



## **Online-Appendix zu**

# **„Analyzing Dynamic Capabilities in the Context of Cloud Platform Ecosystems - A Case Study Approach“**

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# 10. Appendices

## 10.1. Appendix A: Case study database

### Appendix A1: Data sources

Source category / explanation	Filename	URL(s) / Retrieval date
<b>AWS job vacancies</b>  <i>Job opportunities and descriptions from Amazon job portal selected for AWS jobs</i>	Amazon_jobvas_1_4211.pdf	<a href="https://www.amazon.jobs/en/search?base_query=&amp;job_count=4221&amp;result_limit=4221&amp;sort=relevant&amp;business_category%5B%5D=amazon-web-services&amp;cache">https://www.amazon.jobs/en/search?base_query=&amp;job_count=4221&amp;result_limit=4221&amp;sort=relevant&amp;business_category%5B%5D=amazon-web-services&amp;cache</a> downloaded at 19.06.2016
	AWS_job-vacancies_1-1000.pdf	downloaded and processed at 19.06.2016
	AWS_job-vacancies_1001-2000.pdf	downloaded and processed at 19.06.2016
	AWS_job-vacancies_2001-3000.pdf AWS_job-vacancies_3001-4210.pdf	downloaded and processed at 19.06.2016 downloaded and processed at 19.06.2016
<b>AWS blog pages</b>  <i>Blog entries from AWS and its partners about technical and managerial issues, solutions, concepts and best practices</i>	AWS_Blogs_255pages.pdf	<a href="https://aws.amazon.com/de/blogs/aws/">https://aws.amazon.com/de/blogs/aws/</a> <a href="https://aws.amazon.com/de/blogs/aws/page/2/">https://aws.amazon.com/de/blogs/aws/page/2/</a> ... <a href="https://aws.amazon.com/de/blogs/aws/page/255/">https://aws.amazon.com/de/blogs/aws/page/255/</a> downloaded and processed at 18.06.2016
	AWS_APN_Blogs_21pages.pdf	<a href="https://aws.amazon.com/de/blogs/apn/">https://aws.amazon.com/de/blogs/apn/</a> <a href="https://aws.amazon.com/de/blogs/apn/page/2/">https://aws.amazon.com/de/blogs/apn/page/2/</a> ... <a href="https://aws.amazon.com/de/blogs/apn/page/21/">https://aws.amazon.com/de/blogs/apn/page/21/</a> downloaded and processed at 18.06.2016
<b>AWS whitepapers</b>  <i>Report from AWS and its ecosystem actors about AWS economy, architecture and security</i>	AWS_Whitepapers.pdf	<a href="https://aws.amazon.com/de/whitepapers/">https://aws.amazon.com/de/whitepapers/</a> downloaded and processed at 18.06.2016
<b>AWS investor information</b>  <i>Annually published information about AWS internal revision and external accounting: annual reports, stakeholder letters and proxy statements</i>	AWS_investor_information.pdf	<a href="http://phx.corporate-ir.net/phoenix.html?c=97664&amp;p=irol-reportsannual">http://phx.corporate-ir.net/phoenix.html?c=97664&amp;p=irol-reportsannual</a> downloaded and processed at 19.06.2016
<b>AWS customer/partner case studies</b>  <i>Customer and partner success stories about the practical implementation, use, administration and managerial implications of AWS products</i>	AWS_Customer_Case_Studies_701.pdf	<a href="https://aws.amazon.com/solutions/case-studies/all/">https://aws.amazon.com/solutions/case-studies/all/</a> downloaded and processed at 18.06.2016
	AWS_Partner_Case_Studies_16.pdf	<a href="https://aws.amazon.com/partners/success/">https://aws.amazon.com/partners/success/</a> downloaded and processed at 18.06.2016
<b>AWS books</b>  <i>Managerial books about AWS introduction, use and optimization</i>	Rossmann_2015.pdf	<a href="https://books.google.de/books?id=9txICgAAQBAJ&amp;pg=PT10&amp;lpg=PT10&amp;dq=%22amazon+web+services%22+learning+from+mistakes&amp;source=bl&amp;ots=b9Nnj_WDr&amp;sig=ox6hUvLmLj8VJP07GmVvobxyUrE&amp;hl=de&amp;sa=X&amp;ved=0ahUKEwjUrJ2i08rNAhWIRhQKHb70DLIQ6AEIazAQ#v=onepage&amp;q=%22amazon%20web%20services%22%20learning%20from%20mistakes&amp;f=false">https://books.google.de/books?id=9txICgAAQBAJ&amp;pg=PT10&amp;lpg=PT10&amp;dq=%22amazon+web+services%22+learning+from+mistakes&amp;source=bl&amp;ots=b9Nnj_WDr&amp;sig=ox6hUvLmLj8VJP07GmVvobxyUrE&amp;hl=de&amp;sa=X&amp;ved=0ahUKEwjUrJ2i08rNAhWIRhQKHb70DLIQ6AEIazAQ#v=onepage&amp;q=%22amazon%20web%20services%22%20learning%20from%20mistakes&amp;f=false</a> downloaded at 28.06.2016
	Golden_2013.pdf	<a href="http://fit.mta.edu.vn/files/DanhSach/Book_Amazon%20webservices%20for%20dummies.pdf">http://fit.mta.edu.vn/files/DanhSach/Book_Amazon%20webservices%20for%20dummies.pdf</a> downloaded at 20.06.2016
<b>AWS industry reports</b>  <i>Analyst reports about AWS's market development and services, as well as general AWS-oriented cloud trends</i>	AWS_Analyst_reports.pdf	<a href="https://aws.amazon.com/de/resources/analyst-reports/">https://aws.amazon.com/de/resources/analyst-reports/</a> downloaded and processed at 18.06.2016

Appendix A1: Data sources (cont.)

Source category / explanation	Filename	URL(s) / Retrieval date
AWS articles  Newspaper and internet articles written by well-known press that present news about cloud computing business	Lindner_2013_11_19_faz.pdf	<a href="http://www.faz.net/aktuell/wirtschaft/unternehmen/amazon-web-services-jeff-bezos-sind-gewinne-nicht-egal-12671600.html">http://www.faz.net/aktuell/wirtschaft/unternehmen/amazon-web-services-jeff-bezos-sind-gewinne-nicht-egal-12671600.html</a> downloaded at 10.06.2016
	Voss_2013_09_21_wiwo.pdf	<a href="http://www.wiwo.de/technologie/digitale-welt/nsa-skandal-es-gibt-keine-hintertueren-bei-amazon/8822464.html">http://www.wiwo.de/technologie/digitale-welt/nsa-skandal-es-gibt-keine-hintertueren-bei-amazon/8822464.html</a> downloaded at 10.06.2016
	Hohensee_2015_11_30_wiwo.pdf	<a href="http://www.wiwo.de/unternehmen/it/amazons-goldesel-heisst-werner-vogels-dieser-mann-bringt-jeff-bezos-die-milliarden/12640866-all.html">http://www.wiwo.de/unternehmen/it/amazons-goldesel-heisst-werner-vogels-dieser-mann-bringt-jeff-bezos-die-milliarden/12640866-all.html</a> downloaded at 10.06.2016
	Matzer_2015_07_24_cloudcomputinginsider.pdf	<a href="http://www.cloudcomputing-insider.de/index.cfm?pid=11036&amp;pk=898872&amp;type=article&amp;fk=498564">http://www.cloudcomputing-insider.de/index.cfm?pid=11036&amp;pk=898872&amp;type=article&amp;fk=498564</a> downloaded at 10.06.2016
	Vogels_2014_05_15_theguardian.pdf	<a href="http://www.theguardian.com/media-network/media-network-blog/2014/may/15/amazon-werner-vogels-cloud-computing">http://www.theguardian.com/media-network/media-network-blog/2014/may/15/amazon-werner-vogels-cloud-computing</a> downloaded at 10.06.2016
	Asay_2014_07_25_readwrite.pdf	<a href="http://readwrite.com/2014/07/25/amazon-web-services-enterprise-domination-werner-vogels/">http://readwrite.com/2014/07/25/amazon-web-services-enterprise-domination-werner-vogels/</a> downloaded at 10.06.2016
	Martin_Geier_2015_07_02_itbusiness.pdf	<a href="http://www.it-business.de/unternehmen-draengen-in-frankfurter-amazon-cloud-a-496429/">http://www.it-business.de/unternehmen-draengen-in-frankfurter-amazon-cloud-a-496429/</a> downloaded at 10.06.2016
	Malik_2013_12_30_gigaom.pdf	<a href="https://gigaom.com/2013/12/30/amazon-cto-werner-vogels-cloud-and-saas-are-going-global-fast/">https://gigaom.com/2013/12/30/amazon-cto-werner-vogels-cloud-and-saas-are-going-global-fast/</a> downloaded at 10.06.2016
	Dignan_2010_06_24_zdnet.pdf	<a href="http://www.zdnet.com/article/amazon-cto-vogels-counters-private-cloud-pitch/">http://www.zdnet.com/article/amazon-cto-vogels-counters-private-cloud-pitch/</a> downloaded at 10.06.2016
	Malik_2010_02_01_gigaom.pdf	<a href="https://gigaom.com/2010/02/01/amazon-cto-werner-vogels-on-amazon%E2%80%99s-web-services-startups-and-innovation/">https://gigaom.com/2010/02/01/amazon-cto-werner-vogels-on-amazon%E2%80%99s-web-services-startups-and-innovation/</a> downloaded at 10.06.2016
	Butler_2015_07_16_networkworld.pdf	<a href="http://www.networkworld.com/article/2948983/cloud-computing/three-things-i-learned-from-chatting-with-amazon-s-cto.html">http://www.networkworld.com/article/2948983/cloud-computing/three-things-i-learned-from-chatting-with-amazon-s-cto.html</a> downloaded at 10.06.2016
	Vogels_2015_02_04_computerwoche.pdf	<a href="http://www.computerwoche.de/a/werner-vogels-verraet-die-cloud-trends-2015_3093297">http://www.computerwoche.de/a/werner-vogels-verraet-die-cloud-trends-2015_3093297</a> downloaded at 10.06.2016
	Benz_2015_06_30_heise.pdf	<a href="http://www.heise.de/newsticker/meldung/Amazon-Web-Services-Cloud-Dateisystem-zum-Ausprobieren-2732003.html">http://www.heise.de/newsticker/meldung/Amazon-Web-Services-Cloud-Dateisystem-zum-Ausprobieren-2732003.html</a> downloaded at 10.06.2016
	Price_2016_03_12_businessinsider.pdf	<a href="http://www.businessinsider.de/werner-vogels-amazon-builds-it-own-tech-2016-3?r=US&amp;R=T">http://www.businessinsider.de/werner-vogels-amazon-builds-it-own-tech-2016-3?r=US&amp;R=T</a> downloaded at 10.06.2016
	Ruggiero_2015_10_08_siliconangle.pdf	<a href="http://siliconangle.com/blog/2015/10/08/amazon-ecosystem-expands-with-aws-iot-reinvent/">http://siliconangle.com/blog/2015/10/08/amazon-ecosystem-expands-with-aws-iot-reinvent/</a> downloaded at 10.06.2016
	Bort_2013_05_19_businessinsider.pdf	<a href="http://www.businessinsider.com/former-amazon-employee-working-on-amazons-cloud-can-be-a-dull-job-2013-5?IR=T">http://www.businessinsider.com/former-amazon-employee-working-on-amazons-cloud-can-be-a-dull-job-2013-5?IR=T</a> downloaded at 10.06.2016
	Bensinger_2014_01_07_wsj.pdf	<a href="http://www.wsj.com/articles/SB10001424052702304753504579285133045398344">http://www.wsj.com/articles/SB10001424052702304753504579285133045398344</a> downloaded at 10.06.2016
	Büst_2015_06_03_crisp.pdf	<a href="https://www.crisp-research.com/aws-summit-berlin-2015-deutschland-ist-auf-public-cloud-kurs/">https://www.crisp-research.com/aws-summit-berlin-2015-deutschland-ist-auf-public-cloud-kurs/</a> downloaded at 10.06.2016
	Harris_2009_03_26_theguardian.pdf	<a href="https://www.theguardian.com/technology/2009/mar/26/amazon-adam-selipsky">https://www.theguardian.com/technology/2009/mar/26/amazon-adam-selipsky</a> downloaded at 10.06.2016
	Furrier_2015_01_29_medium.pdf	<a href="https://medium.com/@furrier/original-content-the-story-of-aws-and-andy-jassys-trillion-dollar-baby-4e8a35fd7ed#.uikzb4vj6">https://medium.com/@furrier/original-content-the-story-of-aws-and-andy-jassys-trillion-dollar-baby-4e8a35fd7ed#.uikzb4vj6</a> downloaded at 17.06.2016
	Hook_2015_11_04_financialtimes.pdf	<a href="http://www.ft.com/cms/s/0/f19d8be5e-7d7b-11e5-a1fe-567b3780b64.html#axzz4BrOBIb5">http://www.ft.com/cms/s/0/f19d8be5e-7d7b-11e5-a1fe-567b3780b64.html#axzz4BrOBIb5</a> downloaded at 17.06.2016
	Rao_2015_06_28_fortune.pdf	<a href="http://fortune.com/2015/06/28/andy-jassy-amazon-web-services/">http://fortune.com/2015/06/28/andy-jassy-amazon-web-services/</a> downloaded at 17.06.2016
	McLaughlin_2015_08_04_crn.pdf	<a href="http://www.crn.com/print/news/cloud/300077657/andy-jassy-amazons-6-billion-man.htm">http://www.crn.com/print/news/cloud/300077657/andy-jassy-amazons-6-billion-man.htm</a> downloaded at 17.06.2016
	Taylor_2015_10_07_cnbc.pdf	<a href="http://www.cnbc.com/2015/10/07/this-is-why-amazon-wont-spin-off-amazon-web-services.html">http://www.cnbc.com/2015/10/07/this-is-why-amazon-wont-spin-off-amazon-web-services.html</a> downloaded at 17.06.2016
	Fritzergerald_2015_03_04_businessinsider.pdf	<a href="http://www.businessinsider.com.au/it-is-time-for-amazon-web-services-to-get-out-of-amazon-2015-3">http://www.businessinsider.com.au/it-is-time-for-amazon-web-services-to-get-out-of-amazon-2015-3</a> downloaded at 17.06.2016
	Brandon_2013_09_17_bcn.pdf	<a href="http://www.businesscloudnews.com/2013/09/17/awss-andy-jassy-attacks-archaic-private-cloud-vendors/">http://www.businesscloudnews.com/2013/09/17/awss-andy-jassy-attacks-archaic-private-cloud-vendors/</a> downloaded at 17.06.2016
Greene_2014_11_12_seattletimes.pdf	<a href="http://www.seattletimes.com/business/amazon-web-services-growing-fast-more-datacenters-in-works/">http://www.seattletimes.com/business/amazon-web-services-growing-fast-more-datacenters-in-works/</a> downloaded at 17.06.2016	
Gallagher_2016_04_08_retailgazette.pdf	<a href="http://www.retailgazette.co.uk/blog/2016/04/amazon-promotes-vps-as-recognition-of-their-services">http://www.retailgazette.co.uk/blog/2016/04/amazon-promotes-vps-as-recognition-of-their-services</a> downloaded at 17.06.2016	
Lopez_2012_04_22_gigaom.pdf	<a href="https://gigaom.com/2012/04/22/why-we-chose-the-aws-marketplace-no-one-else-is-close/">https://gigaom.com/2012/04/22/why-we-chose-the-aws-marketplace-no-one-else-is-close/</a> downloaded at 20.06.2016	

Appendix A1: Data sources (cont.)

Source category / explanation	Filename	URL(s) / Retrieval date
	Morgan_2015_04_09_nextplatform.pdf	<a href="http://www.nextplatform.com/2015/04/09/how-in-hell-will-any-cloud-ever-catch-aws/">http://www.nextplatform.com/2015/04/09/how-in-hell-will-any-cloud-ever-catch-aws/</a> downloaded at 20.06.2016
	Hottovy_2015_10_23_analysisreport.pdf	<a href="http://analysisreport.morningstar.com/stock/research/c-report?&amp;t=XNAS:AMZN&amp;region=usa&amp;culture=zh-TW&amp;productcode=QS&amp;cur=&amp;urlCookie=8997523520&amp;e=eyJhbGciOiJSU0EiOiJ0FFUCiIsImV1YyI6IjE4OTYyOTQ0IiwiaWF0IjoiYyYsS7E4rNn2a00mdtQy4usd4MgSf5udSvrSfPlx1CR8UyQL-J2fAl-FM8li_sYc2QXO6QyvcEv8yVz2N7bnHCjYrW-7azD4-Pf7enaNTK3hrGGLRpuQymb2fsYaVrl-rfNY9qF3MT8zv4yY_C5NnYALL7i3LU5WCtOqboUw.iwvYb9QzHz9uTU6.b1EtzaNCVJLTwn7nrWU9ZQn7_OGtjfvEdxG7NfHaIyz5D.ACj2DqQpY81QZyqOxd0tKNnorEdis70didYff3cciQOYv1UMV7KsW15niMGxHHw1nh4ozFv3nYYdqLDS71TH6mxu-rpQGcH18aD8HBBdTvFussYiSI7U88YebdZhlGyZVxBAtYvgZteGXZN1xQKJTWcI22pQPdz9-KalDqVz2XsG87r6LOGk.SkwwYrJfA4f2pfi6D_fjsg">http://analysisreport.morningstar.com/stock/research/c-report?&amp;t=XNAS:AMZN&amp;region=usa&amp;culture=zh-TW&amp;productcode=QS&amp;cur=&amp;urlCookie=8997523520&amp;e=eyJhbGciOiJSU0EiOiJ0FFUCiIsImV1YyI6IjE4OTYyOTQ0IiwiaWF0IjoiYyYsS7E4rNn2a00mdtQy4usd4MgSf5udSvrSfPlx1CR8UyQL-J2fAl-FM8li_sYc2QXO6QyvcEv8yVz2N7bnHCjYrW-7azD4-Pf7enaNTK3hrGGLRpuQymb2fsYaVrl-rfNY9qF3MT8zv4yY_C5NnYALL7i3LU5WCtOqboUw.iwvYb9QzHz9uTU6.b1EtzaNCVJLTwn7nrWU9ZQn7_OGtjfvEdxG7NfHaIyz5D.ACj2DqQpY81QZyqOxd0tKNnorEdis70didYff3cciQOYv1UMV7KsW15niMGxHHw1nh4ozFv3nYYdqLDS71TH6mxu-rpQGcH18aD8HBBdTvFussYiSI7U88YebdZhlGyZVxBAtYvgZteGXZN1xQKJTWcI22pQPdz9-KalDqVz2XsG87r6LOGk.SkwwYrJfA4f2pfi6D_fjsg</a> downloaded at 20.06.2016
	Schonfeld_2008_04_21_anand.pdf	<a href="http://anand.typepad.com/datawocky/2008/04/a-herald-of-rev.html">http://anand.typepad.com/datawocky/2008/04/a-herald-of-rev.html</a> downloaded at 20.06.2016
	Subramanian_2011_02_23_cloudave.pdf	<a href="https://www.cloudave.com/10151/will-amazons-video-streaming-service-hurt-netflix/">https://www.cloudave.com/10151/will-amazons-video-streaming-service-hurt-netflix/</a> downloaded at 26.06.2016
	Duryee_2015_05_19_geekwire.pdf	<a href="http://www.geekwire.com/2015/cloud-wars-amazon-is-the-clear-leader-with-microsoft-a-distant-second/">http://www.geekwire.com/2015/cloud-wars-amazon-is-the-clear-leader-with-microsoft-a-distant-second/</a> downloaded at 28.06.2016
	Brachmann_2015_05_01_ipwatchdogs.pdf	<a href="http://www.ipwatchdog.com/2015/05/01/modest-patent-portfolio-amazon-web-services/id=57252/">http://www.ipwatchdog.com/2015/05/01/modest-patent-portfolio-amazon-web-services/id=57252/</a> downloaded at 01.07.2016
	Delaney_2012_08_06_morrisonfoerster.pdf	<a href="http://www.sociallyawareblog.com/2012/08/06/look-before-you-leap-amazon-web-services-customers-may-be-subject-to-an-ip-covenant-not-to-sue/">http://www.sociallyawareblog.com/2012/08/06/look-before-you-leap-amazon-web-services-customers-may-be-subject-to-an-ip-covenant-not-to-sue/</a> downloaded at 01.07.2016
	Darrow_2015_01_22_gigaom.pdf	<a href="https://gigaom.com/2015/01/22/in-aws-cloud-contracts-as-in-life-read-before-signing/">https://gigaom.com/2015/01/22/in-aws-cloud-contracts-as-in-life-read-before-signing/</a> downloaded at 01.07.2016
	Trappler_2012_01_17_computerworld.pdf	<a href="http://www.computerworld.com/article/2501452/data-center/when-your-data-s-in-the-cloud-is-it-still-your-data-.html">http://www.computerworld.com/article/2501452/data-center/when-your-data-s-in-the-cloud-is-it-still-your-data-.html</a> downloaded at 01.07.2016
	Miniman_2013_12_16_wikibon.pdf	<a href="http://wikibon.org/wiki/v/Hyper-specialization_is_the_secret_sauce_to_Amazon_Web_Services">http://wikibon.org/wiki/v/Hyper-specialization_is_the_secret_sauce_to_Amazon_Web_Services</a> downloaded at 01.07.2016
	Woods_2013_11_06_thenextweb.pdf	<a href="http://thenextweb.com/insider/2013/11/06/amazon-open-source-software-drives-innovation-startups/#gref">http://thenextweb.com/insider/2013/11/06/amazon-open-source-software-drives-innovation-startups/#gref</a> downloaded at 09.07.2016
	Writer_2015_03_10_itnews.pdf	<a href="http://www.itnews.com.au/feature/the-rise-of-innovation-platforms-401043/page0">http://www.itnews.com.au/feature/the-rise-of-innovation-platforms-401043/page0</a> downloaded at 09.07.2016
	Trondsen_2015_04_06_siliconvikings.pdf	<a href="http://siliconvikings.com/blog/2015/4/6/innovation-outposts-a-growing-element-in-silicon-valleys-dynamic-innovation-ecosystem">http://siliconvikings.com/blog/2015/4/6/innovation-outposts-a-growing-element-in-silicon-valleys-dynamic-innovation-ecosystem</a> downloaded at 09.07.2016
	Schrage_2014_04_30_hbr.pdf	<a href="https://hbr.org/2014/04/how-innovation-ecosystems-turn-outsiders-into-collaborators/">https://hbr.org/2014/04/how-innovation-ecosystems-turn-outsiders-into-collaborators/</a> downloaded at 09.07.2016
	Lunden_2015_10_07_techcrunch.pdf	<a href="https://techcrunch.com/2015/10/07/amazons-aws-is-now-a-7-3b-business-as-it-passes-1m-active-enterprise-customers/">https://techcrunch.com/2015/10/07/amazons-aws-is-now-a-7-3b-business-as-it-passes-1m-active-enterprise-customers/</a> downloaded at 30.08.2016
<b>AWS news pages</b>	AWS_News_186pages.pdf	<a href="https://aws.amazon.com/de/about-aws/in-the-news/">https://aws.amazon.com/de/about-aws/in-the-news/</a> crawled and processed at 08.05.2016
<i>News about AWS published by press.</i>		
<b>AWS interviews</b>	Werner_Vogels_2006_05_16_infoq.pdf	<a href="https://www.infoq.com/news/Amazon-CTO-Werner-Vogels-on-SOA">https://www.infoq.com/news/Amazon-CTO-Werner-Vogels-on-SOA</a> downloaded at 10.06.2016
<i>Interviews done with top executives of AWS about platform's management</i>	Werner_Vogels_2008_07_31_virtualization.pdf	<a href="http://virtualization.com/2008/07/31/werner-vogels-cto-amazon-video-intervie/">http://virtualization.com/2008/07/31/werner-vogels-cto-amazon-video-intervie/</a> downloaded at 10.06.2016
	Werner_Vogels_2015_04_29_cnbc.pdf	<a href="http://www.cnbc.com/2015/04/24/cloud-set-to-take-over-retail-in-10-years-amazon-cto.html">http://www.cnbc.com/2015/04/24/cloud-set-to-take-over-retail-in-10-years-amazon-cto.html</a> downloaded at 10.06.2016
	Werner_Vogels_2008-12-19_informationweek.pdf	<a href="http://www.informationweek.com/it-leadership/ganda-amazon-cto-werner-vogels/d/d-id/1075053?page_number=1">http://www.informationweek.com/it-leadership/ganda-amazon-cto-werner-vogels/d/d-id/1075053?page_number=1</a> downloaded at 10.06.2016
	Werner_Vogels_2015_02_15_zeit.pdf	<a href="http://www.zeit.de/2015/05/amazon-speicherplatz-technik-vorstand-werner-vogels">http://www.zeit.de/2015/05/amazon-speicherplatz-technik-vorstand-werner-vogels</a> downloaded at 09.06.2016
	Werner_Vogels_2013_09_20_channelpartner.pdf	<a href="http://www.channelpartner.de/a/amazon-will-ueber-partner-die-unternehmens-it-erobern,2614958">http://www.channelpartner.de/a/amazon-will-ueber-partner-die-unternehmens-it-erobern,2614958</a> downloaded at 09.06.2016
	Werner_Vogels_2014_06_24_mit.pdf	<a href="https://www.technologyreview.com/s/528471/three-questions-with-amazons-technology-chief-werner-vogels/">https://www.technologyreview.com/s/528471/three-questions-with-amazons-technology-chief-werner-vogels/</a> downloaded at 09.06.2016
	Werner_Vogels_2009_11_27_computerweekly.pdf	<a href="http://www.computerweekly.com/news/1280097046/Interview-Amazon-CTO-Werner-Vogels-on-why-CIOs-love-clouds">http://www.computerweekly.com/news/1280097046/Interview-Amazon-CTO-Werner-Vogels-on-why-CIOs-love-clouds</a> downloaded at 09.06.2016
	Werner_Vogels_2014_07_19_recode.pdf	<a href="http://www.recode.net/2014/7/19/11628994/talking-the-cloud-business-with-amazon-cto-werner-vogels">http://www.recode.net/2014/7/19/11628994/talking-the-cloud-business-with-amazon-cto-werner-vogels</a> downloaded at 09.06.2016

