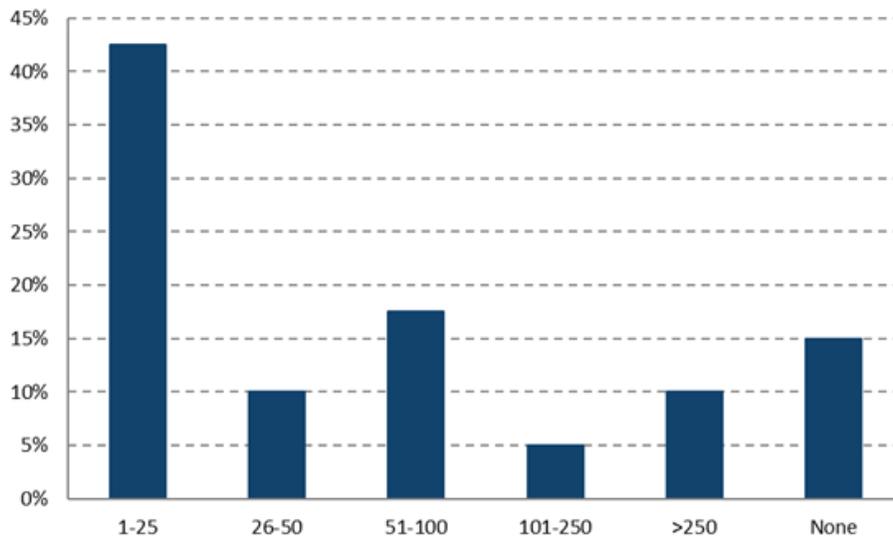


API Drill Down

15. How many new or updated APIs that support mainframe integration are added to IT's project list on an annual basis?

1-25	42.5%
26-50	10.0%
51-100	17.5%
101-250	5.0%
>250	10.0%
None	15.0%

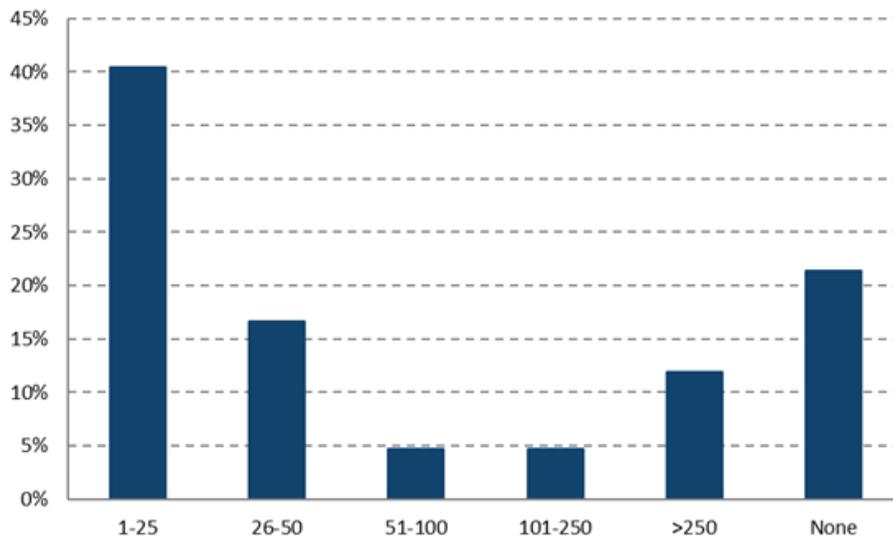
Answered: 42



16. How many active APIs that support mainframe integration are currently in development?