Appendix A1: Data sources (cont.)

Source category / explanation	Filename	URL(s) / Retrieval date
	Werner_Vogels_2006_05_22_acm.pdf	<a href="http://queue.acm.org/detail.cfm?id=1142065">http://queue.acm.org/detail.cfm?id=1142065</a> downloaded at 11.05.2016
	Werner_Vogels_2011_11_02_odbms.pdf	<a href="http://www.odbms.org/blog/2011/11/on-big-data-interview-with-dr-werner-vogels-cto-and-vp-of-amazon-com/">http://www.odbms.org/blog/2011/11/on-big-data-interview-with-dr-werner-vogels-cto-and-vp-of-amazon-com/</a> downloaded at 10.06.2016
	Geier_Rede_2015_04_13_computerwoche.pdf	<a href="http://www.computerwoche.de/arz-in-frankfurt-kein-marketing-instrument,3096997">http://www.computerwoche.de/arz-in-frankfurt-kein-marketing-instrument,3096997</a> downloaded at 10.06.2016
	Andy_Jassy_2013_11_08_allthingsd.pdf	<a href="http://allthingsd.com/20131108/nine-questions-for-andy-jassy-head-of-amazon-web-services/">http://allthingsd.com/20131108/nine-questions-for-andy-jassy-head-of-amazon-web-services/</a> downloaded at 10.06.2016
	Andy_Jassy_2012_11_28_techcrunch.pdf	<a href="http://techcrunch.com/2012/11/28/an-interview-with-amazon-web-services-senior-vice-president-andy-jassy/">http://techcrunch.com/2012/11/28/an-interview-with-amazon-web-services-senior-vice-president-andy-jassy/</a> downloaded at 10.06.2016
	Andy_Jassy_2010_04_29_itnews.pdf	<a href="http://www.itnews.com.au/tools/print.aspx?ciid=173364">http://www.itnews.com.au/tools/print.aspx?ciid=173364</a> downloaded at 10.06.2016
	Steffen_Krause_2013_08_26_t3n.pdf	<a href="http://t3n.de/news/cloud-dienste-startups-amazon-web-services-486480/">http://t3n.de/news/cloud-dienste-startups-amazon-web-services-486480/</a> downloaded at 10.06.2016
	Andy_Jassy_2014_10_23_managermagazin.pdf	<a href="http://www.manager-magazin.de/unternehmen/it/jassy-hohe-volumina-und-niedrige-margen-das-moegen-wir-a-998947.html">http://www.manager-magazin.de/unternehmen/it/jassy-hohe-volumina-und-niedrige-margen-das-moegen-wir-a-998947.html</a> downloaded at 17.06.2016
	Andy_Jassy_2013_11_12_wsj.pdf	<a href="http://www.wsj.com/articles/SB10001424052702304868404579194353031011652">http://www.wsj.com/articles/SB10001424052702304868404579194353031011652</a> downloaded at 17.06.2016
	Andy_Jassy_2012_11_28_geekwire.pdf	<a href="http://www.geekwire.com/2012/amazon-web-services-andy-jassy-build-paternal-service/">http://www.geekwire.com/2012/amazon-web-services-andy-jassy-build-paternal-service/</a> downloaded at 10.06.2016
	Jeff_Bezos_2013_01_hbr.pdf	<a href="https://hbr.org/2013/01/jeff-bezos-on-leading-for-the/">https://hbr.org/2013/01/jeff-bezos-on-leading-for-the/</a> downloaded at 26.06.2016
<b>AWS announcements</b>  <i>Announcements about AWS's strategic and tactical movements in time</i>	AWS_Announcements_1570.pdf	<a href="https://aws.amazon.com/de/about-aws/whats-new/2016/">https://aws.amazon.com/de/about-aws/whats-new/2016/</a> ... <a href="https://aws.amazon.com/de/about-aws/whats-new/2004/">https://aws.amazon.com/de/about-aws/whats-new/2004/</a> crawled and processed at 08.05.2016
<b>AWS research papers</b>  <i>Research papers about AWS's strategic and tactical management decisions, processes and structure</i>	Isckia and Lescop_2009.pdf	<a href="https://core.ac.uk/download/files/153/6332974.pdf">https://core.ac.uk/download/files/153/6332974.pdf</a> downloaded at 01.07.2016
	Haug, Kretschmer and Strobel_2016.pdf	<a href="http://www.sciencedirect.com/science/article/pii/S0308596115001238">http://www.sciencedirect.com/science/article/pii/S0308596115001238</a> downloaded at 01.07.2016
	Kolakowski_2009.pdf	<a href="http://www.ic2.utexas.edu/ictpi/mirror/porto2009/papers/43_Platform%20Leadership%20in%20Software%20as%20a%20Service_Bartomiej%20K.pdf">http://www.ic2.utexas.edu/ictpi/mirror/porto2009/papers/43_Platform%20Leadership%20in%20Software%20as%20a%20Service_Bartomiej%20K.pdf</a> downloaded at 01.07.2016

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
Sense 1: Sensing external innovation	Identify, target, select and exploit innovation, research and development	Identifying and noticing external innovation activities, services, products and technology.	Evidence in form of processes, activities and events that lead to an identification of innovation that originated and took place outside the firm	As far as possible we try to exclude duplicates.	TEMP:=*identify innova* *sense innova* locate innova* target innova* select innova* *exploit innova* *customer innova* *partner innova* *competitor innova* *market innova* *innova*
Sense 2: Sensing and direct internal innovation	Identify, target, select and exploit innovation, research and development	Identifying, noticing, directing and embracing internal innovation activities, services, products and technology.	Evidence in form of processes, activities and events that lead to an identification of innovation that originated and took place inside the firm	As far as possible we try to exclude duplicates.	TEMP:=*identify innova* *sense innova* locate innova* target innova* select innova* *exploit innova* *direct innova* *internal innova* *innova*
Sense 3: Encouraging open innovation focused on a broad external base	Identify, target, select and exploit innovation, research and development	Promoting the creation of innovative services together with external stakeholders (the whole ecosystem)	Evidence in form of processes, activities and events that lead to a promotion of open innovations	As far as possible we try to exclude duplicates.	TEMP:=*open innovat* *open-source* *open source* *innova* *custom innova* *partner innova* *competitor innova* *market innova*
Sense 4: Sensing external R&D	Identify, target, select and exploit innovation, research and development	Identifying and noticing external research activities	Evidence in form of processes, activities and events that lead to an identification of research activities that originated and took place outside the firm	As far as possible we try to exclude duplicates.	TEMP:=*customer research* *partner research* *competitor research* *market research* *external research* *customer development* *partner development* *competitor development* *market development* *external development* *customer R&D* *partner R&D* *competitor R&D* *market R&D* *external *R&D* *identify research* *sense research* *locate research* *target research* *select research* *exploit research* *identify evlopment* *sense development* *locate development* *target development* *select development* *exploit development*
Sense 5: Sensing and direct internal R&D	Identify, target, select and exploit innovation, research and development	Identifying, noticing, directing and embracing internal research activities	Evidence in form of processes, activities and events that lead to an identification of research activities that originated and took place inside the firm	As far as possible we try to exclude duplicates.	TEMP:=*customer innova* *partner innova* *competitor innova* *market innova* *external innova* *identify research* *sense research* *locate research* *target research* *select research* *exploit research* *identify development* *sense development* *locate development* *target development* *select development* *exploit development*
Sense 6: Identifying market segments	Analyze and select the environment	Identifying customer groups and target markets	Evidence in form of market and customer segments or processes and activities that lead to the identification of them	As far as possible we try to exclude duplicates.	TEMP:=market seg* customer seg* consumer seg* product group* segment* product seg* market group* customer group* consumer group*
Sense 7: Identifying changing customer needs	Analyze and select the environment	Identifying changes in customer needs, wantings and behaviour	Evidence in form of customer requirements or processes and activities that lead to the identification of changes in customer requirements	As far as possible we try to exclude duplicates.	TEMP:=*customer needs* *customer want* *market need* *customer requi* *customer feedback* *customer relation* changing customer needs changing customer requirements customers change
Sense 8: Identifying and evaluate ecosystem and industry trends	Analyze and select the environment	Identifying service topics that are coherent among various ecosystem actors	Evidence in form of trending services or processes and activities that lead to the identification of trends	As far as possible we try to exclude duplicates. Detailed technology trends (e.g. containering, ...)	TEMP:=*trend* *ident trend* *sense trend* *eval eco* *eval industr*

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
Sense 9: Using analytic frameworks to sense opportunities and threats	Analyze and select the environment	Applying analytic tools and services in order to evaluate the past and orientate into the future	Evidence in form of tools or processes and activities that lead to analytic evaluation of business development topics	As far as possible we try to exclude duplicates.	TEMP:=*analytic* *analys* *framework* *intelligen* *analyze opport* *analyze threat* *analyze chanc* *analyze danger*
Seize1: Selecting technology/feature and product/service architecture	Redesign business model	Selecting a proper combination of service offerings enabled by technological features	Evidence in form of tools or processes and activities that lead to analytic evaluation of business development topics	As far as possible we try to exclude duplicates.	TEMP:=*select service* *select technolog* *select architect*
Seize 2: (Re-)Designing revenue structures	Redesign business model	Configuring a proper revenue stream design out of prices and sales volume	Evidence in form of decisions and processes that lead to a revenue design consisting of pricing and volume decisions	As far as possible we try to exclude duplicates.	TEMP:=*price* *pricin* *revenue* *volume* *sell*
Seize 3: (Re-)Designing cost structures	Redesign business model	Configuring a proper cost stream design out of fixed and variable costs	Evidence in form of decisions and processes that lead to a cost design consisting of fixed and variable costs	As far as possible we try to exclude duplicates.	TEMP:=*cost* *expense* *expend* *price* *invest* *debt* *mortgage* *TCO*
Seize 4: Selecting target customers	Redesign business model	Selecting customers to target on sales, marketing and analysis initiatives	Evidence in form of market and customer segments or processes and activities that lead to the targeting of them	As far as possible we try to exclude duplicates.	TEMP:=*target customer* *target market* *appropriate customer* *target consumer*
Seize 5: Designing mechanisms to capture value	Redesign business model	Configuring a proper profit design for customer and focal firm value appropriation	Evidence in form of revenue und cost balancing decisions and activities that lead to profit definition	As far as possible we try to exclude duplicates.	TEMP:=*value capture* *capture value* *value proposi* *prop value* *profit* *value*
Seize 6: Designing partnerships	Redesign business model	Configuring a proper ecosystem consisting of partners for value co-creation	Evidence in form of partner ecosystem descriptions and decisions that define the partner ecosystem	As far as possible we try to exclude duplicates.	TEMP:=*partner* *partnership* *cooperat* *union* *ecosystem*
Seize 7: Having deep market and customer understanding	Redesign business model	Stating a comprehensive understanding of market and customers	Evidence in form of customer and market descriptions	As far as possible we try to exclude duplicates.	TEMP:=*understand customer* *know customer* *learn customer* *recognize customer* *sense customer* *customer understand* *customer know* *customer learn* *customer recognize* *customer sense* *customer understand* *understand consumer* *know consumer* *learn consumer* *recognize consumer* *sense consumer* *consumer understand* *consumer know* *consumer learn* *consumer recognize* *consumer sense* *consumer understand*
Seize 8: Recognizing inflexion points	Select decision-making protocols	Noticing major changes in the ecosystem deeply impacting the business model	Evidence in form of business model-relating major changes	As far as possible we try to exclude duplicates.	TEMP:=*inflexion* *turnaround* *technology evolution* *reorient* *business model chang* *change business model

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
Seize 9: Avoiding and mitigating decision errors	Select decision-making protocols	Preventing wrong decisions misleading the company's business	Evidence in form of tools or processes and activities that lead to the prevention of wrong decisions	As far as possible we try to exclude duplicates.	TEMP:=*decision error* *wrong decision* *false decision* *right decision* *good decision* *optimism* *wrong investment* *right investment* *loss aversion* *isolation error* *decision*
Seize 10: Avoiding anticannibalization tendencies	Select decision-making protocols	Preventing decisions leading to the oppression of service substitution	Evidence in form of tools or processes and activities that lead to the prevention of service substitution	As far as possible we try to exclude duplicates.	TEMP:=*cannibaliz* *substitut*
Seize 11: Encouraging creative thinking and action	Select decision-making protocols	Stimulating a culture of creativity with innovative and visionary individuals, processes and decision making	Evidence in form of tools or processes and activities that lead to a culture promoting creativity	As far as possible we try to exclude duplicates.	TEMP:=*creativ* *creativ cultur* *creatie think*
Seize 12: Encouraging removal of no value-adding assets and activities	Select decision-making protocols	Stimulating a culture of efficiency and effectivity in order to rethink processes that add no value to the service	Evidence in form of tools or processes and activities that lead to a culture promoting efficiency and effectivity	As far as possible we try to exclude duplicates.	TEMP:=*value* *value-add* *no value-add*
Seize 13: Learning from mistakes	Select decision-making protocols	Concluding proper business rationale from decisions and activities that turn out to be wrong and leading the firm into very short-term disadvantages	Evidence in form of tools or processes and activities that lead to an understanding of the reasons for wrong decisions in order to conclude insights for improvement	As far as possible we try to exclude duplicates.	TEMP:=*learn from mistake* *learning from mistakes* *mistake*
Seize 14: Demonstrating leadership	Build loyalty and commitment	Proving and showing a strong management role in the entire ecosystem that lead to the actor's awareness for the company as a leader	Evidence in form of tools or processes and activities that lead to a leadership role	As far as possible we try to exclude duplicates.	TEMP:=*lead* *goal* *value* *vision* *motivat* *strategy* *roadmap*
Seize 15: Communicating effectively	Build loyalty and commitment	Exchanging information with all ecosystem actors in an effective and goal-oriented way	Evidence in form of tools or processes and activities that lead to an effective communication and information exchange among ecosystem actors	As far as possible we try to exclude duplicates.	TEMP:=*commun effectiv* *effect commun* *communic* *critic* *feedback* *motivate* *conversation* *conflict*
Seize 16: Recognizing non-economic factors, value and culture	Build loyalty and commitment	Identifying and leveraging non-economic aspects and causes of company success	Evidence in form of tools or processes and activities that lead to the identification of non-economic aspects of success as well as already identified and leveraged aspects	As far as possible we try to exclude duplicates.	TEMP:=*non-economic* *value* *cultur* *qual* *sustain*
Seize 17: Calibrating asset specificity	Select enterprise boundaries to manage complements and "control" platforms	Adjusting asset allocation for specific purposes	Evidence in form of tools or processes and activities that lead to the adjustment of asset specification	As far as possible we try to exclude duplicates.	TEMP:=*asset specificity* *specif* *asset* *hardware* *servers* *human* *staff*
Seize 18: Arranging alliances to learn and upgrade	Select enterprise boundaries to manage complements and "control" platforms	Setting up and managing learning and upgrading arrangements with ecosystem actors	Evidence in form of tools or processes and activities that lead to arranged learning and upgrading alliances	As far as possible we try to exclude duplicates.	TEMP:=*alliance* *partner* *collaboration*
Seize 19: Deciding and managing integration, outsourcing and insourcing	Select enterprise boundaries to manage complements and "control" platforms	Managing and changing enterprise boundaries via the integration, outsourcing or insourcing of services and processes	Evidence in form of tools or processes and activities that lead to re-configured enterprise boundaries	As far as possible we try to exclude duplicates.	TEMP:=*insourc* *outsourc* *integrat* *incorp* *dovetail* *embed* *absorb* *spin off* *spin-off* *assimilat*
Seize 20: Controlling bottleneck assets	Select enterprise boundaries to manage complements and "control" platforms	Monitoring and controlling of assets that determine the maximum service output	Evidence in form of tools or processes and activities that lead to re-configured bottleneck assets	As far as possible we try to exclude duplicates.	TEMP:=*bottleneck* *outage* *barrier* *blockage* *congest* *single point of failure*
Seize 21: Assessing legal and natural protection through an appropriability regime	Select enterprise boundaries to manage complements and "control" platforms	Creating protection mechanisms through management regimes that isolate valuable innovations from the external ecosystem	Evidence in form of tools or processes and activities that lead to appropriability regimes	As far as possible we try to exclude duplicates.	TEMP:=*appropriat* *license* *open-source* *open source* *patent* *protect know*
Seize 22: Recognizing and managing complementarities	Select enterprise boundaries to manage complements and "control" platforms	Identifying and noticing complementors in order to set enterprise boundaries	Evidence in form of tools or processes and activities that lead to the identification of complementors	As far as possible we try to exclude duplicates.	TEMP:=*complement* *supplement*

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
Seize 23: Recognizing, managing and capturing co-specialization	Select enterprise boundaries to manage complements and "control" platforms	Identifying and managing co-specialization with complementors	Evidence in form of tools or processes and activities that lead to the identification and management of co-specialization with complementors	As far as possible we try to exclude duplicates.	TEMP:=*co-specialization* *specialization* *cospecialization*
Transform 1: Learning	Manage knowledge	Managing learning mechanisms	Evidence in form of tools or processes and activities that lead to the management of learning	As far as possible we try to exclude duplicates.	TEMP:=*learn*
Transform2: Transferring knowledge	Manage knowledge	Managing knowledge transfers	Evidence in form of tools or processes and activities that lead to the management of knowledge transfers	As far as possible we try to exclude duplicates.	TEMP:=*knowledge shar* *share knowledge* *expert shar* *share expert* *know-how shar* *share know-how* *knowledge levera* *leverage knowledge* *expertise levera* *leverage expert* *know-how levera* *leverage know-how* *knowledge exploit* *exploit knowledge* *expertise exploit* *exploit expert* *know-how exploit* *exploit know-how* *knowledge use* *use knowledge* *expertise use* *use expert* *know-how use* *use know-how* *knowledge management* *manage knowledge* *expertise management* *manage expert* *know-how manage* *manage know-how*
Transform 3: Integrating know-how	Manage knowledge	Managing knowledge integration	Evidence in form of tools or processes and activities that lead to the management of knowledge integrations	As far as possible we try to exclude duplicates.	TEMP:=*knowledge integr* *integrate knowledge* *expert integr* *integrate expert* *know-how integr* *assembly know-how* *knowledge assembly* *assembly knowledge* *expert assembly* *assembly expert* *know-how assembly* *assembly know-how* *knowledge incorp* *incorporate knowledge* *expert incorp* *incorporate expert* *know-how incorp* *knowledge accomodate* *accomodate knowledge* *expert accomodate* *accomodate expert* *know-how accomodate* *knowledge combine* *combine knowledge* *expert combine* *combine expert* *know-how combine*

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
Transform 4: Achieving know-how	Manage knowledge	Managing knowledge acquisitions	Evidence in form of tools or processes and activities that lead to the management of knowledge acquisitions	As far as possible we try to exclude duplicates.	TEMP:=*knowledge creat* *create knowledge* *expert creat* *create expert* *know-how creat* *knowledge capt* *capture knowledge* *expert capt* *capture expert* *know-how capt* *knowledge acqui* *acquire knowledge* *expert acqui* *acquire expert* *know-how acqui* *knowledge achiev* *achieve knowledge* *expert achiev* *achieve expert* *know-how achiev* *knowledge buy* *buy knowledge* *expert buy* *buy expert* *know-how buy* *knowledge get* *get knowledge* *expert get* *get expert* *know-how get*
Transform 5: Protecting intellectual property	Manage knowledge	Managing the protection of intellectual property	Evidence in form of tools or processes and activities that lead to protected intellectual property (e.g. patents)	As far as possible we try to exclude duplicates.	TEMP:=*legal* *intellectual* *property* *patent* *imitat* *lawyer*
Transform 6: Managing strategic fit so that asset combinations are value-enhancing	Cospecialize	Identifying and managing co-specialization with strategic assets	Evidence in form of tools or processes and activities that lead to the identification and management of co-specialization with strategic assets	As far as possible we try to exclude duplicates.	TEMP:=*combine assets* *strategic fit* *orchestrate* *strategic combination*
Transform 7: Developing integration, coordination and reconfiguration skills	Support open innovation and modularity	Enhancing skills for integration, coordination and reconfiguration of processes and assets	Evidence in form of tools or processes and activities that lead to enhanced skills for integration, coordination and reconfiguration of processes and assets	As far as possible we try to exclude duplicates.	TEMP:=*integrat* *reconfigur* *coordinat* *arrange*
Transform 8: Adopting loosely coupled structures	Support open innovation and modularity	Managing modular enterprise formations	Evidence in form of tools or processes and activities that lead to modular enterprise formations	As far as possible we try to exclude duplicates.	TEMP:=*modul* *loose* *couple* *API* *service-oriented* *combi*
Transform 9: Embracing open innovation	Support open innovation and modularity	Adopting the combined use of external and internal ideation and marketing paths	Evidence in form of tools or processes and activities that lead to a combined use of external and internal ideation and marketing paths	As far as possible we try to exclude duplicates.	TEMP:=*open innovat* *open-source* *open source*
Transform 10: Achieving incentive alignment	Strength governance	Aligning incentive mechanisms to strategic goals	Evidence in form of tools or processes and activities that lead to aligned incentive mechanisms	As far as possible we try to exclude duplicates.	TEMP:=*incentive* *talent* *reward* *bonus* *compensation* *honor* *motivat*
Transform 11: Minimizing agency issues	Strength governance	Reducing the issues that arise when having separated control and ownership structures	Evidence in form of tools or processes and activities that lead to aligned agencies	As far as possible we try to exclude duplicates.	TEMP:=*private purpose* *agency issue* *asset misuse* *misuse* *interest conflict* *conflict of interest* *self-interest* *self interest* *agent* *principal*
Transform 12: Checking strategic malfeasance	Strength governance	Managing the processes of checking executive misbehavior and drawing conclusions from that	Evidence in form of tools or processes and activities that lead to checked strategic executive misbehavior	As far as possible we try to exclude duplicates.	TEMP:=*malfeas* *mismanage* *board replace* *board capabil* *management evaluat*
Transform 13: Blocking rent dissipation	Strength governance	Preventing resource depletion with pricing mechanisms	Evidence in form of tools or processes and activities that lead to prevented resource depletion	As far as possible we try to exclude duplicates.	TEMP:=*rent dissipat*
InnoScale 1: Customer network effects	Innovation scale	Achieving the attraction and adoption of many customers because the platform already has a lot of customers	Evidence in form of tools or processes and activities that lead to high customer attraction and adoption because of already high amount of customers	As far as possible we try to exclude duplicates.	TEMP:=*customer network* *number of customers* *economies of scale* *network effects*

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
InnoScale 2: Complementor network effects	Innovation scale	Achieving the attraction and adoption of many complementors because the platform already has a lot of complementors	Evidence in form of tools or processes and activities that lead to high complementor attraction and adoption because of already high amount of complementors	As far as possible we try to exclude duplicates.	TEMP:=*complementor network* *number of complementors* *economies of scale* *network effects* *partner network* *number of partners* *ISV*
InnoScale 3: Information-based decision making and applied analytics	Innovation scale	Applying data-driven analysis in order to find and select decisions	Evidence in form of tools or processes and activities that lead to data- and analytics-driven decision making	As far as possible we try to exclude duplicates.	TEMP:=analytic* analys* framework* intelligen*
InnoScale 4: Modular product and service architecture	Innovation scale	Offering a service portfolio that consists out of loosely coupled services	Evidence in form of tools or processes and activities that lead to a modular service portfolio. Evidence in form of service portfolios.	As far as possible we try to exclude duplicates.	TEMP:=*modul* *loose* *couple* *API* *service-oriented* *combi*
InnoScale 5: Information and technology functionality and exchange	Innovation scale	Offering services that are highly useful from a technological perspective. Exchanging knowledge about service technology with other actors.	Evidence in form of tools or processes and activities that lead to the offering and exchange of highly, technological useful services.	As far as possible we try to exclude duplicates.	TEMP:=*technology functionality* *service technology*
InnoScope 1: Customer scope	Innovation scope	Achieving a high level of acceptance for innovations by customers	Evidence in form of tools or processes and activities that lead to a high level of acceptance for innovations by customers	As far as possible we try to exclude duplicates.	TEMP:=*customer* *consumer*
InnoScope 2: Complementor scope	Innovation scope	Achieving a high level of acceptance for innovations by complementors	Evidence in form of tools or processes and activities that lead to a high level of acceptance for innovations by complementors	As far as possible we try to exclude duplicates.	TEMP:=*complementor* *parnter* *ISV*
InnoScope 3: Information and technology appliance to multi-industry ecosystems	Innovation scope	Implementing technological services in a variety of industry branches	Evidence in form of tools or processes and activities that lead to the implementation of technological services in a variety of industry branches	As far as possible we try to exclude duplicates.	TEMP:=*multiple industries* *various industries* *multiple branches* *various branches*

DC Code	Code parent	Description	Inclusion criteria	Exclusion criteria	ATLAS.ti auto coding search expression
InnoSpeed 1: Customer attraction rate	Innovation speed	The velocity at which the number of attracted customers rises with regard to time	Evidence in form of comments showing that the company recognizes this measure as well as direct statements of the rate	As far as possible we try to exclude duplicates.	TEMP:=*customer attraction rate* *attraction rate* *attract customers*
InnoSpeed 2: Complementor attraction rate	Innovation speed	The velocity at which the number of attracted complementors rises with regard to time	Evidence in form of comments showing that the company recognizes this measure as well as direct statements of the rate	As far as possible we try to exclude duplicates.	TEMP:=*complementor attraction rate* *attraction rate* *attract complementors*
InnoSpeed 3: Customer adoption speed	Innovation speed	The velocity at which the number of service-adopted customers rises with regard to time	Evidence in form of comments showing that the company recognizes this measure as well as direct statements of the rate	As far as possible we try to exclude duplicates.	TEMP:=*customer adoption speed* *adopt speed* *platform adoption velocity* *adopt velocity* *adoption rate*
InnoSpeed 4: Complementor adoption speed	Innovation speed	The velocity at which the number of service-adopted complementors rises with regard to time	Evidence in form of comments showing that the company recognizes this measure as well as direct statements of the rate	As far as possible we try to exclude duplicates.	TEMP:=*complementor adoption speed* *adopt speed* *platform adoption velocity* *adopt velocity* *adoption rate*
InnoSpeed 5: Platform adaption speed	Innovation speed	The velocity at which the number of service adoptions on the platform rises with regard to time	Evidence in form of comments showing that the company recognizes this measure as well as direct statements of the rate	As far as possible we try to exclude duplicates.	TEMP:=*platform adoption speed* *adoption speed* *platform adoption velocity* *adoption velocity* *adoption rate*
InnoSpeed 6: Information and technology for open innovation and community	Innovation speed	Managing open innovation and open community-oriented mechanisms to share and develop technology	Evidence in form of tools or processes and activities that lead to open innovation and open community-oriented mechanisms in order to share and develop technology	As far as possible we try to exclude duplicates.	TEMP:=*open innov* *open comm* *share tech* *dev tech*



## Appendix A4: Quotations

- P 1: Amazon\_jobvas\_1\_4211.pdf - 1:1 [We are taking all the industry..] (7:1082-7:1201) (Super)**  
We are taking all the industry trends and blending them into the critical foundation of utility computing: the network.
- P 1: Amazon\_jobvas\_1\_4211.pdf - 1:2 [Want to design and build then..] (12:495-12:671) (Super)**  
Want to design and build the next generation Customer Information Platform and Tools ground up using cloud technologies to power a flexible, scalable customer analytics engine?
- P 1: Amazon\_jobvas\_1\_4211.pdf - 1:3 [Job Description Are you comfor..] (20:1498-20:1681) (Super)**  
Job Description Are you comfortable making decisions that analyze market data, product features and business terms to develop recommendations that represent a winwin for all parties?
- P 1: Amazon\_jobvas\_1\_4211.pdf - 1:4 [Global Alliance Manager- Stra..] (3:1517-3:1615) (Super)**  
Global Alliance Manager - Strategic Technology Partnerships  
US, CA, San Francisco | Job ID: 418646
- P 1: Amazon\_jobvas\_1\_4211.pdf - 1:5 [Manager Network Scaling and In..] (10:723-10:804) (Super)**  
Manager Network Scaling and Integration, Singapore  
SG, Singapore | Job ID: 418038
- P 1: Amazon\_jobvas\_1\_4211.pdf - 1:6 [Knowledge Management Librarian..] (269:1410-269:1439) (Super)**  
Knowledge Management Librarian
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:1 [kills. - Extensive customer ne..] (1245:2900-1245:2965) (Super)**  
kills.  
- Extensive customer network.  
- Strong leadership skills.
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:2 [lls. Â· Extensive customer net..] (1383:1867-1383:1902) (Super)**  
lls.  
Â· Extensive customer network.
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:3 [kills. - Extensive customer ne..] (1384:2468-1384:2533) (Super)**  
kills.  
- Extensive customer network.  
- Strong leadership skills.
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:4 [Â· Strong verbal and written c..] (1544:1-1544:110) (Super)**  
Â· Strong verbal and written communications skills  
Â· Extensive customer network  
Â· Strong leadership skills
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:5 [y. Â· Understand the infrastru..] (82:214-82:302) (Super)**  
y.  
Â· Understand the infrastructure market segments, customer base, and industry verticals
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:6 [We have an exciting opportunit..] (115:850-115:971) (Super)**  
We have an exciting opportunity for a Strategic Transformation Manager for our Enterprise segment to join our fast growing
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:7 [ct community. Â· Understand th..] (144:2119-144:2196) (Super)**  
ct community.  
Â· Understand the AWS market segments, customer base, and industries
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:8 [ies. Your responsibilities wil..] (147:1370-147:1727) (Super)**  
ies. Your responsibilities  
will include helping to define key public sector market segments to target, driving the necessary business and technical relationships with customers and partners to establish new business in those markets, and enabling the sales team drive the day-to-day interactions with prospects in order to build long-term business opportunities
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:9 [egy. Â· Help define the AWS pu..] (147:2829-147:2931) (Super)**  
egy.  
Â· Help define the AWS public sector market segments, customer base, and industry verticals we target
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:10 [Â· Develop campaigns to create..] (196:3268-196:3368) (Super)**  
Â· Develop campaigns to create awareness and increase service adoption for the target market segments
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:11 [Specific responsibilities incl..] (198:910-198:1175) (Super)**  
Specific responsibilities include the following:  
Â· Creating the Product Strategy for Developer Support and Business Support product offerings  
Â· Create and define specific product and service offerings that align with the needs of the corresponding market segment
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:12 [Â· Defining product requiremen..] (198:1478-198:1612) (Super)**  
Â· Defining product requirement documents based on an intimate knowledge of the specific market segments, target customers, and products
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:13 [Global Segment Leader, Devops] (261:1168-261:1196) (Super)**  
No codes No memos  
Global Segment Leader, Devops
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:14 [Amazon Web Services (AWS) is L..] (261:1796-261:1986) (Super)**  
Amazon Web Services (AWS) is looking for an experienced candidate to build, own and manage the strategic plan and competency program for our top partners focused on the DevOps market segment
- P 2: AWS\_job-vacancies\_1-1000.pdf - 2:15 [You: We are seeking web devel..] (359:1572-359:1748) (Super)**  
You: We are seeking web developers with industry experience who are passionate about enhancing customer satisfaction, operational performance, and growing market segment share

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:16 [Goals. By establishing and growing.] (386:1492-386:1746) (Super)**  
 Goals. By establishing and growing business and technical relationships, and managing the day-to-day interactions with these partners, you will be responsible for driving top line revenue growth and overall end customer adoption across all owned segments.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:17 [Intermediate/advanced knowledge.] (473:3544-473:3651) (Super)**  
 Intermediate/advanced knowledge of the AWS services, market segments, customer base and industry verticals

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:18 [Defining product requirements.] (599:1198-599:1334) (Super)**  
 Defining product requirements documents based on an intimate knowledge of the specific market segments, target customers, and product

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:19 [Defining product requirements.] (628:1933-628:2069) (Super)**  
 Defining product requirements documents based on an intimate knowledge of the specific market segments, target customers, and product

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:20 [The Field Marketing Manager.] (765:294-765:514) (Super)**  
 The Field Marketing Manager is an integral part of the outbound marketing team who is responsible for delivering programs aimed at Enterprise sales audiences and will be the face of marketing for the segment sales

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:21 [- Use of statistical functions..] (44:1882-44:1981) (Super)**  
 Use of statistical functions to correlate various data elements to establish trends and forecasts.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:22 [Awareness of current and future trends in the relational database industry.] (199:2304-199:2379) (Super)**  
 Awareness of current and future trends in the relational database industry

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:23 [Tracking skills. Track record ..] (291:2858-291:3041) (Super)**  
 Tracking skills. Track record in investing time in the development of others by actively mentoring and educating the larger SDE community on trends, technologies, and best practices.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:24 [Drive trend and systemic issues.] (338:2360-338:2421) (Super)**  
 Drive trend and systemic issues identification across the team

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:25 [You will analyze trends involving.] (382:2538-383:41) (Super)**  
 You will analyze trends involving the industry players, vendors, customers, and technology to develop strategies to reduce cost, minimize risk, protect continuity of supply, and exploit emerging opportunities allowing AWS to meet and exceed its goals

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:26 [Review and approve a comprehensive list of suppliers for bid processes developed by analyzing the industry to understand trends and competitive positioning ensuring system activation of the best possible supply base.] (383:1111-383:1325) (Super)**  
 Review and approve a comprehensive list of suppliers for bid processes developed by analyzing the industry to understand trends and competitive positioning ensuring system activation of the best possible supply base

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:27 [Cloud und Web-Services sind Trends die sich in den vergangenen Jahren in der IT etabliert haben und für die Zukunft nicht mehr wegzudenken sind.] (644:1341-644:1486) (Super)**  
 Cloud und Web-Services sind Trends die sich in den vergangenen Jahren in der IT etabliert haben und für die Zukunft nicht mehr wegzudenken sind

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:28 [Actively seeking solutions to customer needs, communicating trends to leadership, and suggesting innovative solutions on behalf of the customer experience.] (740:1296-740:1451) (Super)**  
 Actively seeking solutions to customer needs, communicating trends to leadership, and suggesting innovative solutions on behalf of the customer experience.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:29 [By undertaking programs that define or change industry trends we are continuously raising the bar on customer experience.] (802:641-802:760) (Super)**  
 By undertaking programs that define or change industry trends we are continuously raising the bar on customer experience

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:30 [Strategy & Innovation: articulate business/industry fundamentals (e.g., ROI, CBA, TCO); understand regulations and operational excellence (e.g., SOX, Lean, Six Sigma); familiarity with business strategy frameworks (e.g., Norton/Kaplan, Blue/Red Ocean, NABC) and trends in the IT industry (e.g., CI/CD, IoT, Predictive Analytics).] (842:2025-842:2354) (Super)**  
 Strategy & Innovation: articulate business/industry fundamentals (e.g., ROI, CBA, TCO); understand regulations and operational excellence (e.g., SOX, Lean, Six Sigma); familiarity with business strategy frameworks (e.g., Norton/Kaplan, Blue/Red Ocean, NABC) and trends in the IT industry (e.g., CI/CD, IoT, Predictive Analytics)

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:31 [By undertaking programs that define or change industry trends we are continuously raising the bar on customer experience.] (866:1428-866:1547) (Super)**  
 By undertaking programs that define or change industry trends we are continuously raising the bar on customer experience

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:32 [Have a strong understanding of game technology and trends.] (1447:2648-1447:2704) (Super)**  
 Have a strong understanding of game technology and trends

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:33 [ts. You must be creative in solving hard problems in the Infrastructure space and unafraid to think out-of-the-box.] (34:883-34:998) (Super)**  
 ts. You must be creative in solving hard problems in the Infrastructure space and unafraid to think out-of-the-box.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:34 [Amazon offers an exciting, dynamic and challenging environment encouraging creativity and personal development while maintaining our computing environments in a secure, scalable, and cost-effective manner.] (38:1686-38:1891) (Super)**  
 Amazon offers an exciting, dynamic and challenging environment encouraging creativity and personal development while maintaining our computing environments in a secure, scalable, and cost-effective manner.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:35 [In joining our team, you'll enjoy a competitive salary, great benefits, a creative and comfortable work environment, and the exciting opportunity to be part of a fast-paced and growing technology company.] (70:1841-70:2045) (Super)**  
 In joining our team, you'll enjoy a competitive salary, great benefits, a creative and comfortable work environment, and the exciting opportunity to be part of a fast-paced and growing technology company.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:36 [Delivering a reliable, scalable, and high-performance service requires engineers with exceptional technical expertise.] (88:1903-88:2045) (Super)**  
 Delivering a reliable, scalable, and high-performance service requires engineers with exceptional technical expertise

and fearless creativity.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:37 [Strong and creative problem so..] (93:2891-93:2935) (Super)**  
Strong and creative problem solving abilities

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:38 [Ability to think and work creat..] (262:3410-262:3536) (Super)**  
Ability to think and work creatively to develop unique joint value propositions and product strategy within a Partner ecosystem

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:40 [You learn from your mistakes, ..] (1239:1381-1239:1456) (Super)**  
You learn from your mistakes, and you love working with really smart people.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:41 [. If this is you, AWS is a uniq..] (2:2009-2:2204) (Super)**  
. If this is you, AWS is a unique place where you can design and build innovative technologies in a very large distributed computing environment and help lead fundamental changes in the industry.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:42 [You need to not only be a top ..] (5:2367-5:2519) (Super)**  
You need to not only be a top software developer with a good track record of delivering, but also excel in communication, leadership and customer focus.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:43 [Excellent leadership, verbal a..] (6:1463-6:1523) (Super)**  
Excellent leadership, verbal and written communication skills

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:44 [Mentor other engineers, define t..] (3:170-3:245) (Super)**  
Mentor other engineers, define the technical culture, and help grow the team

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:45 [Our team finds ways to move fas..] (9:1793-9:1924) (Super)**  
non-economic factors, value and culture - Family: What] [SeizeB: Select decision-making protocols - Family: What] [SeizeC: Build loyalty and commitment - Family: What]  
Our team finds ways to move faster by cross training, process automation, removing non-value add activities, and improving quality.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:46 [Our team is looking for individ..] (8:1276-8:1377) (Super)**  
Our team is looking for individuals with specific qualities in addition to the technical requirements.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:47 [You've succeeded at so many dif..] (8:2380-8:2489) (Super)**  
You've succeeded at so many different things that you don't like being labeled as one specific type of person.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:48 [The ideal candidate will posse..] (262:785-262:973) (Super)**  
The ideal candidate will possess a strong background in technology partnerships and cloud solutions along with strong business development, strategic alliances, and entrepreneurial skills.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:49 [Our success depends on our world..] (34:271-34:410) (Super)**  
Our success depends on our world-class network infrastructure; we're handling massive scale and rapid integration of emergent technologies.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:50 [Diving deep into open source t..] (49:251-49:398) (Super)**  
Diving deep into open source technologies like Hadoop, Hive, Pig, Hbase, and Spark to build features, fix bugs, and improve performance bottlenecks