1-25	40.5%
26-50	16.7%
51-100	4.8%
101-250	4.8%
>250	11.9%
None	21.4%

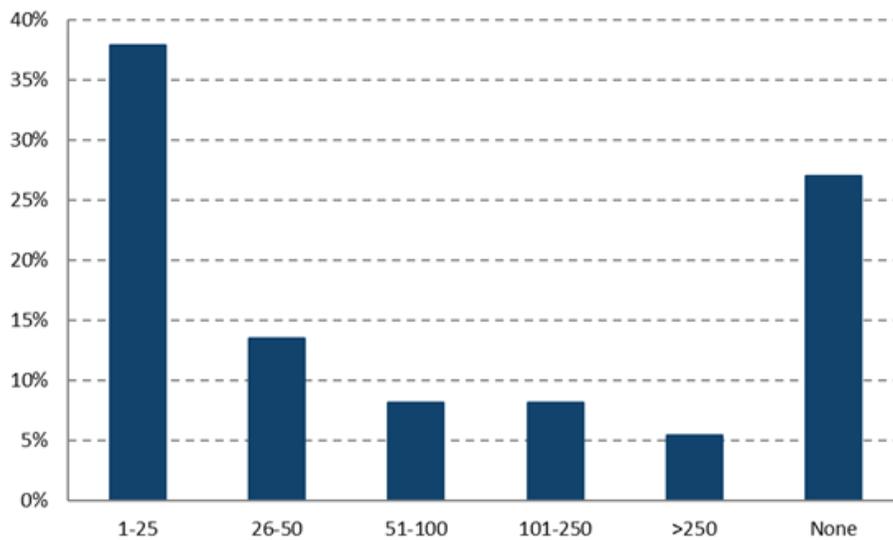
Answered: 42



17. What is the current backlog of APIs that support mainframe integration?

1-25	37.8%
26-50	13.5%
51-100	8.1%
101-250	8.1%
>250	5.4%
None	27.0%

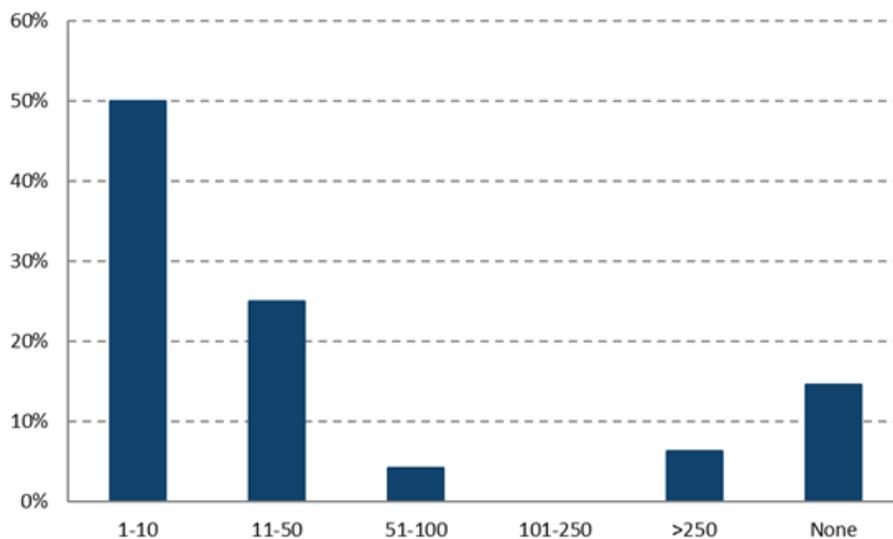
Answered: 37



18. How many full-time employees are dedicated to developing APIs that support mainframe integration?