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:51 [Address bottlenecks, provide e..] (136:1577-136:1779) (Super)**  
Address bottlenecks, provide escalation management, anticipate and make tradeoffs, balance the business needs versus technical constraints, and encourage risk-taking behavior to maximize business benefit

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:52 [Work cross-functionally to mana..] (162:1927-162:2113) (Super)**  
Work cross-functionally to manage bottlenecks, provide escalation management, anticipate issues, balance business needs versus team constraints, and champion a great customer experience.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:53 [Demonstrated ability to adapt to..] (99:335-99:401) (Super)**  
Demonstrated ability to adapt to new technologies and learn quickly

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:54 [We need someone who is willing..] (103:747-103:875) (Super)**  
We need someone who is willing to learn fast and raise the quality bar by both testing and influencing the development processes.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:55 [Should be genuinely excited abo..] (104:3269-104:3396) (Super)**  
Should be genuinely excited about technology, have a strong interest in learning about and playing with the latest technologies.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:56 [Create and review documentation..] (12:1139-12:1279) (Super)**  
Create and review documentation and process regarding recurring issues, new standard operating procedures, knowledge transfer material, etc.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:57 [Leverage knowledge of your custo..] (98:2858-98:2989) (Super)**  
Leverage knowledge of your customers' environments to assist support engineers and service teams in better serving your customers

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:58 [You are the type of person that..] (180:1201-180:1336) (Super)**  
You are the type of person that codes for fun, quickly wins the respect of peers, and jumps at the chance to share knowledge and mentor

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:59 [Leverage knowledge of internal ..] (201:1536-201:1608) (Super)**  
Leverage knowledge of internal and industry prior art in design decisions

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:60 [Proactively support knowledge s..] (368:1145-368:1220) (Super)**  
Proactively support knowledge sharing within the team and across the company

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:61 [Share knowledge and help educa..] (546:679-546:779) (Super)**  
Share knowledge and help educate your peers on the best practices related to all service owner issues

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:62 [A Security Engineer II will pro..] (629:2599-629:2765) (Super)**  
A Security Engineer II will proactively share knowledge across the Amazon

Community and will be a key company resource in one or more of the core areas of security. T

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:63 [Mentoring: Share knowledge and..] (927:824-927:945) (Super)**  
Mentoring: Share knowledge and help educate less technical staff on the best practices related to all service owner issues

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:64 [knowledge acquired from releva..] (19:3143-19:3189) (Super)**  
knowledge acquired from relevant job experience

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:65 [Contributing patches and impro..] (49:404-49:460) (Super)**  
Contributing patches and improvements back to open source

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:66 [do everything to delight ourcu..] (71:1248-71:1577) (Super)**  
do everything to delight our customers directly- build libraries, tools and applications to improve day-1 customer experience, connect directly with customer on forums, blog posts and meet-ups to increase awareness, and contribute to open source community. You will shape the product roadmap, strategy and evangelize technology

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:67 [Throughout your job you will be ..] (102:654-102:820) (Super)**  
Throughout your job you will be guiding your team of 5+ developers to collaborate with internal teams and the Open Source Community to improve the Linux OS components

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:68 [Contribute intellectual proper..] (201:1719-201:1767) (Super)**  
- Family: What] [TransformA: Manage knowledge - Family: What]  
Contribute intellectual property through patents.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:69 [Experience in TDD techniques &..] (28:2318-28:2370) (Super)**  
Experience in TDD techniques & Continuous Integration

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:70 [You will integrate a wide rang..] (31:892-31:1046) (Super)**  
You will integrate a wide range of existing AWS infrastructure to deliver large-scale, high-throughput distributed services consumed by mobile developers.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:71 [Successful candidates will be ..] (62:1352-62:1626) (Super)**  
Successful candidates will be responsible for designing innovative solutions using AWS services, integrating with existing systems and implementing new systems to drive the building and operation of an effective, data driven, automated security control monitoring solution.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:72 [Integration of AWS cloud servic..] (64:3181-64:3283) (Super)**  
- Family: What] [TransformC: Support open innovation and modularity - Family: What]  
Integration of AWS cloud services with on-premise technologies from Microsoft, IBM, Oracle, HP, SAP etc

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:73 [integrating our customerâ€™s IT..] (75:127-75:191) (Super)**  
integrating our customerâ€™s IT infrastructure with Cloud storage

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:74 [AWS Storage Gateway is a servi..] (75:3223-75:3459) (Super)**  
- Family: What] [TransformC: Support open innovation and modularity - Family: What]  
AWS Storage Gateway is a service connecting an on-premises software appliance with cloud-based storage to provide seamless and secure integration between an organizationâ€™s on-premises IT environment and AWS's storage infrastructure.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:75 [The successful candidate will ..] (78:1642-78:1856) (Super)**  
The successful candidate will have a proven track record of success in delivering complex projects, including coordinating and driving issues to resolution autonomously utilizing excellent project management skills

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:76 [AWS is seeking talented engine..] (86:1117-86:1342) (Super)**  
- Family: What] [TransformC: Support open innovation and modularity - Family: What]  
AWS is seeking talented engineers, well versed in DevOps technologies, automation, infrastructure orchestration, configuration management and continuous integration, who are not constrained by how things are usually done

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:77 [One or more DevOps, Orchestrat..] (87:727-87:874) (Super)**  
One or more DevOps, Orchestration/Configuration Management and Continuous Integration technology (e.g. Chef, Puppet, Docker, Jenkins, Ansible etc.)

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:78 [This includes project managem..] (107:2816-107:3005) (Super)**  
This includes project management, quality audits and coordination of training sessions with senior-level engineers as well as day-to-day oversight of the team including scheduling of shifts

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:79 [Cross-Site, Cross-Team Coordin..] (107:3009-107:3576) (Super)**  
Cross-Site, Cross-Team Coordination  
You will be responsible for coordinating with your counterparts to ensure that a clear communication channel exists between AWS and Retail teams. You will also work closely with other Operations, Systems and Network teams to create and maintain a proper process for transitioning operational responsibilities to the Infrastructure and Platform Automation team. A portion of this process will include establishing both solid operational acceptance criteria and a concrete feedback loop for resolving deviations from that process.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:80 [The successful candidate will ..] (108:1356-108:1570) (Super)**  
The successful candidate will have a proven track record of success in delivering complex projects, including coordinating and driving issues to resolution autonomously utilizing excellent project management skills

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:81 [Experience with service-orient..] (40:1785-40:1846) (Super)**  
Experience with service-oriented architecture and web services

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:82 [You will have a chance to work..] (127:1986-127:2162) (Super)**  
You will have a chance to work with the open source community and contribute significant portions of its software to open source projects possibly including Hadoop, Pig and Hbase.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:83 [Developers in this position wi..] (184:2002-184:2181) (Super)**  
innovation and modularity - Family: What]  
Developers in this position will use a variety of mainstream and open source technologies like Java, C++, Linux, Perl, Javascript,

Oracle, as well as in-house Amazon technologies.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:84 [Self-driven & motivated, with..] (49:1510-49:1592) (Super)**  
 Self-driven & motivated, with a strong work ethic and a passion for problem solving

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:85 [Amazon.com offers a demanding,..] (67:1544-67:1721) (Super)**  
 Amazon.com offers a demanding, exciting and rewarding experience, with opportunities to work with the world's best computer scientists on some of the most interesting problems

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:86 [You can motivate high skilled ..] (102:1379-102:1445) (Super)**  
 You can motivate high skilled individuals to perform at their best.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:87 [Reduce the end-to-end cost of..] (12:454-12:502) (Super)**  
 Reduce the end-to-end costs of delivering packets.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:88 [Prioritize projects and activi..] (157:1937-157:2025) (Super)**  
 Prioritize projects and activities to deliver maximum cost reductions and reliable supply

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:89 [Analyze industry trends and evo..] (157:2161-157:2373) (Super)**  
 Analyze industry trends and evolving technology to proactively identify supply base opportunities to reduce cost, minimize risk, protect continuity of supply, and exploit industry developments that benefit Amazon

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:90 [Evaluate supplier core competen..] (157:2777-157:2866) (Super)**  
 Evaluate supplier core competencies and competitive positioning using industry cost models

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:91 [Make the business decisions th..] (166:1633-166:1788) (Super)**  
 Make the business decisions that grow adoption and usage of Amazon S3. Set prices, target the right customers, and focus our investments in the right areas

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:92 [Help prioritize AWS investment..] (262:1911-262:2056) (Super)**  
 Help prioritize AWS investment in partners who focus on the DevOps market segment to drive incremental results for both AWS and selected partners

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:93 [Set a strategic business devel..] (147:2942-147:3059) (Super)**  
 Set a strategic business development plan for target markets and ensure it's in line with the AWS strategic direction.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:94 [Defining product requirement d..] (196:2998-196:3130) (Super)**  
 Defining product requirement documents based on an intimate knowledge of the specific market segments, target customers, and product

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:95 [Build and strengthen the partn..] (303:1881-303:1966) (Super)**  
 Build and strengthen the partner community to generate businesses in the target market

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:96 [Define and size target market ..] (691:2364-691:2472) (Super)**  
 Define and size target market segments, customer base, and key partners including ISVs and system integrators

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:97 [Using our business intelligenc..] (272:2310-272:2524) (Super)**  
 Using our business intelligence platform, we also drive complex data analysis to understand customer behavior, and to find hidden patterns in data that will help us design future products that customers will love.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:98 [Experience driving a technical..] (60:1359-60:1474) (Super)**  
 Experience driving a technical global product and team with end to end inbound and outbound product responsibilities

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:99 [Exceptional customer relations..] (52:2229-52:2268) (Super)**  
 Exceptional customer relationship skills

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:100 [Understanding customer require..] (64:1578-64:1612) (Super)**  
 Understanding customer requirements

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:101 [Ability to gather customer requi..] (77:1216-77:1254) (Super)**  
 Ability to gather customer requirements

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:102 [Understand current and future ..] (246:4640-246:4720) (Super)**  
 Understand current and future customer needs and present AWS technical benefits.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:103 [Work with partners to extend re..] (32:2022-32:2075) (Super)**  
 Work with partners to extend reach & promote adoption.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:104 [Help partners and customers le..] (64:1211-64:1265) (Super)**  
 Help partners and customers learn and use AWS services

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:105 [Develop long-term strategic pa..] (82:1220-82:1290) (Super)**  
 Develop long-term strategic partnerships in support of our key markets.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:106 [Handle ad-hoc incoming inquiri..] (82:1296-82:1377) (Super)**  
 Handle ad-hoc incoming inquiries and qualify them as potential vendors or partners

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:107 [After joining, you have quickly..] (102:414-102:555) (Super)**  
 After joining, you have quickly become a key partner to the leadership team, where you will understand its core business goals and priorities

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:108 [Work with AWS engineering teams..] (112:2013-112:2131) (Super)**  
 Work with AWS engineering teams to convey partner and enterprise customer feedback as input to AWS technology roadmaps

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:109 [Apply advanced troubleshooting ..] (238:1671-238:2014) (Super)**

Apply advanced troubleshooting techniques to provide unique solutions to our customers' individual needs. These May vary from customers attempting to use our systems for the first time, all the way up to large scale enterprise customers processing and transforming billions of data records per day with use cases spanning multiple industries.

**P 2: AWS\_job-vacancies\_1-1000.pdf - 2:110 [The Data Analytics team within..] (272:1660-272:2308) (Super)**

The Data Analytics team within EBS is looking for innovative engineers to design, build, and grow the next generation of our data analytics platform. We own data analytics and reporting on both operational and business data, and strive to become the trusted source of actionable insights to the EBS business. We are the monitors of EBS service health and EBS business growth, continuously looking to drive better customer experiences. Our engineers work closely with data scientists on interesting problems involving big data, machine learning, data mining, statistical analysis, and forecasting on massive structured and unstructured data sets.

**P 4: AWS\_job-vacancies\_2001-3000.pdf - 4:1 [Amazon Web Services (AWS) is rapidly..] (346:447-346:625) (Super)**

Amazon Web Services (AWS) is rapidly expanding its presence in multiple industries and countries, offering a public cloud meeting a wide range of security compliance requirements

**P 5: AWS\_job-vacancies\_3001-4210.pdf - 5:1 [The AWS Solutions Architecture P..] (17:1942-17:2363) (Super)**

The AWS Solutions Architecture Program Management Office (PMO) is looking for an experienced content librarian and curator who is passionate about reuse, discoverability, and enabling other to succeed. In this role you will work with SAs, key stakeholders, and program managers to manage and evolve our knowledge management system (KMS) while enhancing the leveragability and discoverability of the content we produce.

**P 5: AWS\_job-vacancies\_3001-4210.pdf - 5:2 [planning, creating, maintainin..] (17:2388-17:2517) (Super)**  
planning, creating, maintaining and integrating shared typologies that enhance the ability to discover and reuse relevant content.

**P 5: AWS\_job-vacancies\_3001-4210.pdf - 5:3 [Amazon Web Services (AWS) is rap..] (997:2309-997:2569) (Super)**

Amazon Web Services (AWS) is rapidly expanding its global presence. AWS adheres to multiple industry frameworks by strategically implementing new IT processes and product security features to accommodate the requirements and to expand our global customer base

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:1 [A need to differentiate and in..] (4:866-4:933) (Super)**  
A need to differentiate and innovate while growing business revenue.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:2 [“Working with AWS has transfor..] (11:1108-11:1716) (Super)**

“Working with AWS has transformed what we provide to our customers,” says Pietrasanta. “We’ve always thrived in the digital services and application development space, but our ability to leverage AWS in order to provide customers with a full end-to-end solution has transformed the type of work we do for customers and has transformed Aquilent as a company, allowing us to specialize and help our customers evolve into Agile, Continuous Integration, Continuous Delivery and Deployment, and DevOps.” Aquilent has seen significant business growth on AWS, experiencing cloud growth of 566% over the last year.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:3 [“Our acceptance into the progr..] (11:1903-11:2194) (Super)**

“Our acceptance into the program highlights our advanced offerings in the cloud managed services space, which includes the tools necessary to deliver continuous innovation around security, DevOps, proactive monitoring, and streamlined management of customer environments,” says Pietrasanta.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:4 [AWS Innovation Partner – Fusio..] (30:50-30:82) (Super)**

- Family: To whom] [Innovate - Family: What]  
AWS Innovation Partner – Fusionex

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:5 [Let’s Innovate Together on Beh..] (37:2563-37:2776) (Super)**

Let’s Innovate Together on Behalf of Customers – Join the APN by Dorothy Copeland | on 20 APR 2016 | in APN Channel Reseller Program, APN Consulting Partners, APN Technology Partners, AWS Competency, MSPs On AWS |

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:6 [Partners in Innovation: Announ..] (64:1783-64:1867) (Super)**

Partners in Innovation: Announcing the AWS 2016 City on a Cloud Innovation Challenge

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:7 [AWS and a panel of worldwide ex..] (64:2348-64:2663) (Super)**

AWS and a panel of worldwide experts will award a total of \$250,000 in AWS promotional credits to eight grand prize winners from three award

categories: Best Practices, Partners in Innovation, and Dream Big, a category that recognizes the best ideas for a cloud innovation, and award credits for its implementation.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:8 [Ericsson is creating a global ..] (81:1261-81:1396) (Super)**

Ericsson is creating a global team of experts focused on AWS, and is opening cloud innovation centers with customers, with AWS support.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:9 [Infor and AWS share a common e..] (63:1409-63:1561) (Super)**

Infor and AWS share a common entrepreneurial spirit, driven by a strong desire to continuously disrupt the market and innovate on behalf of our customers

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:10 [One of the leaders and most inn..] (96:4680-96:4818) (Super)**

One of the leaders and most innovative companies unlocking the potential of cloud-stored imaging data is AWS Partner Network (APN) Advanced

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:11 [Increasingly, customers are as..] (173:1789-173:1943) (Super)**

Increasingly, customers are asking for AWS MSPs across various industries, serving different customer segments, and

across different regions of the world.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:12 [We will continue to identify IS..] (224:1223-224:1372) (Super)**

We will continue to identify ISVs who are leaders in their respective market segments and work hard to earn their commitment to AWS and our customers.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:13 [Terry also discussed key trend..] (29:2369-29:2602) (Super)**

Terry also discussed key trends representing a large opportunity for Partners on AWS, and Premier Consulting Partner

BlazeClan took the stage to

discuss a successful cloud migration the company completed for a large company in region.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:14 [then discussed what we find to..] (33:945-33:1103) (Super)**

then discussed what we find to be some of the keys to partner success, along with seven key trends that represent an enormous opportunity for partners on AWS:

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:15 [Learn how to increase revenue ..] (1:1309-1:1549) (Super)**

Learn how to increase revenue with cloud-based products and services, gain a greater competitive advantage, and expand your business

Attend sessions that will cover a wide range of topics relevant to business leaders at Partner organizations

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:16 [AWS Marketplace Announces New ..] (61:630-61:714) (Super)**

AWS Marketplace Announces New AWS Marketplace Metering Service For 3rd Party Sellers

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:17 [There are five full-day traini..] (62:3366-63:37) (Super)**

There are five full-day training bootcamps happening, and the bootcamps have the following pricing structure: AWS

Certified Professionals – \$400 AUD

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:18 [“Prior to the cloud, researche..] (172:1829-172:2200) (Super)**

“Prior to the cloud, researchers sent hard drives around

in an attempt to collaborate. We now have a different paradigm where we put data in the cloud and bring the scientists to the data, side-by-side with

the EC2 compute resources they need to perform their analysis. AWS is enabling new science, and reducing the turnaround time on many different

types of analysis.”

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:19 [Barracuda SignNow: Barracuda S..] (257:1048-257:1134)**

**(Super)**

Barracuda SignNow: Barracuda SignNow cuts document turnaround time by as much as 90%. G

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:20 [Cloud Choice with AWS is inten..] (46:4382-46:4539) (Super)**

Cloud Choice with AWS is intended to help enterprise customers make the right business decisions as they optimize workload migrations and deployments on AWS.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:21 [SampleApp\_Linux\_Consul/key1 va..] (44:2390-44:2423) (Super)**

No codes

SampleApp\_Linux\_Consul/key1 value1

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:22 [We’ve clearly shifted away fro..] (3:4368-3:4717) (Super)**

We’ve clearly shifted away from a “should-I-move-to-cloud” mentality to “how-do-I-move-to-cloud” and

“what-is-the-right-path-for-me.” Enterprises large and small are looking to navigate the journey

smoothly, plan and architect a strategy, execute a migration at scale, and develop new cloud applications cost-effectively, using leading-edge IT tools.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:23 [Editor’s note—our team had greatc..] (37:2803-37:3007) (Super)**

Editor’s note—our team

had great conversations with a number of companies yesterday at the AWS Chicago Summit who were interested in learning more about becoming a member of the AWS Partner ecosystem, a

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:24 [We continuously enhance our te..] (46:1725-46:1856) (Super)**

We continuously enhance our technical courses to stay current with the pace of AWS platform updates and incorporate student feedback.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:25 [It involves rapid, continuous..] (4:1844-4:1983) (Super)**

It involves rapid, continuous development and integration to deliver enhanced and new business capabilities through the use of AWS services.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:26 [There are several ways to inte..] (5:270-5:356) (Super)**

There are several ways to

integrate Windows applications in AWS with Active Directory.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:27 [These custom processing featur..] (10:974-10:1187) (Super)**

These custom processing features may be of particular interest to SaaS providers who may have integrations or provisioning activities that would

need to be triggered at different steps in the registration process.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:28 [You might, for example, have t..] (10:1189-10:1334) (Super)**

You might, for example, have third-party integration with a billing system that must

be called each time a new user is being added to the system.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:29 [Amazon Cognito has a well-defi..] (10:2586-10:2684) (Super)**

Amazon Cognito has a well-defined model for how it integrates with other public identity providers.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:30 [It already supports integratio..] (10:2686-10:2729) (Super)**

It already supports integration with Google,

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:31 [But if your database is perform..] (20:1425-20:1642) (Super)**

But if your database is performing poorly while metrics for IOPS and network are in normal ranges,

and while the instance appears to have sufficient memory, the CPUs of your chosen instance type may be the bottleneck.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:32 [This allows you to forward tra..] (35:5377-35:5483) (Super)**

This allows you to forward traffic within a private

VPC without any bandwidth or availability bottlenecks.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:33 [Pouring all your customers int..] (54:4323-54:4512) (Super)**

Pouring all your customers into a shared, multi-tenant environment places an even higher premium on identifying opportunities to remove

bottlenecks and improve each customer’s experience. T

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:34 [Another bottleneck in the migr..] (124:4740-124:4812) (Super)**

Another bottleneck in the migration process is moving database workloads.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:35 [Our modular, flexible approach..] (4:3010-4:3193) (Super)**

Our modular, flexible approach to large scale application migrations to AWS comprises five key components with the various factory production lanes available for application migration

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:36 [You can use AWS Database Migra..] (150:329-150:669) (Super)**

You can use AWS Database Migration Service to migrate your data to and from most widely used commercial and open-source databases. The

service supports homogenous migrations such as Oracle to Oracle, as well as heterogeneous migrations between different database platforms, such as

Oracle to Amazon Aurora or Microsoft SQL Server to MySQL.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:37 [Purpose-driven incentives, suc..] (4:939-4:1001) (Super)**

Purpose-driven incentives, such as lowering IT operational costs

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:38 [Timeline-driven incentives, fr..] (4:1008-4:1093) (Super)**

Timeline-driven incentives, from the need to shed a legacy data center to M&A activity

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:39 [For a limited time, we've incr..] (165:759-165:859) (Super)**

For a limited time, we've increased the AWS Test Drive start-up bonus to \$3,000 in AWS usage credits.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:40 [There's never been a better ti..] (164:4043-164:4169) (Super)**

There's never been a better time to explore how the AWS Test Drive Program can help you reach your target customer base on AWS.

**P 6: AWS\_APN\_Blogs\_21pages.pdf - 6:41 [As a SaaS solution provider, y..] (71:5363-71:5562) (Super)**

As a SaaS solution provider, you should always consider agility and how your personas may or may not be influencing your ability to respond rapidly

to customer feedback and changes in market dynamics

**P 7: AWS\_Blogs\_255pages.pdf - 7:1 [Driving viralspread globally t..] (52:2013-52:2135) (Super)**

Driving viralspread globally to increase network effects, we are signing up new Webshops and Brands at a tremendous pace. W

**P 7: AWS\_Blogs\_255pages.pdf - 7:2 [. Because Amazon S3 is already..] (3318:3349-3318:3461) (Super)**

Because Amazon S3 is already supporting BitTorrent OOTB, they can still benefit from the network effect of P2P

**P 7: AWS\_Blogs\_255pages.pdf - 7:3 [After talking to many customer..] (408:2451-408:2803) (Super)**

After talking to many customers about their Business Intelligence (BI) needs, we believe that QuickSight will be able to

handle many types of data intensive workloads including ad targeting, customer segmentation, forecasting & planning, marketing & sales analytics, inventory & shipment

tracking, IoT device stream management, and clickstream analysis.

**P 7: AWS\_Blogs\_255pages.pdf - 7:4 [As part of our continued effort..] (618:103-618:303) (Super)**

As part of our continued effort to allow our partners to share their expertise in

particular market segments and topical areas, I'm happy to be able to tell you about our new APN Security Competency.

**P 7: AWS\_Blogs\_255pages.pdf - 7:5 [The AWS Partner Network (APN) ..] (641:331-641:529) (Super)**

- Family: To whom] [Sense 6: Identifying market segments - Family: What] [Sense B: Analyze and select the environment - Family: What]

The AWS Partner Network (APN) allows partners to differentiate themselves and to share their expertise in particular market segments and topical

areas by qualifying for one or more APN Competencies.

**P 7: AWS\_Blogs\_255pages.pdf - 7:6 [We are continuing to add value..] (766:577-766:767) (Super)**

We are continuing to add value to the AWS Partner Network (APN) by allowing partners to share their expertise in particular market segments and

topical areas in the form of APN Competencies.

**P 7: AWS\_Blogs\_255pages.pdf - 7:7 [For the best availability, we ..] (774:2114-774:2310) (Super)**

For the best availability, we recommend that customers

segment their on-premises instances to talk to the closest available region, in much the same way they would segment EC2 instances by region.

**P 7: AWS\_Blogs\_255pages.pdf - 7:8 [In order to address this custo..] (1882:1207-1882:1311) (Super)**

In order to address this customer segment, we are launching our new Punched Card Cloud, or PC2 for short.

**P 7: AWS\_Blogs\_255pages.pdf - 7:9 [Heroku, Engine Yard, Twilio, C..] (2978:301-2978:551) (Super)**

Heroku, Engine Yard, Twilio, CodeRun are all different in nature and behavior. All of them are built using different technologies and methodologies. All

are targeting different market segments. All share one thing in common. They are all built on AWS.

**P 7: AWS\_Blogs\_255pages.pdf - 7:10 [The majority of our customers r..] (3189:1594-3189:1790) (Super)**

The majority of our customers represent three segments: people looking to use

Amazon S3 as an online collaboration tool, as a reliable store for off-site backups, or as a content delivery network.

**P 7: AWS\_Blogs\_255pages.pdf - 7:11 [And our EU customers from all ..] (3189:1792-3189:1915) (Super)**

segments - Family: What] [Sense B: Analyze and select the environment - Family: What]

And our EU customers from all

three segments expressed the need for an EU node of S3 to keep their data confined to the EU.

**P 7: AWS\_Blogs\_255pages.pdf - 7:12 [Understand the AWS market segm..] (3274:697-3274:780) (Super)**

Understand the AWS market segments, customer base, and industry verticals we target.

**P 7: AWS\_Blogs\_255pages.pdf - 7:14 [These services, like many othe..] (179:4489-179:4779) (Super)**

These services, like many other parts of AWS, are designed to allow you to focus on the unique and creative aspects of your game, with an emphasis

on rapid turnaround and easy iteration so that you can continue to hone your gameplay until it reaches the desired level of engagement and fun.

**P 7: AWS\_Blogs\_255pages.pdf - 7:15 [Another question was about the..] (3540:3589-3540:4135) (Super)**

Another question was about the turnaround time for vulnerabilities. Chris mentioned that their track record is 24 hours, based on recent history. A

vulnerability was found at 10:00 PM. They had a patch in an hour, but the remaining time was spent testing and creating the final

package build.

Jeff Bezos mentioned in Wired magazine (January 13) that, “ Iftoday the successful recipe is to put 70 percent ofyour energy into shouting about

your service and 30 percent into making it great, over the next 20 years, I think that’s going to invert.

**P 7: AWS\_Blogs\_255pages.pdf - 7:16 [Invent and Simplify – True inn..] (1450:1983-1450:2342) (Super)**

Invent and Simplify – True innovation calls for a lot ofdifficult decisions. T he innovator must decide what the product is, and what it is not. We were

breaking new ground when we were designing and building S3, and had to figure out how to handle identity, authentication, billing, security, and

hundreds ofother issues before we could launch the product.

**P 7: AWS\_Blogs\_255pages.pdf - 7:17 [We’ve also seen a 50 percent r..] (46:1679-46:1864) (Super)**

We’ve also seen a 50 percent” reduction in “ tickets” and a

98 percent reduction in impactful business outages and incidents—an unexpected benefit that is as valuable as the cost savings.

**P 7: AWS\_Blogs\_255pages.pdf - 7:18 [With DNS Failover, Route 53 ca..] (1822:1357-1822:1500) (Super)**

With DNS Failover, Route 53 can detect an outage ofyour website and redirect your end

users to alternate or backup locations that you specify.

**P 7: AWS\_Blogs\_255pages.pdf - 7:19 [All requests coming in to Modu..] (1912:2199-1912:2382) (Super)**

All requests coming in to Modulus are tracked, stored, and made available for analysis

so that you can locate bottlenecks and boost the efficiency and performance ofyour application.

**P 7: AWS\_Blogs\_255pages.pdf - 7:20 [Target Audience – Describe the..] (1178:1255-1178:1389) (Super)**

T arget Audience – Describe the target market and audience for your product or service (businesses, consumers, teachers, students, etc).

**P 8: AWS\_Announcements\_1570.pdf - 8:1 [AWS Application Discovery Serv..] (1:11304-1:11563) (Super)**

AWS Application Discovery Service helps Systems Integrators quickly and reliably plan application migration projects by

automatically identifying applications running in on-premises data centers, their associated dependencies, and their performance profile

**P 8: AWS\_Announcements\_1570.pdf - 8:2 [DNS Failover, Amazon Route 53 ..] (41:9580-41:9749) (Super)**

DNS Failover, Amazon Route 53 can help detect an outage of your website and redirect your end users to alternate

locations

where your application is operating properly.

**P 8: AWS\_Announcements\_1570.pdf - 8:3 [It means your media files are ..] (43:3012-43:3124) (Super)**

"control" platforms - Family: What]

It means your media files are processed faster and with less risk of delay due to bottlenecks at any one stage.

**P 8: AWS\_Announcements\_1570.pdf - 8:4 [Each partner brings unique cap..] (14:12032-14:12233) (Super)**

Each partner brings unique capabilities within their database migration

practice, from specialization in cross-platform migrations to building high availability solutions to setting up a hybrid cloud.

**P 8: AWS\_Announcements\_1570.pdf - 8:5 [We really appreciate customer ..] (34:983-34:1072) (Super)**

We really appreciate customer feedback and use it to help us prioritize upcoming features.

**P 8: AWS\_Announcements\_1570.pdf - 8:6 [Based on customer feedback and..] (59:596-59:724) (Super)**

Based on customer feedback and usage patterns of Amazon SQS, we have made some changes to the service and its pricing structure

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:1 [Armed with these insights, its..] (124:1020-124:1266)**

**(Super)**

Armed with these insights, its personalization platform allows

travel companies to segment and target each customer individually in real time, and deliver tailored, personalized marketing messages and offers across any communication channel.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:2 [By using AWS, Cloud Kinetics c..] (193:335-193:473)**

**(Super)**

By using AWS, Cloud Kinetics can

market solutions to a range of segments, from

small businesses to enterprise financial institutions.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:3 [The company segmented its busi..] (490:349-490:483)**

**(Super)**

T he company segmented its business into two groups:

hosted traffic for InfoSpace branded sites and distribution traffic for partners.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:4 [Observing behavior comprehensi..] (573:2355-573:2549)**

**(Super)**

Observing

behavior comprehensively across media, not just campaigns, reduces bias and provides clients with greater accuracy and more sophisticated segmentation for targeting and analytics.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:5 [“At the same time, our clients..] (574:1844-574:2071)**

**(Super)**

“ At the same time, our clients have complete

freedom to change their minds and evolve their segmentation strategies without limits, which would not be possible with traditional, non-cloud-based infrastructure environments.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:6 [AWS Case Study: RazorfishRazor..] (905:246-905:481)**

**(Super)**

AWS Case Study: RazorfishRazorfish LogoAbout RazorfishRazorfish, a digital

advertising and marketing firm, segments users and customers based on the collection and analysis of non-personally identifiable data from browsing sessions.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:7 [Results of the analysis are lo..] (905:1097-905:1368)**

**(Super)**

Results of the analysis are loaded into ad-serving

and cross-selling systems that in turn deliver the segmentation results in real time. The Challenge A common issue Razorfish has found with customer segmentation is the need to process gigantic click stream data sets.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:8 [InVision estimated that these ..] (1344:2088-1344:2426) (Super)**

InVision estimated that these small companies represented 85 percent of the contact center market, and therefore represented a vast, untapped customer segment. With a number of cloud providers emerging, InVision wanted to offer a new WFM product delivered via the cloud that would meet the needs of smaller contact center operators.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:9 ["We can deploy our team member..] (3:1065-3:1561) (Super)**

"We can deploy our team members on more strategic, revenue-generating projects rather than configuring servers and undertaking backup and maintenance activities." The business has also gained double the processing capacity at half the infrastructure costs than would be required with an on-premises or collocated data center. AWS has also provided a platform to enable 91App to expand into South East Asia, where many people access the Internet exclusively through their mobile devices.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:10 [As a result, our work helps le..] (4:572-4:706) (Super)**

As a result, our work helps level the playing field, making everyone's ad revenue, spend, app financials, and job salaries available.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:11 [In an on-premises data center,..] (12:836-12:1150) (Super)**

In an on-premises data center, we would have had two unpalatable options—stop selling the service while developers worked on the issue, or defer the project launch date," says Booy. But in this situation, AWS auto-scaled, adding additional Amazon EC2 instances until CPU utilization stabilized at 60 percent.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:12 [direct benefits:82% savings in..] (26:1-26:572) (Super)**

direct benefits:82% savings in initial stages of the startup versus on-premise deployment70% savings during beta stage versus on-premise deployment60% savings for market launch stage versus on-premise deploymentRoll says, "Indirect benefits are more difficult to quantify, but they include reduced risk of downtime; ability to respond to market conditions without over-provisioning; ability to mobilize resources quickly for a specific event, project, or piece of processing; and ability to correlate infrastructure cost to a business initiatives and revenues.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:13 [This approach enables the team..] (59:2003-59:2416) (Super)**

This approach enables the team to run queries concurrently rather than sequentially, and take advantage of the ability to provision new Amazon EC2 instances quickly to expand database capacity. "The end result is that we have been able to reduce the average turnaround time required to complete scenarios by over 50 percent—improving the quality and timeliness of our service to clients," says Marimuthu.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:14 [largest investment managers wi..] (226:1-226:141) (Super)**

largest investment managers with more than \$400B in assets under management, whose use of CloudDOCX on AWS reduced turnaround time by half.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:15 [The much quicker turnaround ha..] (600:2284-600:2810) (Super)**

The much quicker turnaround has been a win for our department, and for the business in trying to be more agile and more responsive to what is going on in the marketplace."Shahrazad McNeil, Vice President SAP Basis and Security Administration for LIONSGATE, adds: "The speed of building servers, disaster recovery, high availability, and better backup methods are really the wins that we will achieve using AWS."The company avoided acquiring additional data center space, saving an estimated \$1M+ over three years.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:16 [AWS greatly reduced our turnar..] (956:943-956:1102) (Super)**

AWS greatly reduced our turnaround time for scientific inquiry."Professor Petkovic estimates that their computing costs have been reduced by about 20 times.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:17 [In particular, the team was im..] (10:2924-10:3028) (Super)**

In particular, the team was impressed by the innovation and creativity that could be achieved with AWS.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:18 [The fact that AWS regularly re..] (455:2294-455:2425) (Super)**

The fact that AWS regularly released new services convinced HubWorks! that AWS shared its passion for innovation and creativity.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:19 [The company's founders also be..] (1:2541-1:2788) (Super)**

The company's founders also believed that the emergence of AWS from the world's leading e-commerce provider, Amazon.com, gave the cloud provider a legacy and experience that the business could tap into when running its own e-commerce service.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:20 [In addition, now our IT resour..] (26:574-26:850) (Super)**

In addition, now our IT resources are focused on generating direct value to the business through product enhancement, rather than provisioning, commissioning, and supporting hardware."According to Roll, the company is considering additional AWS services for future use.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:21 [Lee describes the support as "..] (2:1723-2:1862) (Super)**

Lee describes the support as "extremely helpful" in extracting as much value as possible from the products and features provided by AWS.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:22** ["Introducing new products fast.."] (30:407-30:618)

(Super)

"Introducing new products faster boosts our value to our customers, which is a competitive advantage for us." The company is also using AWS for new products and services, such as its new mobile application.

"W

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:23** [We see AWS as a strategic fit ..] (190:2016-190:2320)

(Super)

We see AWS as a strategic fit for our long-term business strategy." Classle uses Amazon Elastic Compute Cloud (Amazon EC2), with the Amazon Elastic Load Balancing (Amazon ELB), Auto Scaling, and Amazon Elastic Block Storage (Amazon EBS) features, to handle its application and analytics server needs.

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:24** ["Why Amazon Web Services IATA s.."] (465:1467-465:1839)

(Super)

"Why Amazon Web Services IATA A selected

AWS as its cloud provider because of the pace of innovation at AWS, as well as its big data services portfolio and security features. "We needed the best in breed in terms of cloud platform, so we chose AWS," Buchner says. "Moving to AWS was our only option if we wanted to survive in a world that's going faster and faster."

**P 9: AWS\_Customer\_Case\_Studies\_701.pdf - 9:25** [Now Aldebaran saves staffing c..] (51:750-51:845)

(Super)

Now Aldebaran saves staffing costs and can quickly and flexibly adapt to changing market needs

**P10: AWS\_Partner\_Case\_Studies\_16.pdf - 10:1** ["AWS CloudFormation allows us .."] (3:16287-3:16515)

(Super)

"AWS CloudFormation allows us to automate the build process for customers, which leads to a faster turnaround time to test and build new customer environments, as opposed to building new environments on-premise," explains Byrd.

**P11: AWS\_News\_186pages.pdf - 11:1** [Of this partnership, Stefan Ja..] (11:1456-11:1699) (Super)

Of this partnership, Stefan Jansen,

Head of Channels and Alliances for AWS Australia and New Zealand, says the services Rackspace is offering will bring added choice to the rapidly growing AWS customer base across all segments in the region.

**P11: AWS\_News\_186pages.pdf - 11:2** [Posted on: January 31, 2014 In..] (101:422-101:653) (Super)

Posted on: January 31, 2014

Infrastructure-as-a-service (IaaS) -- or the delivery of compute, storage and network resources via the cloud -- continues to be the fastest-growing segment of the overall public cloud services market.

**P11: AWS\_News\_186pages.pdf - 11:3** ["The venture, which Amazon exp.."] (180:1480-180:1643) (Super)

"The venture, which Amazon expects will grow into a significant business

segment, could help keep the company strong if retailers get hit by an economic downturn.

**P11: AWS\_News\_186pages.pdf - 11:4** [The article concludes, "Knock.."] (2:1194-2:1369) (Super)

The

article concludes, "Knock on wood, we haven't had a single outage on any of our sites on AWS, and none of our sites have been compromised...that's huge, in and of itself."

**P11: AWS\_News\_186pages.pdf - 11:5** [resolve them before end users ..] (7:1220-7:1349) (Super)

resolve them before end users are impacted by an issue, while bottlenecks or

underperforming services can be isolated for review.

**P11: AWS\_News\_186pages.pdf - 11:6** [DC Inno covers how AWS has low..] (14:1393-14:1542) (Super)

DC Inno covers how AWS has lowered the barrier for entry in cloud computing

and next-gen data storage markets for startups, focusing on AWS customers

**P11: AWS\_News\_186pages.pdf - 11:7** [Network World's Brandon Butler..] (23:1282-23:1458) (Super)

Network World's Brandon Butler reports that "despite having the

largest cloud offering on the market, Amazon Web Services had the least amount of outages among major vendors."

**P11: AWS\_News\_186pages.pdf - 11:8** [AWS Breaking Barriers and Driv..] (73:1317-73:1379) (Super)

AWS Breaking Barriers and Driving Cloud Adoption in

South Asia

**P11: AWS\_News\_186pages.pdf - 11:9** [BBC takes iPlayer video produc..] (74:1421-74:1504) (Super)

BBC takes iPlayer video production to AWS cloud to

beat bottleneck and storage woes

**P11: AWS\_News\_186pages.pdf - 11:10** [In this interview with t3n he ..] (117:969-117:1143) (Super)

In this

interview with t3n he talks about the opportunities offered by cloud services, AWS outages, and data protection fears concerning the use of cloud services like AWS.

**P11: AWS\_News\_186pages.pdf - 11:11** [You will see so much innovatio..] (136:610-136:720) (Super)

You will see so much innovation if

cost is not a barrier," said the man who is seen as one of those who helped

**P11: AWS\_News\_186pages.pdf - 11:12** [Amazon Web Services, fresh off..] (139:1350-139:1496) (Super)

Amazon Web Services, fresh off an outage that brought down big-name sites

such as Reddit and Imgur, today announced an 18% price reduction for its

**P12: AWS\_Whitepapers\_109.pdf - 12:1** [The most efficient view of thi..] (137:2205-137:2430) (Super)

The most efficient view of this optimized delivery structure is the development

and operations (DevOps) or the development, security, and operations (DevSecOps) models used by highly innovative enterprises such as Netflix.

**P12: AWS\_Whitepapers\_109.pdf - 12:2** [AWS listens to customer feedba..] (572:1272-572:1441) (Super)

AWS listens to customer feedback and continues to innovate with new storage

solution and features, providing new combinations of capacity, throughput, and durability.

**P12: AWS\_Whitepapers\_109.pdf - 12:3** [To mitigate this challenge, co..] (148:414-148:623) (Super)

To

mitigate this challenge, consider creating a strategy for segmenting skills and competencies into separate roles and growing additional skills in team members through knowledge transfer and experience.

**P12: AWS\_Whitepapers\_109.pdf - 12:4 [Offered via a pay-as-you-go ut..] (3:2192-3:2463) (Super)**

Offered via a pay-as-you-go utility model, where at the end of each month customers simply pay for their usage.

Allowed the flexibility to fluctuate based on market pricing so that customers can take advantage of the dynamic and competitive nature of cloud pricing.

**P12: AWS\_Whitepapers\_109.pdf - 12:5 [See the pricing pages for each..] (9:1744-9:1862) (Super)**

See the pricing

pages for each AWS service you will be using or the AWS Simple Monthly Calculator for full details.

**P12: AWS\_Whitepapers\_109.pdf - 12:6 [Amazon S3 has three pricing co..] (57:2197-57:2361) (Super)**

Amazon S3 has three pricing components:

storage (per GB per month), data transfer in or out (per GB per month), and requests (per n thousand requests per month).

**P12: AWS\_Whitepapers\_109.pdf - 12:7 [In normal use, Amazon Glacier..] (61:1860-61:2057) (Super)**

In normal use, Amazon Glacier has three pricing components: storage (per

GB per month), data transfer out (per GB per month), and requests (per thousand UPLOAD and RETRIEVAL requests per month).

**P12: AWS\_Whitepapers\_109.pdf - 12:8 [Decreased clinical turnaround ..] (45:2044-45:2107) (Super)**

Decreased clinical turnaround times from 4-6 months to 4-6 weeks

**P12: AWS\_Whitepapers\_109.pdf - 12:9 [This approach ensures that cus..] (4:3055-4:3248) (Super)**

This approach ensures that customers are getting the best

cloud services to meet their needs, the best value in these services, and the ability to take advantage of market-driven innovation.

**P12: AWS\_Whitepapers\_109.pdf - 12:10 [Organizations that have built ..] (2:1687-2:1983) (Super)**

Organizations

that have built successful cloud procurement strategies focus early on facilitating the rapid procurement of services, and on removing needless procurement complexity or irrelevant processes, which may serve as unnecessary barriers to fully realizing the benefits of the cloud.

**P12: AWS\_Whitepapers\_109.pdf - 12:11 [Other connection optimizations..] (214:1404-214:1564) (Super)**

Other connection optimizations are also

applied to avoid Internet bottlenecks and fully utilize available bandwidth between the edge location and the viewer.

**P12: AWS\_Whitepapers\_109.pdf - 12:12 [These events can be caused by ..] (487:720-487:912) (Super)**

These events can be caused by

technical problems (e.g. viruses, data corruption, human error, etc.) or natural phenomena (e.g. fires, floods, power failures, weather-related outages, etc.).

**P12: AWS\_Whitepapers\_109.pdf - 12:13 [Upon request, AWS may work wit..] (389:2174-389:2265)**

(Super)

Upon request, AWS may work with customers

who require AWS' assistance in legal proceedings.