1-10	50.0%
11-50	25.0%
51-100	4.2%
101-250	0%
>250	6.3%
None	14.6%

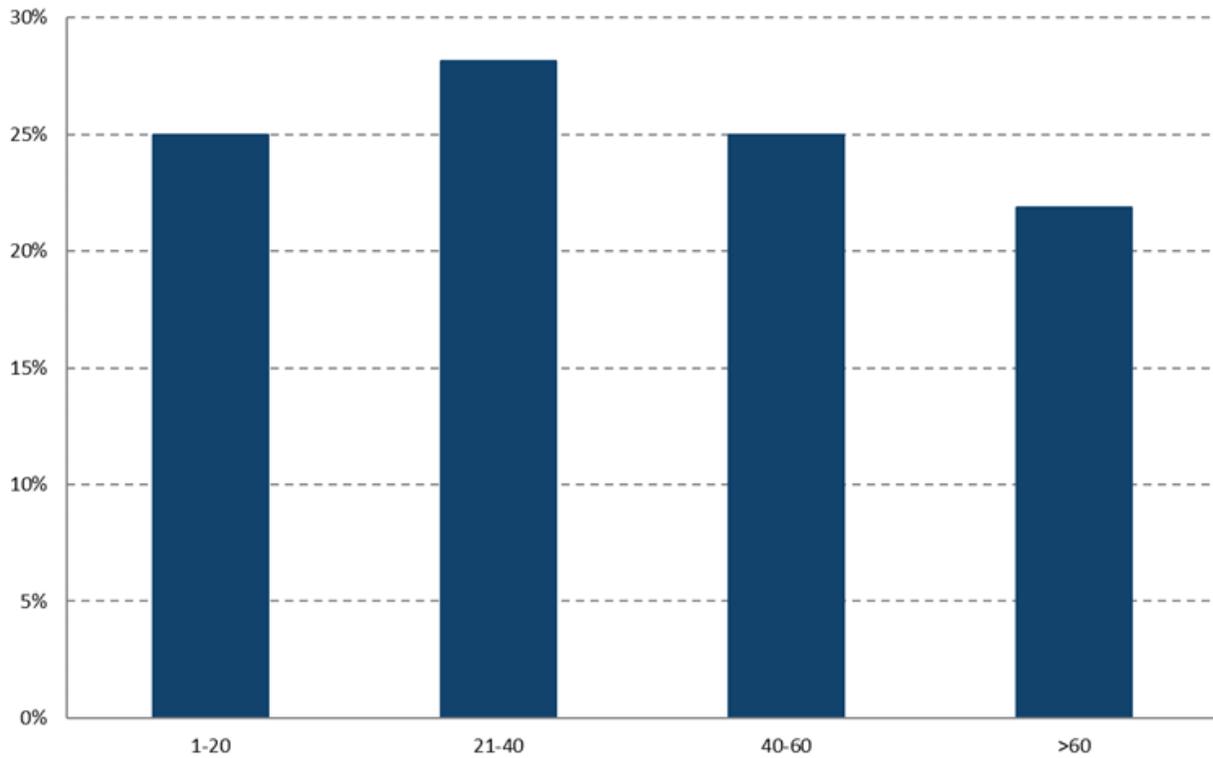
Answered: 48



19. On average, how many labor-hours does it take your company to develop APIs that support mainframe integration?

1-20	25.0%
21-40	28.1%
40-60	25.0%
>60	21.9%

Answered: 32

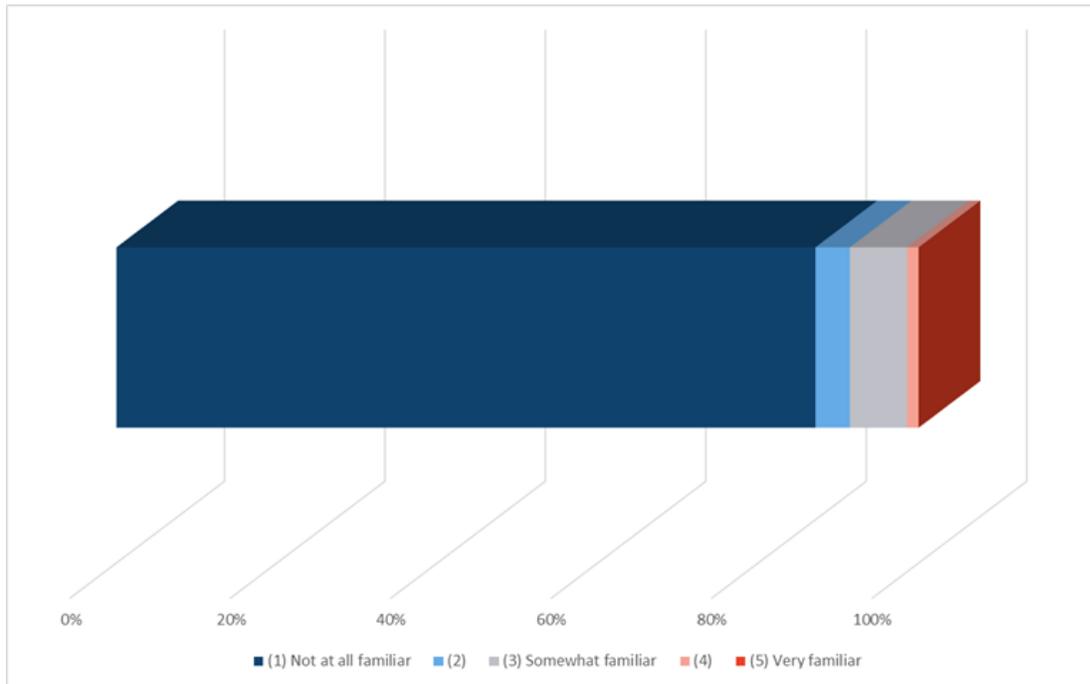


Open Banking Familiarity

20. On scale of 1-5, please rate how familiar you are with FedNow.

(1) Not at all	87.1%
(2)	4.3%
(3) Somewhat	7.1%
(4)	1.4%
(5) Very	0.0%
Weighted Average	1.2

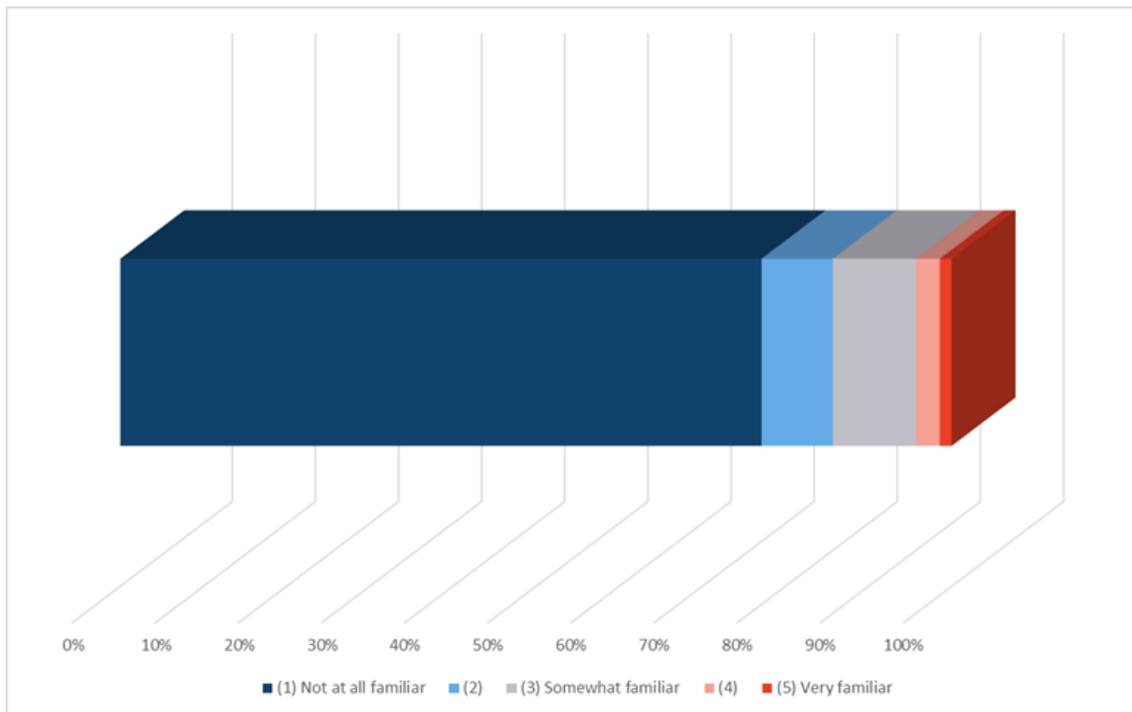
Answered: 70



21. On scale of 1-5, please rate how familiar you are with PSD2.

(1) Not at all	77.1%
(2)	8.6%
(3) Somewhat	10.0%
(4)	2.9%
(5) Very	1.4%
Weighted Average	1.4