**P12: AWS\_Whitepapers\_109.pdf - 12:14 [Rewarding employees for cloud-..] (141:491-141:597) (Super)**

Rewarding employees for cloud-based certifications can

help increase interest in growing cloud skillsets.

**P12: AWS\_Whitepapers\_109.pdf - 12:15 [Do define success metrics and ..] (151:380-151:462) (Super)**

Do define success metrics and create incentives aligned to those success metrics.

**P12: AWS\_Whitepapers\_109.pdf - 12:16 [Developers and systemarchitec..] (869:1612-869:1645) (Super)**

- Family: What]

Developers and system

architects

**P12: AWS\_Whitepapers\_109.pdf - 12:17 [Enterprise architects] (869:1800-869:1820) (Super)**

Enterprise architects

**P12: AWS\_Whitepapers\_109.pdf - 12:18 [Auditors or risk and complianc..] (869:2015-869:2060) (Super)**

Auditors or risk and

compliance professional

**P12: AWS\_Whitepapers\_109.pdf - 12:19 [AWS listens to customer feedba..] (570:982-570:1155) (Super)**

AWS listens to customer feedback and continues to innovate with new

instance types and sizes, providing new combinations of CPU, memory, storage, and networking capacity.

**P13: AWS\_investor\_information.pdf - 13:1 [Beginning in the first quarter..] (90:1434-90:1551) (Super)**

Beginning in the first quarter of 2015, we changed our reportable segments to North America, International, and Amazon

**P13: AWS\_investor\_information.pdf - 13:2 [We may have limited or no expe..] (93:2257-93:2375) (Super)**

We may have limited or no experience in our newer market segments, and our customers may not adopt our new offerings.

**P13: AWS\_investor\_information.pdf - 13:3 [In certain international marke..] (94:1653-94:1819) (Super)**

In

certain international market segments, we have relatively little operating experience and may not benefit from any first-to-market advantages or otherwise succeed.

**P13: AWS\_investor\_information.pdf - 13:4 [• conditions or trends in the ..] (98:5749-98:5828) (Super)**

• conditions or trends in the Internet and the industry segments we operate in;

**P13: AWS\_investor\_information.pdf - 13:5 [We have a risk analysis proces..] (18:573-18:741) (Super)**

We have a risk analysis process and audit tools, including audit protocols, trainings, and scorecards to best manage what we believe to be key risks in our supply chain

**P13: AWS\_investor\_information.pdf - 13:6 [Our approach to pricing is als..] (36:2817-36:2985) (Super)**

Our approach to pricing is also driven by our customer-centric culture – we've dropped prices 51 times, in many cases before there was any competitive pressure to do so

**P13: AWS\_investor\_information.pdf - 13:7 [In addition to price reduction..] (36:2988-36:3429) (Super)**

In addition to price reductions, we've also

continued to launch new lower cost services like Aurora, Redshift, QuickSight (our new Business Intelligence service), EC2

Container Service (our new compute container service), and Lambda (our pioneering server-less computing capability), while

extending our services to offer a range of highly cost-effective options for running just about every type of application or IT use case

imaginable.

**P13: AWS\_investor\_information.pdf - 13:8 [We even roll out and continuou..] (36:3431-36:3725) (Super)**

We even roll out and continuously improve

services like Trusted Advisor, which alerts customers when they can save money – resulting in hundreds of millions of dollars in savings for our customers. I'm pretty sure we're the only IT vendor telling customers how to stop spending money with us.

**P13: AWS\_investor\_information.pdf - 13:9 [Market leadership can translat..] (39:1820-39:1986) (Super)**

Market leadership can translate

directly to higher revenue, higher profitability, greater capital velocity, and correspondingly stronger returns on invested capital.

**P13: AWS\_investor\_information.pdf - 13:10 [Well-meaning people internally..] (1199:576-1199:793)**

(Super)

What]

Well-meaning people internally and externally worried it would cannibalize Amazon's retail

business, and—as is often the case with consumer-focused innovations—there was no way to prove in advance that it would work.

**P13: AWS\_investor\_information.pdf - 13:11 [As proud as I am of our progre..] (415:2892-415:3305)**

(Super)

As proud as I am of our progress and our inventions, I know that we will make mistakes along the way –

some will be self-inflicted, some will be served up by smart and hard-working competitors. Our passion for pioneering will drive us to explore narrow passages, and, unavoidably, many will turn out to be blind alleys. But – with a bit of good fortune – there will also be a few that open up into broad avenues

**P13: AWS\_investor\_information.pdf - 13:12 [In addition, we believe granti..] (22:485-22:690) (Super)**

In

addition, we believe granting stock-based compensation to employees at all levels across the Company results in motivated, customer-centric people who think and act like owners because they are owners.

**P13: AWS\_investor\_information.pdf - 13:13 [shareholder value, base salari..] (22:2319-22:2540) (Super)**

shareholder value, base salaries for named executive officers are designed to provide a minimum level of cash compensation and to be significantly less than those paid to senior leadership at similarly situated companies.

**P13: AWS\_investor\_information.pdf - 13:14 [We will work hard to spend wis..] (40:667-40:862) (Super)**

We will work hard to spend wisely and maintain our lean culture. We understand the importance of continually reinforcing a cost-conscious culture, particularly in a business incurring net losses.

**P13: AWS\_investor\_information.pdf - 13:15 [From the beginning, our focus ..] (40:1814-40:1895) (Super)**

From the beginning, our focus has been on offering our customers compelling value.

**P13: AWS\_investor\_information.pdf - 13:16 [Our present and future e-comm..] (96:4078-96:4542)**

(Super)

Our present and future e-commerce services agreements, other commercial agreements, and strategic alliances create additional risks such as:

- disruption of our ongoing business, including loss of management focus on existing businesses;
- impairment of other relationships;
- variability in revenue and income from entering into, amending, or terminating such agreements or relationships; and
- difficulty integrating under the commercial agreements.

**P13: AWS\_investor\_information.pdf - 13:17 [the difficulty of incorporatin..] (97:195-97:333) (Super)**

the difficulty of incorporating acquired technology and rights into our offerings and unanticipated expenses related to

such integration;

**P13: AWS\_investor\_information.pdf - 13:18 [the difficulty of integrating ..] (97:340-97:627) (Super)**

the difficulty of integrating a new company's accounting, financial reporting, management, information and information security, human resource, and other administrative systems to permit effective management, and the lack of control if such integration is delayed or not implemented;

**P13: AWS\_investor\_information.pdf - 13:19 [Some decisions are consequenti..] (37:1784-37:2474) (Super)**

Some decisions are consequential and irreversible or nearly irreversible – one-way doors – and these

decisions must be made methodically, carefully, slowly, with great deliberation and consultation. If you walk through and don't like what you see on the other side, you can't get back to where you were before. We can call these T type 1 decisions. But most decisions aren't like that – they are changeable, reversible – they're two-way doors. If you've made a suboptimal T type 2 decision, you don't have to live with the consequences for that long. You can reopen the door and go back through. T type 2 decisions can and should be made quickly by high judgment individuals or small groups.

**P13: AWS\_investor\_information.pdf - 13:20 [We will continue to learn from..] (39:3236-39:3302) (Super)**

We will continue to learn from both our successes and our failures.

**P13: AWS\_investor\_information.pdf - 13:21 [We regard our trademarks, serv..] (91:3121-91:3929) (Super)**

- Family: What] [TransformA: Manage knowledge - Family: What]

We regard our trademarks, service marks, copyrights, patents, domain names, trade dress, trade secrets, proprietary technologies, and similar intellectual property as critical to our success, and we rely on trademark, copyright, and patent law, trade-secret protection, and confidentiality and/or license agreements with our employees, customers, partners, and others to protect our proprietary rights. We have registered, or applied for the registration of, a number of U.S. and international domain names, trademarks, service marks, and copyrights. Additionally, we have filed U.S. and international patent applications covering certain of our proprietary technology. We have licensed in the past, and expect that we may license in the future, certain of our proprietary rights to third parties.

**P13: AWS\_investor\_information.pdf - 13:22 [The People's Republic of China..] (95:589-95:758) (Super)**

The People's Republic of China ("PRC") and India regulate Amazon's and its affiliates' businesses and operations in country through regulations and license requirements

**P13: AWS\_investor\_information.pdf - 13:23 [We may need to obtain licenses..] (98:4599-98:5078) (Super)**

We may need to

obtain licenses from third parties who allege that we have infringed their rights, but such licenses may not be available on terms acceptable to us or at all. In addition, we may not be able to obtain or utilize on terms that are favorable to us, or at all, licenses or other rights with respect to intellectual property we do not own. These risks have been amplified by the increase in third parties whose sole or primary business is to assert such claims.

**P13: AWS\_investor\_information.pdf - 13:24 [The 2015 complaint alleges, am..] (147:3431-147:4126)**

(Super)

The 2015 complaint alleges, among other things, that Amazon's Elastic Compute Cloud, Simple Workflow, and Herd infringe U.S. Patent Nos. 8,682,959, entitled "System And Method For Fault Tolerant Processing Of Information Via Networked Computers Including Request Handlers, Process Handlers, And Task Handlers," and 9,049,267, entitled "System And Method

For Processing Information Via Networked Computers Including Request Handlers, Process Handlers, And Task Handlers."

The 2015 complaint seeks injunctive relief, an unspecified amount of damages, treble damages, costs, and interest.

We dispute

the allegations of wrongdoing and intend to defend ourselves vigorously in these matters.

**P13: AWS\_investor\_information.pdf - 13:25 [We operate customer service ce..] (90:3526-90:3623) (Super)**

We

operate customer service centers globally, which are supplemented by co-sourced arrangements.

**P13: AWS\_investor\_information.pdf - 13:26 [Our Business Could Suffer if W..] (96:2134-96:2300) (Super)**

Our Business Could Suffer if We Are Unsuccessful in Making, Integrating, and Maintaining Commercial Agreements, Strategic Alliances, and Other Business Relationships

**P13: AWS\_investor\_information.pdf - 13:27 [Our Business Could Suffer if W..] (96:4546-96:4664) (Super)**

Our Business Could Suffer if We Are Unsuccessful in Making, Integrating, and Maintaining Acquisitions and Investments

**P13: AWS\_investor\_information.pdf - 13:28 [the potential impairment of cu..] (97:9-97:187) (Super)**

the potential impairment of customer and other relationships of the company we acquired or in which we invested or our own customers as a result of any integration of operations

**P13: AWS\_investor\_information.pdf - 13:29 [the difficulty of incorporatin..] (97:195-97:332) (Super)**

the difficulty of incorporating acquired technology and rights into our offerings and unanticipated expenses related to

such integration

**P13: AWS\_investor\_information.pdf - 13:30 [the difficulty of integrating ..] (97:340-97:627) (Super)**

the difficulty of integrating a new company's accounting, financial reporting, management, information and information security, human resource, and other administrative systems to permit effective management, and the lack of control if such integration is delayed or not implemented;

**P13: AWS\_investor\_information.pdf - 13:31 [for foreign transactions, addi..] (97:1128-97:1338) (Super)**

for foreign transactions, additional risks related to the integration of operations across different cultures and languages, and the economic, political, and regulatory risks associated with specific countries

**P13: AWS\_investor\_information.pdf - 13:32 [We do not have long-term arran..] (100:1596-100:1800)**

**(Super)**

We do not

have long-term arrangements with most of our suppliers to guarantee availability of merchandise, content, components, or services, particular payment terms, or the extension of credit limits.

**P13: AWS\_investor\_information.pdf - 13:33 [While the full Board has overa..] (8:146-8:360) (Super)**

While the full Board has overall responsibility for risk oversight,

the Board has delegated responsibility related to certain risks to the Audit Committee and the Leadership Development and Compensation Committee.

**P13: AWS\_investor\_information.pdf - 13:34 [For our named executive office..] (22:1632-22:2000) (Super)**

For our named executive officers, who are employed on an at-will basis, we provide few perquisites and generally do not provide cash bonuses other than in a new-hire context. We do not maintain nonqualified deferred compensation plans, supplemental executive retirement plan benefits, cash severance programs, or change-in-control benefits for our executive officers

**P13: AWS\_investor\_information.pdf - 13:35 [we do not provide cash or equi..] (67:2026-67:2217) (Super)**

we do not provide cash or equity

incentives tied to performance criteria, which could cause employees to focus solely on short-term returns at the expense of long-term growth and innovation.

**P13: AWS\_investor\_information.pdf - 13:36 [The primary component of a nam..] (67:2861-67:3035)**

**(Super)**

The primary component of a named executive officer's total compensation is

stock-based compensation in order to closely tie total compensation to long-term shareholder value.

**P13: AWS\_investor\_information.pdf - 13:37 [ctors Our directors do not rec..] (11:282-11:472) (Super)**

ctors

Our directors do not receive cash compensation for their services as directors or as members of committees of the Board, but we pay reasonable expenses incurred for attending meetings

**P13: AWS\_investor\_information.pdf - 13:38 [We will continue to make inves..] (39:2831-39:3020) (Super)**

We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions.

**P13: AWS\_investor\_information.pdf - 13:39 [We will continue to measure ou..] (39:3025-39:3301) (Super)**

We will continue to measure our programs and the effectiveness of our investments analytically, to jettison those that do not provide acceptable returns, and to step up our investment in those that work best. We will continue to learn from both our successes and our failures

**P13: AWS\_investor\_information.pdf - 13:40 [We will make bold rather than ..] (40:3-40:261) (Super)**

We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages. Some of these investments will pay off, others will not, and we will have learned another valuable lesson in either case.

**P13: AWS\_investor\_information.pdf - 13:41 [We will share our strategic th..] (40:431-40:662) (Super)**

We will share our strategic thought processes with you when we make bold choices (to the extent competitive pressures allow), so that you may evaluate for yourselves whether we are making rational long-term leadership investments.

**P13: AWS\_investor\_information.pdf - 13:42 [We have invested and will cont..] (39:2280-39:2452) (Super)**

We have invested and will continue to invest

aggressively to expand and leverage our customer base, brand, and infrastructure as we move to establish an enduring franchise

**P13: AWS\_investor\_information.pdf - 13:43 ["Working backwards" from custo..] (819:777-819:1432)**

**(Super)**

- Family: What] [SenseB: Analyze and select the environment - Family: What]

"Working backwards" from customer needs

can be contrasted with a "skills-forward" approach where existing skills and competencies are used to drive business opportunities. The skills-forward approach says, "We are really good at X. What else can we do with X?" That's a useful and rewarding business approach. However, if used exclusively, the company employing it will never be driven to develop fresh skills. Eventually the existing skills will become outmoded. Working backwards from customer needs often demands that we acquire new competencies and exercise new muscles, never mind how uncomfortable and awkward-feeling those first steps might be

**P13: AWS\_investor\_information.pdf - 13:44 [We May Not Be Able to Adapt Qu..] (1255:1-1255:100)**

**(Super)**

We May Not Be Able to Adapt Quickly Enough to Changing Customer Requirements and Industry Standards

**P13: AWS\_investor\_information.pdf - 13:45 [After two decades of risk taki..] (168:385-168:922) (Super)**

After two decades of risk

taking and teamwork, and with generous helpings of good fortune all along the way, we are now happily wed to what I believe are three such life partners: Marketplace, Prime, and AWS. Each of these offerings was a bold bet at first, and sensible people worried (often!) that they could not work. But at this point, it's become pretty clear how special they are and how lucky we are to have them.

It's also clear that there are no sinecures in business. We know it's our job to always nourish and fortify them

**P13: AWS\_investor\_information.pdf - 13:46 [We established long-term relat..] (209:3383-209:3554)**

**(Super)**

We established long-term relationships with many important strategic partners, including America

Online, Yahoo!, Excite, Netscape, GeoCities, AltaVista, @Home, and Prodigy

**P14: Asay\_2014\_07\_25\_readwrite.pdf - 14:1 [By using industrystandard ope..] (4:1481-4:1591) (Super)**

By using industrystandard open source software products, you

reduce your lockin down to an absolute minimum.

**P14: Asay\_2014\_07\_25\_readwrite.pdf - 14:2 [AWS runs on a lot of opensour..] (4:1595-4:1795) (Super)**

AWS runs on a lot of opensource software, of course, but it's not open source itself. While

I doubt AWS spends any time trying to find ways to lock its customers in, the reality is that many will be

**P17: Bort\_2013\_05\_19\_businessinsider.pdf - 17:1 ["Amazon is a product ofthe pas..] (1:1227-1:1512)**

**(Super)**

"Amazon is a product ofthe past laying the groundwork for the future. One of my friends who was a SDE (Software Development Engineer) had the most mundane tasks ever. He actually quit as well and went to work somewhere for a little less money, but doing some far more rewarding work.

**P17: Bort\_2013\_05\_19\_businessinsider.pdf - 17:2 ["Putting Amazon SDE on your re..] (1:1515-1:1724)**

**(Super)**

"Putting Amazon SDE on your resume is quickly turning into the same thing as putting Google SDE on your resume. So, while you may feel it's boring, the real reward will be the job opportunities in the future."

**P18: Brandon\_2013\_09\_17\_bcn.pdf - 18:1 ["It's been a very good model..] (1:1033-1:1439) (Super)**

"It's been a very good model. In the early days ofthe cloud, the old guard

companies poopooed it, saying 'nobody's going to use it for anything critical and enterprises will never use it,'" Jassy said. He went on to add that these vendors are pushing private cloud solutions because they wanted to protect the traditionally high margins they're used to, rather than deliver value to enterprise users.

**P18: Brandon\_2013\_09\_17\_bcn.pdf - 18:2 [Hewent on to add that these v..] (1:1239-1:1439) (Super)**

He went on to add that these

vendors are pushing private cloud solutions because they wanted to protect the traditionally high margins they're used to, rather than deliver value to enterprise users.

**P18: Brandon\_2013\_09\_17\_bcn.pdf - 18:3 [Speaking to a large group of e..] (1:787-1:1030) (Super)**

Speaking to a large group of enterprise customers and technology partners,

Jassy, perhaps unsurprisingly, said that the "old guard" technology vendors hopped onto the private cloud bandwagon once enterprises began embracing the public cloud.

**P19: Butler\_2015\_07\_16\_networkworld.pdf - 19:1 [A frequent topic of conversati..] (2:1318-2:1562)**

**(Super)**

A frequent topic of conversation is when talking about AWS at a bar is: Would AWS ever sell a private cloud that customers can run on their own premises? If you read my interview with Vogels, it doesn't sound like that will happen anytime soon

**P19: Butler\_2015\_07\_16\_networkworld.pdf - 19:2 [AWS has been known as the mark..] (1:876-1:1283)**

**(Super)**

AWS has been known as the market-leading infrastructure as a service provider, but it's also a great platform for building and hosting applications. So does that make AWS a PaaS? I asked Vogels: Is AWS an IaaS or a PaaS?

Vogels said customers don't care about definitions like that. They just want to get a job done. I find this fascinating: AWS is clearly a PaaS, or at the very least has PaaS services.

**P19: Butler\_2015\_07\_16\_networkworld.pdf - 19:3 [What have you learned from bui..] (2:577-2:789)**

**(Super)**

What have you learned from building AWS into what it is today?

He said that in the beginning they just built services and gave them APIs. Now, they have to do a lot more customer hand-holding to get deals done.

**P20: Büst\_2015\_07\_03\_crisp.pdf - 20:1 [Innovation: 1.170 neue Funktio..] (1:2113-1:2170) (Super)**

Innovation: 1.170 neue Funktionen und Services in 7 Jahren

**P20: Büst\_2015\_07\_03\_crisp.pdf - 20:2 [Neben dem Vorteil als erster I..] (3:241-3:453) (Super)**

Neben dem Vorteil als erster Infrastructure-as-a-Service (IaaS) Anbieter am Markt zu sein,

sorgen insbesondere zwei Faktoren für den radikalen Vorsprung: das Service-Portfolio und die Innovationsgeschwindigkeit.

**P20: Büst\_2015\_07\_03\_crisp.pdf - 20:3 [Dies hat vor allemstrategisch..] (4:2465-4:2567) (Super)**

Dies hat vor allem strategische

Gründe, um die Innovation und Kreativität des Unternehmens zu fördern.

**P20: Büst\_2015\_07\_03\_crisp.pdf - 20:4 [Gespräche mit Kunden,Partnern..] (5:2314-5:2401) (Super)**  
 Gespräche mit Kunden, Partnern und Systemintegratoren zeigen eine positive Entwicklung.

**P21: Dignan\_2010\_06\_24\_zdnet.pdf - 21:1 [Vogels said the bottom line fo..] (2:1266-2:1433) (Super)**  
 Vogels said the bottom line for pure cloud computing, which features scale, elastic pricing and agility, really comes down to server utilization and economies of scale

**P21: Dignan\_2010\_06\_24\_zdnet.pdf - 21:2 [You're better selling the cyc..] (2:1726-2:1806) (Super)**  
 "You're better selling the cycle at 2 cents than throwing it away," said Vogels.

**P21: Dignan\_2010\_06\_24\_zdnet.pdf - 21:3 [Simply put, if your cloud invo..] (1:1840-1:2022) (Super)**  
 Simply put, if your cloud involves capital expenditures, it's not really agile, flexible or cost effective. In a nutshell, you're buying assets that require time and people and cost.

**P22: Fritzgerald\_2015\_03\_04\_businessinsider.pdf - 22:1 [Google in particular intends t..] (8:574-8:933) (Super)**  
 Google in particular intends to push Amazon to the wall financially, though it was Bill Gates who said, "Never get into a price war with someone who has more money than you." Amazon has notably lost its prior enthusiasm for price cuts and obliquely grouches about networking costs where Google and Microsoft have a huge advantage in terms of facilities

**P22: Fritzgerald\_2015\_03\_04\_businessinsider.pdf - 22:2 [Scepticism has emerged over th..] (10:1324-10:1471) (Super)**  
 Scepticism has emerged over the last year or two about whether the company will ever get out of "investment mode" and focus on financial returns.