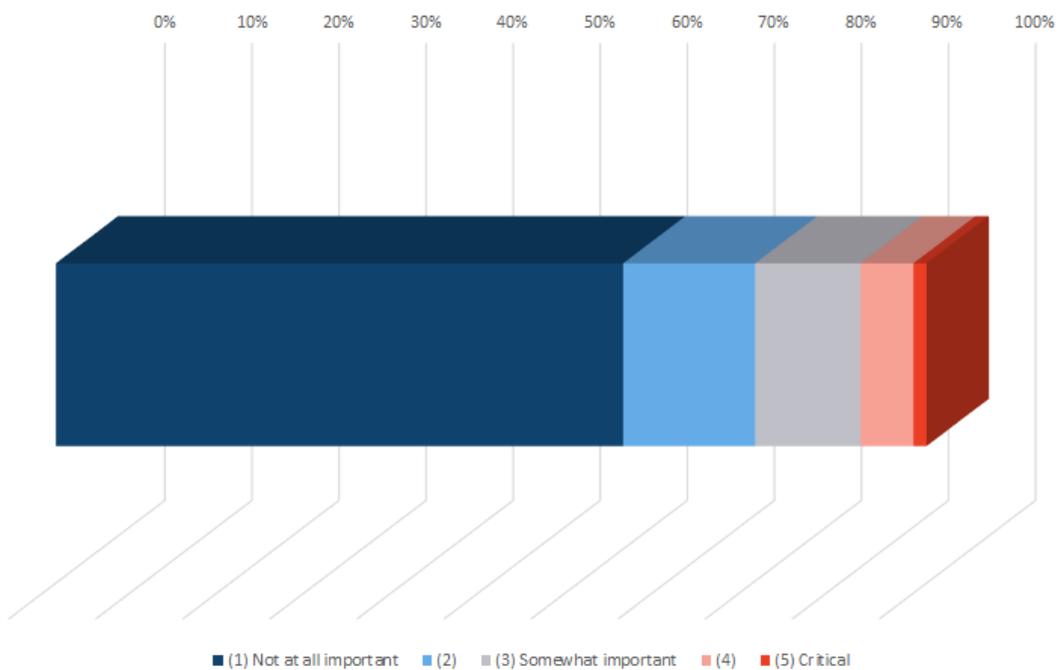
Answered: 70



22. On scale of 1-5, please rate how important preparation for Open Banking or FedNow is to your company.

(1) Not at all	65.2%
(2)	15.2%
(3) Somewhat	12.1%
(4)	6.1%
(5) Critical	1.5%
Weighted Average	1.6