**P22: Fritzgerald\_2015\_03\_04\_businessinsider.pdf - 22:3 [Amazon has guided investors to..] (11:513-11:593) (Super)**  
 Amazon has guided investors to focus on its free cash flow as opposed to profits

**P22: Fritzgerald\_2015\_03\_04\_businessinsider.pdf - 22:4 [The free cash flow picture loo..] (11:865-11:977) (Super)**  
 The free cash flow picture looks very different, in both magnitude and trend, when these leases are considered

**P22: Fritzgerald\_2015\_03\_04\_businessinsider.pdf - 22:5 [And note this debt is being in..] (12:191-12:328) (Super)**  
 And note this debt is being incurred today at unprecedentedly low interest rates, a phenomenon that is unlikely to continue much longer

**P22: Fritzgerald\_2015\_03\_04\_businessinsider.pdf - 22:6 [Amazon's stock price obviously..] (10:1156-10:1471) (Super)**  
 Amazon's stock price obviously reflects perceptions of the company broadly. It has been run as a profitless machine yet been richly valued for most of its history. Scepticism has emerged over the last year or two about whether the company will ever get out of "investment mode" and focus on financial returns.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:1 [The most compelling part of o..] (8:1748-8:1842) (Super)**  
 "The most compelling part of our value prop is being able to innovate more easily and quickly.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:2 [Amazon's offer to do the "non-d..] (8:1945-8:2103) (Super)**  
 Amazon's offer to do the "non-differentiated heavy lifting" has enormous appeal to big companies because it frees up more time for their engineers to innovate.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:3 [y. AWS enabled innovators to p..] (10:779-10:902) (Super)**  
 y. AWS enabled innovators to prove the validity of their ideas in the marketplace, mitigating a lot of risk for investors.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:4 [It has cut the cost of doing b..] (12:1445-12:1688) (Super)**  
 It has cut the cost of doing business down to the lowest it's ever been, provides real elasticity, the ability to move quickly, and lets innovators spend their scarce resources on driving product and service differentiation, not housekeeping.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:5 [Jassy and the AWS team's compe..] (12:1788-12:1921) (Super)**  
 Jassy and the AWS team's competitive strategy is to be faster at iterating on new features to push new innovations at amazing speed.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:6 [I think there are some compan..] (12:2319-12:2492) (Super)**  
 decision-making protocols - Family: What] [Sense 2: Sensing and direct internal innovation - Family: What] [SenseA: Identify, target, select and exploit RDI - Family: What]  
 "I think there are some companies that either fear innovation entirely or just do it through acquisition," says Jassy. "At Amazon, we love innovation. We're builders here."

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:7 [Cloud computing enables mor..] (7:2244-7:2365) (Super)**  
 "Cloud computing enables more use of technology," he says, "I believe it's expanding TAM by adding new user segments."

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:8 [Amazon's enterprise infrastruc..] (9:1782-9:1878) (Super)**  
 Amazon's enterprise infrastructure competitors are also responding to the "cloudification" trend.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:10 [In March of this year, the big..] (7:2410-7:2603) (Super)**  
 In March of this year, the big three public cloud providers, Google, Amazon and Microsoft, each announced price cuts in quick succession, reminiscent of airlines, which tend to price in packs.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:11 [In March of this year, the big..] (7:2410-7:2602) (Super)**

In March of this year, the big three public cloud providers, Google, Amazon and Microsoft, each announced price cuts in quick succession, reminiscent of airlines, which tend to price in packs

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:12** [“We knew that the largest cons..] (8:1023-8:1342) (Super)

“ We knew that the largest consumers of infrastructure would be large enterprise because they spend more absolute dollars,” Jassy says, “ But we also had a mental image of a college kid in his dorm room having the same access, the same scalability and same infrastructure costs as the largest businesses in the world.”

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:13** [When customers said that for a..] (10:2569-10:2749) (Super)

whom] [Seize 1: Selecting technology/feature and product/service architecture - Family: What] [Seize 2: (Re-)Designing revenue structures - Family: What] [Seize 10: Avoiding anticannibalization tendencies - Family: What] [SeizeA: Redesign business model - Family: What] [SeizeB: Select decision-making protocols - Family: What] [Sense 7: Identifying changing customer needs - Family: What] [SenseB: Analyze and select the environment - Family: What]

When customers said that for archival process, they’d trade latency for lower prices, AWS built Glacier, an archival and back up storage service at a penny per gigabyte per month.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:14** [“Ifyou believe developers will..] (6:1519-6:2046) (Super)

“ Ifyou believe developers will build applications from scratch using web services as primitive building blocks, then the operating system becomes the Internet,” says Jassy—an approach to development that had not yet been considered. Amazon asked itself what the key components of that operating system would be, what already existed, and what Amazon could contribute. They realized they could contribute a great deal, because all of the components identified were non-existent.

“ We made a pretty quick decision to do it.”

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:15** [Their ?rst critical decision w..] (6:2283-6:2766) (Super)

Their first critical decision was whether or not they should build just one service and see how it goes—either a storage solution, a compute solution or a database solution—or build a complete platform with all three from the get go. “ All apps need a compute solution, almost all need storage and most need a database,” Jassy says. “ Most developers need some combination of the three, so we were strong about the platform approach right away.” In March of 2006, AWS was launched.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:16** [‘It stirs up the creativeju..] (8:2569-8:2679) (Super)

. ‘It stirs up the creative juices of the team because they know they can actually get their ideas out there.”

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:17** [“Businesses often compromise o..] (10:1603-10:1949) (Super)

What]

“ Businesses often compromise on hiring characteristics in the name of rapid growth, but we’re vigilant about hiring builders—inventive, entrepreneurial, creative types that want to operate what they build,” he explains, “We want missionaries, not mercenaries—people focused on building businesses that last beyond their tenure at the company.”

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:18** [“The most compelling part of o..] (8:1748-8:1941) (Super)

“ The most compelling part of our value prop is being able to innovate more easily and quickly. Engineering teams and LOB leaders have a lot of ideas and a strong appetite for doing new things.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:19** [“In the sixteen years I’ve bee..] (11:2403-11:2609) (Super)

“ In the sixteen

years I’ve been here, I’ve noticed how easy it is to focus on the shiny new pennies,” says Jassy, alluding to the natural tendency for Amazon culture to get excited about new capabilities.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:20** [This culture of constant itera..] (12:1979-12:2051) (Super)

This culture of constant iteration means they add capabilities very fast.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:21** [“But we’d built Amazon so quic..] (5:2386-5:2674) (Super)

“ But we’d built Amazon

so quickly that a number of the pieces of the platform had become entangled.”

To develop solutions for external partners, Amazon would need an effective way to communicate with them via hardened APIs, and that meant

decoupling the entangled parts of the platform.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:22** [Amazon AWS team was born as a..] (6:769-6:1516) (Super)

Amazon AWS team was born as a startup within a large company. Arguably the best “ intrapreneurship” venture of our time. Amazon began to look seriously at what the business would look like under a much broader mission: enabling developers build their tech infrastructure on top of an Amazon-built cloud computing platform. They began by asking some key early stage startup questions about the infrastructure services market and their position and opportunity in it:

Is the space big enough to become a significant part of our business? Yes. Is there a market need for a better solution than exists now? Yes.

Does Amazon have the competency to provide a successful product? Yes.

Does Amazon have a differentiated approach? Yes—and here it is:

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:23** [“Invention”, says Jassy, “requ..] (8:2682-8:3182) (Super)

“ Invention”, says Jassy, “ requires two things: 1. The ability to try a lot of experiments, and 2. not having to live with the collateral damage of failed experiments.” Satisfying both criteria, cloud computing has been a perfect breeding ground for invention. In other words, if developers were pastry chefs, they can now stop spending most of their time milling flour and churning butter, and start spending most of their time combining and presenting those ingredients in new and different ways.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:24** [And what of the wildly unpredic..] (12:759-12:1330) (Super)

And what of the wildly unpredictable open source—the Linuxs and MySQLs of the world, which AWS both consumes and purveys—how does that fit in? “ We view open source as a companion to our business model,” says Jassy, “ Our customers want to run services on top of open protocols because it gives them the freedom to move workloads around. We use it, contribute to it, think

it’s important to the development community and it’s not going away any time soon. So long as our customers are asking for

services based on open source technologies, we'll continue to add them."

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:25 [As the late Stuart Scott would..] (1:269-1:351) (Super)**

As the late Stuart Scott would say "AWS has created so much value it's ridiculous"

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:26 [AWS has a compelling value pro..] (8:1506-8:1942) (Super)**

AWS has a compelling value proposition for each case, and they're actually quite similar. Large companies are saying yes to AWS because it's simpler, less costly and less headache, "but what they really care about is agility," Jassy says. "The most compelling part of our value prop is being able to innovate more easily and quickly. Engineering teams and LOB leaders have a lot of ideas and a strong appetite for doing new things."

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:27 [The pace of innovation at AWS ..] (11:2345-11:3039)**

(Super)

The pace of innovation at AWS continues to run very high. "In the sixteen years I've been here, I've noticed how easy it is to focus on the shiny new pennies," says Jassy, alluding to the natural tendency for Amazon culture to get excited about new capabilities. He then tosses out a list of AWS services with the enthusiasm of someone describing their first trip around the galaxy. "Elastic Compute Cloud, Elastic Map Reduce, S3 which stores trillions of objects, Dynamo DB—a very fast, high throughput, low latency, nonrelational database, RDS Service, Mobile Push Notification—demand for

these services just keeps accelerating. We're waiting for it to attenuate and it just hasn't yet."

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:28 [As Bezos and Jassy dug into an..] (5:204-5:669) (Super)**

As Bezos and Jassy dug into and examined their own internal development process and what they were doing for affiliates and partners, they kept bumping into one particular problem. What the business wasn't doing well

was accurately forecasting the time it took to complete projects—both internal and external. Providing a solution for Target, for example, one of Amazon's early merchant.com deals, was "far more painful than we thought it would be," Jassy notes.

**P23: Furrier\_2015\_01\_29\_medium.pdf - 23:29 [They began by asking some key..] (6:1095-6:1500) (Super)**

They began by asking some key early stage startup

questions about the infrastructure services market and their position and opportunity in it:

Is the space big enough to become a significant part of our business? Yes. Is there a market need for a better solution than exists now? Yes.

Does Amazon have the competency to provide a successful product? Yes.

Does Amazon have a differentiated approach? Yes

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:1 ["Our goal is that we can bring..] (4:1018-4:1103) (Super)**

[Seize 13: Learning from mistakes - Family: What] [SeizeB: Select decision-making protocols - Family: What] [Sense 2: Sensing and direct internal innovation - Family: What] [SenseA: Identify, target, select and exploit RDI - Family: What] [Transform 1: Learning - Family: What] [TransformA: Manage knowledge - Family: What]

"Our goal is that we

can bring that innovation over faster than we have in the past."

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:2 ["Every imaginable business seg..] (3:892-3:988) (Super)**

"Every imaginable business segment is using AWS in a meaningful way," Jassy said in his keynote.

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:3 [Jassy noted that AWS has cut p..] (2:820-2:897) (Super)**

Jassy noted that AWS

has cut prices 46 times since it debuted nine years ago.

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:4 [Jassy, though, said it would b..] (2:213-2:339) (Super)**

Jassy, though, said it would be a mistake to believe that each region costs the same \$1 billion Ohio authorities expect there.

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:5 [But over a period of a few yea..] (2:453-2:592) (Super)**

But over a

period of a few years, the costs could climb as datacenters get more use, leading Amazon to expand them to build more capacity.

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:7 ["If you are going to pursue bi..] (3:227-3:445) (Super)**

"If you are going to pursue big reinventions of industries, you have to be willing to invest over a long period of time, and you also have to be comfortable with being misunderstood for long periods of time," he said.

**P25: Greene\_2014\_11\_12\_seattletimes.pdf - 25:8 [The cost of creating themassi..] (3:1412-3:1598) (Super)**

Assessing legal and natural protection through an appropriability regime - Family: What] [SeizeA: Redesign business model - Family:

What] [SeizeC: Build loyalty and commitment - Family: What] [SeizeD: Select enterprise boundaries to manage complements and "control" platforms - Family: What]

The cost of creating the massive datacenters and the price of developing a broad

variety of services that customers want are becoming a bigger barrier to entry for would-be competitors.

**P26: Harris\_2009\_03\_26\_theguardian.pdf -26:1 [That's always a compelling val..] (1:2137-1:2282) (Super)**

non-economic factors, value and culture - Family: What] [SeizeB: Select decision-making protocols - Family: What] [SeizeC: Build loyalty and commitment - Family: What]

That's always a compelling value proposition for a CIO [chief

information officer] but particularly so in today's capital-constrained environment."

**P26: Harris\_2009\_03\_26\_theguardian.pdf - 26:2 [When Amazon's virtual computin..] (1:2544-1:2845)**

(Super)

When Amazon's virtual computing service,

the Elastic Compute Cloud (EC2), launched less than three years ago, it attracted impoverished startups and web 2.0 entrepreneurs. Now it has working partnerships with everyone from the Max Planck Institute and the New York Times to Sun, Oracle and even IBM.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:1 ["We have a very important cult..] (3:2495-3:2717)**

(Super)

"We have a very important cultural principle that we want people to respectfully challenge each other when they disagree." These types of challenging conversations were key for some of the early decisions at AWS, he adds.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:2 [Perhaps the biggest challenge ..] (3:1908-3:2365)**

(Super)

Perhaps the biggest challenge of the moment is a crisis of culture. Amazon's harddriving work culture has come under scrutiny after an exposé by The New York Times earlier this year, which described scenes of frequent confrontation and employees crying at their desks.

Mr Jassy, who has been at the company for nearly two decades, says Amazon's culture is a "real competitive advantage" for the company — and that healthy disagreements are part of that.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:3 [The fastpaced Amazon culture ..] (3:2720-3:2988)**

(Super)

The fastpaced Amazon culture is one reason why people such as Mr Jassy stay at the company.

"Amazon is a place that really functions like a large startup. It is not slow and stodgy and bureaucratic, we move way more fast," he explains. "It is a pioneering culture."

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:4 [Maintaining reliability as it ..] (3:1122-3:1273) (Super)**

Maintaining reliability as it grows quickly is one:

a major outage at the end of September took its Virginia data centre region offline for five hours.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:5 [Another risk is losing its pos..] (3:1276-3:1581) (Super)**

Another risk is losing its position as the darling of the analyst community. Among the investor community, the enthusiasm around AWS helped Amazon's share price double in 2015.

That could wane, however, as the debt structures that AWS has used to finance its server purchases catch up with it over time.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:6 [Because the AWS business is gr..] (3:1584-3:1905)**

(Super)

Because the AWS business is growing so quickly, its depreciation cost — the writedown it takes to

reflect its assets' loss of value through age and use — is much lower than its capital expenditure. This means that profit margins will shrink for AWS as growth slows and depreciation catches up to its true capex levels.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:7 [AWS, which rents out computing..] (2:409-2:527)**

(Super)

AWS, which rents out computing power and data storage,

accounted for half of group profits in the most recent quarter.

**P28: Hook\_2015\_11\_04\_financialtimes.pdf - 28:8 [This means that profit margins..] (3:1785-3:1904)**

(Super)

This means that profit margins will shrink for AWS as growth slows and depreciation catches up to its true capex levels

**P29: Lindner\_2013\_11\_19\_faz.pdf - 29:1 [Zum Beispiel in der Preisphilosophie..] (3:2889-3:3019) (Super)**

Zum Beispiel in der Preisphilosophie: „AWS ist ein Geschäft mit hohem Volumen, aber relativ niedrigen Margen, genauso wie Amazon.“

**P30: Malik\_2013\_12\_30\_gigaom.pdf - 30:1 [A few years ago, during the co..] (1:584-1:862) (Super)**

A few years ago, during the course of an interview, he told us the cloud with its pay-as-you-go led to more tinkering and

that was good for entrepreneurial activity

(<http://gigaom.com/2010/02/01/amazon-cto-werner-vogels-onamazon%E2%80%99s-web-services-startups-and-innovation/>).

**P30: Malik\_2013\_12\_30\_gigaom.pdf - 30:2 [What we'll continue to see is..] (2:1615-2:1808) (Super)**

What we'll continue to see is the trend in the U.S. as the front runner in

usage of the cloud, but the rest of the world is picking up pretty quickly in that sense and that is very interesting.

**P30: Malik\_2013\_12\_30\_gigaom.pdf - 30:3 [The big challenge for Amazon(..) (3:286-3:443) (Super)**

- Family: What] [TransformA: Manage knowledge - Family: What]

The big challenge for Amazon (and to some extent many US cloud-oriented companies) is going to be regulatory and legal problems that exist in non-US markets.

**P30: Malik\_2013\_12\_30\_gigaom.pdf - 30:4 [“Cloud and SaaS change the way..] (2:2398-3:283) (Super)**

"Cloud and SaaS change the way companies compete," he said, citing the example of an Indian construction company

that used an open source ERP system, hacked and customized it, and then tied it to 2,000-odd suppliers. The

cloudbased system is much cheaper than the traditional ERP systems, and Vogels expect more companies to do precisely the

same. This might not be what Oracle, SAP and others want to hear. Even the smallest mom-and-pop operation has access

to the technology that gave giants an advantage. "[The] pay-as-you-go model is pretty empowering," Vogels said. "The impact of

cloud and SaaS will be huge on small and medium businesses," he said, especially in places like "India and

Indonesia where they are large part of the economy." He believes Amazon's growth will be driven by these small-and-medium sized business, who will embrace cloud.

**P31: Malik\_Vogels\_2010\_02\_01\_gigaom.pdf - 31:1 [“With the cloud comes unconstr..] (1:1847-1:2225)**

(Super)

"With the cloud comes unconstrained thinking and willingness to tinker and experiment without worrying too much about

cost," Vogels said. I agree — success-based scaling is perhaps one of the biggest disruptions of our times. In the old days

they used to call it getting your money's worth. Today, it's more commonly referred to as getting the most out of your startup capital

**P31: Malik\_Vogels\_2010\_02\_01\_gigaom.pdf - 31:2 [One, that AWS remains a platfo..] (2:710-2:780)**

(Super)

One,

that AWS remains a platform of innovation for a long time to come

**P32: Martin\_Geier\_2015\_07\_02\_itbusiness.pdf - 32:1 [Partnerkonferenz AWS Summit 20..] (1:755-1:786)**

(Super)

- Family: To whom] [Seize 6: Designing partnerships - Family: What] [SeizeA: Redesign business model - Family: What]

Partnerkonferenz AWS Summit 2015

**P33: Matzer\_2015\_07\_24\_cloudcomputinginsider.pdf - 33:1 [Wie so häufig in deutschen Clou..] (2:783-2:905)**

(Super)

Wie so häufig in deutschen Cloud-Projekten war auch für Audi

Business Innovator Geschwindigkeit von wesentlicher Bedeutung.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:1 [“We're allowing enterprises to..] (6:719-6:916) (Super)**

"We're allowing enterprises to move much more quickly, and allowing them to innovate at a time where a lot of these organizations have stopped feeling like they were able to innovate," said Jassy.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:2 [The idea is to let enterprises..] (6:1530-6:1699) (Super)**  
The idea is to let enterprises get the same advantages from using APIs as Amazon does, thereby paving the way for faster development and innovation, according to Jassy.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:3 [Once we got into that mode in..] (6:1970-6:2084) (Super)**  
"Once we got into that mode inside Amazon, it dramatically changed the speed with which we were able to innovate."

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:4 [Every Wednesday, Jassy holds a..] (5:781-5:1426) (Super)**  
Every Wednesday, Jassy holds a meeting with AWS management that involves spending about two hours going through the operational performance data of AWS—"literally thousands of metrics on how the platform is performing," he said. That's followed immediately thereafter by a 90-minute business review. The Wednesday meetings are no picnic for AWS leaders whose businesses aren't performing up to expectations, according to Sirota. "The meetings were pretty intense and often included making difficult decisions, or unpleasant conversations about business metrics," he said. "If a presenter wasn't prepared, things could quickly go sideways."

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:5 [AWS, under Andy's leadership,..] (2:2354-2:2611) (Super)**  
"AWS, under Andy's leadership, has recognized the value the channel provides to the cloud customer, and that having a strong partner ecosystem will help AWS grow faster," said Luis Benavides, founder and CEO of Day1 Solutions, an AWS partner in McLean, Va.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:6 [The speed of execution [at AW..] (4:693-4:922) (Super)**  
"The speed of execution [at AWS] is intoxicating, and after 29 years of working on enterprise systems, it's been a pretty foreign experience to be constantly looking for ways to deliver more value at lower cost," added Hamilton.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:7 [Then, we refined our answers u..] (4:2855-4:2960) (Super)**  
non-economic factors, value and culture - Family: What] [SeizeB: Select decision-making protocols - Family: What] [SeizeC: Build loyalty and commitment - Family: What]  
Then, we refined our answers until the team believed the service created sufficient value for customers."

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:8 [Andy isn't a micromanager, bu..] (4:1333-4:1518) (Super)**  
"Andy isn't a micromanager, but he does inject himself into the review process to see if the product is there yet, and provides useful feedback on issues a team is seeing," said Sirota.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:9 [Amazon has a process it calls ..] (4:1749-4:2069) (Super)**  
Amazon has a process it calls "working backwards," which requires product teams to write a press release and an FAQ document before writing any code, said Jassy. This form of communication requires thoughtful, concise communication and ensures that all team members have a clear understanding of what they're building.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:10 [The meetings were pretty inte..] (5:1215-5:1357) (Super)**  
"The meetings were pretty intense and often included making difficult decisions, or unpleasant conversations about business metrics," he said.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:11 [The AWS culture is one where,..] (5:2840-5:3065) (Super)**  
"The AWS culture is one where, when there's a significant launch, or a customer decides to use the platform in a pervasive way, people will communicate about it, and people will tend to respond enthusiastically," Jassy said.