Answered: 66

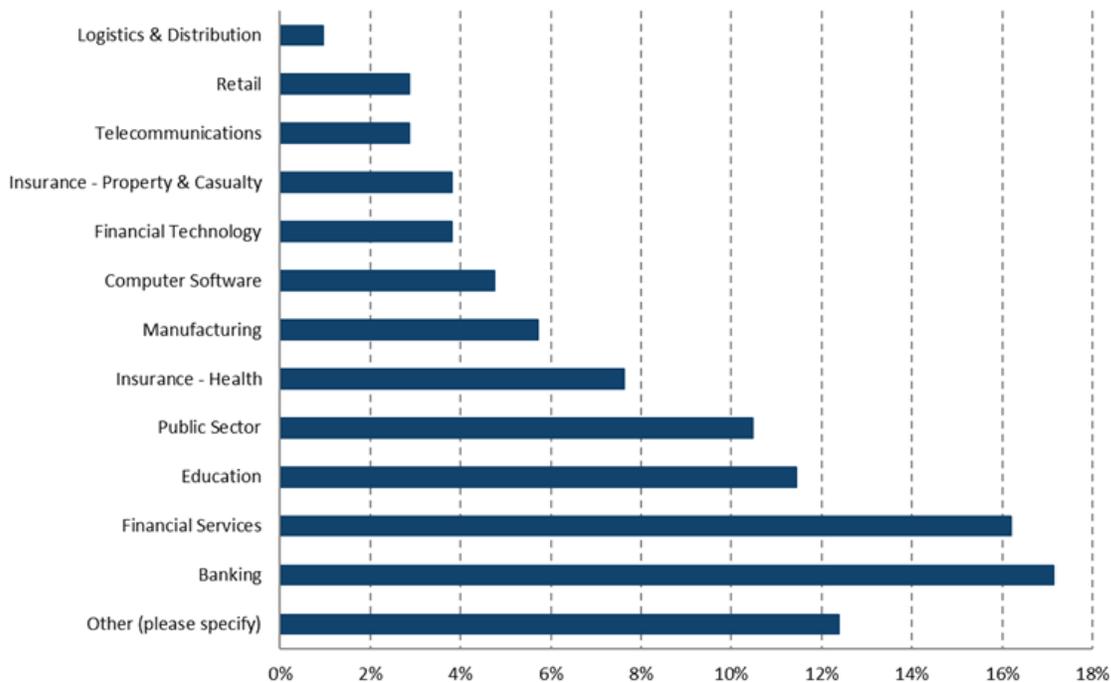


Survey Demographics

23. What best describes the industry that your company serves?

Other (please specify)	12.4%
Banking	17.1%
Financial Services	16.2%
Education	11.4%
Public Sector	10.5%
Insurance - Health	7.6%
Manufacturing	5.7%
Computer Software	4.8%
Financial Technology	3.8%
Insurance - Property & Casualty	3.8%
Telecommunications	2.9%
Retail	2.9%
Logistics & Distribution	1.0%

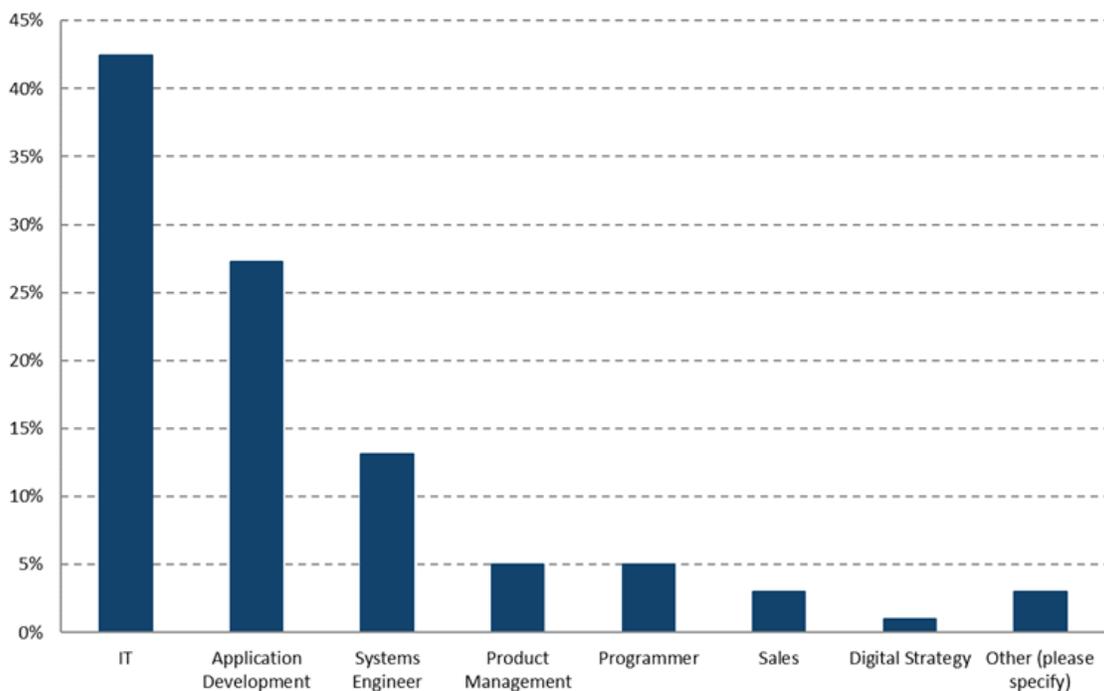
Answered: 105



24. What best describes the industry that your company serves?

IT	42.4%
Application Development	27.3%
Systems Engineer	13.1%
Product Management	5.1%
Programmer	5.1%
Sales	3.0%
Digital Strategy	1.0%
Other (please specify)	3.0%

Answered: 99



25. What best describes your job level?

Entry level	0.0%
Intermediate	36.4%
Middle Management	34.3%
Senior Management	25.3%
Executive/ C-Level	4.0%

Answered: 99