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:12 [But it's also a culture where..] (5:3067-5:3160) (Super)**  
"But it's also a culture where we celebrate quickly and then move on to the next initiative."

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:13 [In the early 2000s when Amazon..] (2:2632-2:2917) (Super)**  
In the early 2000s when Amazon started providing ecommerce technology to Target and other thirdparty retailers, the company realized it had to decouple many components of its platform in order to expose them to customers through application programming interfaces (APIs), Jassy said

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:14 [The experience of having to d..] (2:3150-2:3336) (Super)**  
"The experience of having to deliver to customers in decoupled APIs—which was way harder than we thought it was going to be—really changed the way we thought about software," said Jassy

**P34: McLaughlin\_2015\_08\_04\_crn.pdf - 34:15 [Partnering with AWS has allow..] (6:2247-6:2532) (Super)**  
- Family: To whom] [Seize 6: Designing partnerships - Family: What] [SeizeA: Redesign business model - Family: What]  
"Partnering with AWS has allowed us to focus more of our efforts on what we do best and not worry about the infrastructure and all the overhead that comes with maintaining it," said Kevin RisonChu, director of systems and infrastructure at Mirum Agency, a San Diegobased AWS partner

**P35: Price\_2016\_03\_12\_businessinsider.pdf - 35:1 [But Amazon still has to cough ..] (2:1530-2:1703) (Super)**  
But Amazon still has to cough up huge chunks of capitalexpenditure cash in advance to outfit its data center, so it's motivated to find ways to do that as cheaply as possible.

**P35: Price\_2016\_03\_12\_businessinsider.pdf - 35:2 [the rise of the whole startup ..] (3:1220-3:1287) (Super)**  
the rise of the whole startup culture is largely driven by cloud."

**P36: Rao\_2015\_06\_28\_fortune.pdf - 36:1 [Microsoft and Google are also..] (4:282-4:445) (Super)**  
Microsoft and Google are also doing something that's familiar to any retailer who has ever competed with Amazon.com: They're engaging the incumbent in a price war.

**P36: Rao\_2015\_06\_28\_fortune.pdf - 36:2 [The idea of renting computing p..] (3:563-3:857) (Super)**  
The idea of renting computing power from another company was almost unheard of, but Jassy had a key backer in Dalzell, who recalls arguing that "we're going to invest in this anyway," since Amazon would always need datacenter resources for itself. In October 2003, Jassy got the green light.

**P37: Ruggiero\_2015\_10\_08\_siliconangle.pdf - 37:1 [He sees three majortrends atth..] (3:453-3:690) (Super)**  
He sees three majortrends at the moment: autonomous driving, seamless integration of the car as a powerful IoT device and mobility services gaining ground. These trends have enabled BMW to utilize IoT that's run through AWS at the core.

**P37: Ruggiero\_2015\_10\_08\_siliconangle.pdf - 37:2 [Docker integration with Compos..] (2:1154-2:1349)**

(Super)

Docker integration with Compose was a muchapplauded newaddition giving Docker containers more abilities. These are all powered bythe addition ofAmazon EC2 Container Registrythat's been added.

**P37: Ruggiero\_2015\_10\_08\_siliconangle.pdf - 37:3 [The above announcements culmin..] (2:1892-2:2266)**

(Super)

innovation and modularity - Family: What]

The above announcements culminated with the revealing ofAWS Mobile Hub, which is a development hub so that mobile

developers cannot be restrained bythe back-end complexity ofmobile devices, but rather much more simply produce the cloud-based application back-end processes and easily integrate them into the phone experience with end code sources being produced as SDKs

**P39: Vogels\_2014\_05\_15\_theguardian.pdf - 39:1 [Europe's fastest growing start..] (1:831-1:1140) (Super)**

Europe's fastest growing start-ups, like Hailo, JustEat and WeTransfer, some of the largest enterprises, like Royal Dutch Shell, SAP and Unilever, governments, education and research institutes, all are using cloud technologies to innovate faster and better serve their customers and the citizens of Europe.

**P39: Vogels\_2014\_05\_15\_theguardian.pdf - 39:2 [Focusing on lowering prices wi..] (2:577-2:710) (Super)**

Focusing on lowering prices will boost the economy and prosperity of local businesses as more capital can be allocated to innovation.

**P39: Vogels\_2014\_05\_15\_theguardian.pdf - 39:5 [I believe that what is needed..] (1:2022-1:2345) (Super)**

I believe that

what is needed for cloud to be successful relates to Europe's core values. As a Dutchman, I hold these values in close regard – such as the right to a fair and democratic society and a strong protection of privacy and freedom. Cloud – done right – enables broad expression and realisation of these values.

**P39: Vogels\_2014\_05\_15\_theguardian.pdf - 39:6 [For cloud computing to be succ..] (1:2348-1:2457)**

(Super)

For cloud computing to be successful in Europe, providers must hold exceeding customer needs as a core value.

**P39: Vogels\_2014\_05\_15\_theguardian.pdf - 39:7 [Another core value is putting..] (2:1080-2:1340) (Super)**

Family: What]

Another core value is putting data protection, ownership, and control, in the hands of cloud users. It is essential that customers own and control their data at all times. Customers, governments and businesses, large and small alike, have concerns about this.

**P39: Vogels\_2014\_05\_15\_theguardian.pdf - 39:8 [Another core value is putting..] (2:1080-2:1179) (Super)**

Another core value is putting data protection, ownership, and control, in the hands of cloud users.

**P40: Vogels\_2015\_02\_04\_computerwoche.pdf - 40:1 [Im Jahr 2014 konnten wir beob..] (2:454-2:602)**

(Super)

"Im Jahr 2014 konnten wir beobachten, wie Cloud Computing sowohl in Consumer- als auch Enterprise-Produkten zu bedeutenden Innovationen geführt hat.

**P40: Vogels\_2015\_02\_04\_computerwoche.pdf - 40:2 [Für Medienunternehmen wie "Tim..] (2:940-2:1182)**

(Super)

Für Medienunternehmen wie "Times", "The Guardian", "The Telegraph", "New York Times", "Washington Post" und das "Time Magazine" bedeutet die Cloud nicht weniger als den Wandel hin zu schlankeren, flexibleren und innovativen Geschäftsmodellen.

**P40: Vogels\_2015\_02\_04\_computerwoche.pdf - 40:3 [Dennoch und trotz all der beei..] (2:1276-2:1388)**

(Super)

Dennoch und trotz all der beeindruckenden Innovationen, die es bislang gab, stehen wir immer noch ganz am Anfang.

**P40: Vogels\_2015\_02\_04\_computerwoche.pdf - 40:4 [Die Cloud treibt innovative Lö..] (6:692-6:872)**

(Super)

Die Cloud treibt innovative Lösungen voran, wie etwa die "HealthSuite" von Philips - eine Plattform, die Gesundheitsdaten verwaltet und sowohl Ärzte als auch Patienten unterstützt.

**P40: Vogels\_2015\_02\_04\_computerwoche.pdf - 40:5 [Dropcam ist ein weiteres innov..] (5:1990-5:2193)**

(Super)

Dropcam ist ein weiteres innovatives Beispiel dafür, wie VCA in der Kunden-Beziehung eingesetzt wird. Dropcam analysiert

Videos, die von Internetfähigen Kameras übertragen werden, um Kunden zu alarmieren

**P40: Vogels\_2015\_02\_04\_computerwoche.pdf - 40:6 [Werner Vogels verrät die Cloud..] (1:1116-1:1157)**

(Super)

Werner Vogels verrät die Cloud-Trends 2015

**P42: AWS\_Analyst\_reports.pdf - 42:1 [The midmarket and enterprise s..] (86:1838-86:1951) (Super)**

The midmarket and enterprise space holds tremendous promise, and

AWS is a fringe player in these segments today.

**P42: AWS\_Analyst\_reports.pdf - 42:2 [AWS retained a solid advantage..] (291:449-291:552) (Super)**

AWS retained a solid advantage for the DevOps and coder segments -- and as an overall choice for CIOs.

**P42: AWS\_Analyst\_reports.pdf - 42:3 [AWS is the best fit for the ..] (311:410-311:492) (Super)**

■ AWS is the best fit for the DevOps pro segment, but scores high for all segments.

**P42: AWS\_Analyst\_reports.pdf - 42:4 [The capabilities of AWS' appli..] (311:702-311:1069) (Super)**

The capabilities of AWS' application services, coupled with its mature infrastructure services, vast ecosystem of partners, including many of the rapid dev and coder-focused platforms in this analysis, gave it high current offering and strategy scores across all but the rapid dev segment, where its degree of abstraction does not rise to the needs of this user.

**P42: AWS\_Analyst\_reports.pdf - 42:5 [Cloud changes how IT gets done..] (84:1786-84:1908) (Super)**

Cloud changes

how IT gets done, sometimes supplementing, and in other situations replacing, how services are delivered.

**P42: AWS\_Analyst\_reports.pdf - 42:6 [A large ecosystem dramatically..] (296:2797-296:3005) (Super)**

A large ecosystem dramatically improves the

customer's ability to deliver applications, find support for key components, supplement staff with consultants, and empower management of its cloud applications.

**P42: AWS\_Analyst\_reports.pdf - 42:7 [Areas such as specialization i..] (333:2476-333:2931) (Super)**

Areas such as specialization in security features, vertical industry expertise, costs per endpoint,

relationships with OEMs, and the ability to drive computing at the edge have become key battlegrounds for IoT purpose-built

platform vendors that are seeking to demonstrate exceptional value

to IoT buyers. One company that has emerged as a

significant competitor in this market is Amazon Web Services, with its recent launch of the AWS IoT platform.

**P43: Andy\_Jassy\_2010\_04\_29\_itnews.pdf - 43:1 [Due to our scale, we are able ..] (2:1991-2:2057) (Super)**

Due to our scale, we are able to pass on lower prices to customers.

**P43: Andy\_Jassy\_2010\_04\_29\_itnews.pdf - 43:2 [We utilise infrastructure seve..] (2:2194-2:2363) (Super)**

We utilise infrastructure several orders of magnitude higher than any customer would. So we have

a better profit structure, and we can pass on lower prices to customers.

**P43: Andy\_Jassy\_2010\_04\_29\_itnews.pdf - 43:3 [I do believe that this will be..] (3:541-3:606) (Super)**

I do believe that this will be a high volume, low margin business.

**P43: Andy\_Jassy\_2010\_04\_29\_itnews.pdf - 43:4 [In this environment, you think..] (3:833-3:903) (Super)**

In this environment, you think about costs and prices very differently.

**P43: Andy\_Jassy\_2010\_04\_29\_itnews.pdf - 43:5 [Cloud computing allows you to ..] (2:1076-2:1154) (Super)**

Cloud computing allows you to turn capital expenditure into a variable expense.

**P43: Andy\_Jassy\_2010\_04\_29\_itnews.pdf - 43:6 [First, what is different about..] (2:2615-2:2862) (Super)**

First, what is different about what we do is that when we started this business seven years ago, we

knew we were very good at running services deep in the stack, and very good at running reliable data centres that are scalable and

costeffective.

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:1 [If you run a high volume, low..] (2:924-2:1126) (Super)**

If you run a high volume, low margin business ... you think

about your pricing differently, you think about your cost structure differently, you think where you spend your innovation

cycles differently....

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:2 [Amazon Web Services chief Andy..] (1:855-1:1112)**

**(Super)**

Amazon Web Services chief Andy Jassy essentially laid out the case today at the company's

Re:Invent conference in Las Vegas, telling some 20,000 attendees that the company's focus on high-volume, low-margin businesses

is absolutely its strategic advantage.

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:3 [then a high volume, low margin..] (2:673-2:712) (Super)**

then a high volume, low margin business.

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:4 [And, if you believe like we do..] (2:714-2:922) (Super)**

And, if you believe like we do, that

the vast majority of computing is moving to the cloud over the next 10 years, it stands to reason that cloud computing is going to be

a high volume, low margin business.

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:5 [And then it will be interestin..] (2:1663-2:1902) (Super)**

And then it will be

interesting to see how many of those companies will be good at operating

high-volume, low margin businesses, because you don't 翻轉ip a switch over

night and become great at operating high-volume, low-margin businesses.

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:6 [Well, it continues to cut pric..] (2:2017-2:2090) (Super)**

Well, it continues to cut prices, making it

harder for rivals to compete.

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:7 [the reductions come "largely i..] (3:459-3:540) (Super)**

the reductions come "largely in the absence of any competitive pressure to do so."

**P44: Andy\_Jassy\_2012\_11\_28\_geekwire.pdf - 44:8 [Net??ix CEO Reed Hastings, a b..] (3:543-3:799) (Super)**

Net 翻轉ix CEO Reed Hastings, a big user of AWS who later appeared on stage with Jassy, thanked

Amazon for yet another price reduction.

"Wow, a 25 percent price cut, I feel very welcome," said Hastings. "You saved us a fortune by just starting the day 翻轉."

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:1 [y. In fact, our customers are ..] (1:2928-1:3101) (Super)**

y. In fact, our

customers are telling us that new ideas are now coming from across the organization and that employees are excited to innovate on

behalf of their customers.

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:2 [We also have a culture that is..] (3:2849-3:2913)**

**(Super)**

We also have a culture that is really lean forward on innovation.

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:3 [Think about what AWS does: We ..] (3:955-3:1159)**

**(Super)**

Think about what AWS does: We provide

infrastructure, software, hardware and data center services. If you think about that market segment, it's trillions of dollars. There

simply won't be only one player

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:4 [And if they fail, there's no co..] (1:2778-1:2928) (Super)**

And if they fail, there's no collateral damage,

which is really exciting since it removes the paralyzing fear of failure that often stifles creativity

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:5 [Customers are telling us what ..] (2:4804-2:5053)**

**(Super)**

Customers are telling

us what they want, and that drives a lot of what we put on the roadmap. And I think you'll see us adding capabilities for companies

with large data sets that want to do computing and processing, and then make that data useful

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:6 [At Amazon — and especially in ..] (3:2960-3:3153) (Super)**

At Amazon — and especially in AWS — the leadership team is always trying to say yes. ... That has a big impact on the team. It encourages people to come up with new ideas that can help customers

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:7 [When the cost of experimentation..] (1:2410-1:2608) (Super)**

When the cost of experimentation is high, and requires the approvals of a lot of committees and getting IT to schedule a project often weeks out, it's really hard to foster a culture of innovation.

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:8 [Think about what AWS does: W..] (3:953-3:1052) (Super)**

Think about what AWS does: We provide infrastructure, software, hardware and data center services

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:9 [So we'll have about 175 courses..] (1:1563-1:1658) (Super)**

So we'll have about 175 courses and 40 percent of them will be taught by customers or partners.

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:10 [Next week Amazon will hold its..] (1:789-1:928) (Super)**

Next week Amazon will hold its second re:Invent conference in Las Vegas, giving customers a chance to learn about AWS's latest capabilities

**P46: Andy\_Jassy\_2013\_11\_08\_allthingsd.pdf - 46:11 [If we don't offer all the funct..] (3:2355-3:2467) (Super)**

If we don't offer all the functionality that they want now, we're able to listen and quickly add what they want.

**P47: Andy\_Jassy\_2013\_11\_12\_wsj.pdf - 47:1 [?e h?ve ?? much ?c??e ?h??e?e..] (2:2217-2:2388) (Super)**

Chúng tôi có rất nhiều điều mà chúng ta không thể xây dựng được và chúng tôi sẽ cố gắng để xây dựng những điều đó. Chúng ta sẽ cố gắng để xây dựng những điều đó.

**P48: Andy\_Jassy\_2014\_10\_23\_managermagazin.pdf - 48:1 [Ich habe jede erdenkliche Anal..] (2:2694-2:2826) (Super)**

Ich habe jede erdenkliche Analyse durchgeführt und glauben sie mir, AWS wird noch sehr lange Zeit einen freien Cash flow generieren.

**P49: Geier\_Rede\_2015\_04\_13\_computerwoche.pdf - 49:1 [Mit unserer Strategie wollen w..] (3:351-3:450) (Super)**

Mit unserer Strategie wollen wir dem deutschen Mittelstand helfen, innovativ zu sein und zu bleiben.

**P49: Geier\_Rede\_2015\_04\_13\_computerwoche.pdf - 49:2 [GEIER: Wir p?egen zahlreiche,..] (3:834-3:947) (Super)**

GEIER: Wir ermöglichen intensive Technologie-Partnerschaften mit einer Vielzahl von Software-Herstellern.

**P49: Geier\_Rede\_2015\_04\_13\_computerwoche.pdf - 49:3 [Da der deutsche Mittelstand st..] (2:2868-2:3150) (Super)**

Da der deutsche Mittelstand stark mit Software-Anbietern zusammenarbeitet und letztlich auch darauf setzt, dass diese ihre Software "as-a-service" anbieten, sind die Independent Software Vendors genauso wie die System-Integratoren wichtige Bausteine unserer Mittelstandsstrategie.

**P50: Steffen\_Krause\_2013\_08\_26\_t3n.pdf - 50:1 [Wichtig ist an der Stelle, das..] (2:838-2:1211) (Super)**

Wichtig ist an der Stelle, dass die Anbieter die Möglichkeit haben, in verschiedenen Lizenz-Modellen ihre Software gegen Geld oder auch kostenlos schlüsselfertig anzubieten. Kunden haben dadurch die Möglichkeit, die Software sofort nutzen zu können. Dadurch ergibt sich ein zusätzlicher Revenue-Stream für die Anbieter und auch ein zusätzlicher Nutzen für die Kunden

**P50: Steffen\_Krause\_2013\_08\_26\_t3n.pdf - 50:2 [Ganz wichtig ist natürlich die..] (4:719-4:846) (Super)**

Ganz wichtig ist natürlich die Empfehlung, möglichst alles zu automatisieren und möglichst alles über API-Steuerung zu machen.

**P52: Werner\_Vogels\_2006\_05\_16\_infoq.pdf - 52:1 [A lot of innovation was necess..] (1:752-1:857) (Super)**

A lot of innovation was necessary to make this happen, as we were one of the first to take this approach.

**P52: Werner\_Vogels\_2006\_05\_16\_infoq.pdf - 52:2 [Giving developers operational ..] (1:1075-1:1653) (Super)**

Giving developers operational responsibilities has greatly enhanced the quality of the services, both from a customer and a technology point of view. The traditional model is that you take your software to the wall that separates development and operations, and throw it over and then forget about it. Not at Amazon. You build it, you run it. This brings developers into contact with the day-to-day operation of their software. It also brings them into day-to-day contact with the customer. This customer feedback loop is essential for improving the quality of the service.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:1 [The services model has been a ..] (2:4589-2:4707) (Super)**

The services model has been a key enabler in creating teams that can innovate quickly with a strong customer focus.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:2 [more sellers] (1:1576-1:1587) (Super)**

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:3 [The application that renders t..] (2:1928-2:2206) (Super)**

The application that renders the Amazon.com Web pages is one such application server, but so are the applications that serve the Web-services interface, the customer service application, the seller interface, and the many third-party Web sites that run on our platform.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:4 [A large part of Amazon.com's t..] (1:2028-1:2198) (Super)**

A large part of Amazon.com's technology evolution has been driven to enable this continuing growth, to be ultrascaleable while maintaining availability and performance.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:5 [JG Let's postulate that somebo..] (6:2162-6:2514) (Super)**

JG Let's postulate that somebody has come up with an idea and the team has gone off and built something. How does the go/no-go decision get made?  
WV It may depend on the criteria for success that were defined up front. When the service is ready for beta testing, we will slowly introduce this to our customers, and then we measure relentlessly.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:6 [We have a very good understand..] (6:2561-6:2995) (Super)**

We have a very good understanding of how customers interact with the site as is. When we expose new features we measure how they change the customer's behavior. For example, does it take the customer fewer steps to find what he or she needs? This is hard because you are measuring human behavior; there are some things that customers are delighted about immediately and there are other things that they have to get used to.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:7 [WV There is, of course, long-r..] (6:304-6:567) (Super)**

[SeizeB: Select decision-making protocols - Family: What] [SeizeC: Build loyalty and commitment - Family: What]  
WV There is, of course, long-range business-strategy planning—whether it is our future in digital media or the way we open up our platform for consumption by major partners—but there is also room for a lot of creative thinking by the larger Amazon community. I

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:8 [WV The Amazon development envi..] (8:532-8:651) (Super)**

WV The Amazon development environment requires engineers and architects to be very independent creative thinkers. We

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:9 [Growth is core to Amazon.com's..] (1:1362-1:1479) (Super)**

Growth is core to Amazon.com's business strategy, and that has had a significant impact on the way we use technology

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:10 [The Amazon development environ..] (8:535-8:1062) (Super)**

The Amazon development environment requires engineers and architects to be very independent creative thinkers. We are building things that nobody else has done before, so you need to be able to think outside

the box. You need to have a strong sense of ownership, because in the small teams in which you will work at Amazon, your colleagues will count on you to pull your weight—especially when it comes to operating the service that you have built. Can you take responsibility for making this the best it can be?

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:11 [The small-team concept means t..] (6:1120-6:1249) (Super)**

The small-team concept means that you have a continuous feedback loop where you try to understand the impact for the customer.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:12 [There is another lesson here: ..] (2:4902-2:5084) (Super)**

There is another lesson here: Giving developers operational responsibilities has greatly enhanced the quality of the services, both from a customer and a technology point of view.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:13 [This customer feedback loop is..] (4:140-4:223) (Super)**

This customer feedback loop is essential for improving the quality of the service.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:14 [We provide incentives for some..] (4:4945-4:5265) (Super)**

We provide incentives for some things, such as integration with the monitoring system and other infrastructure tools. But for the rest, we allow teams to function as independently as possible.

Developers are like artists; they produce their best work if they have the freedom to do so, but they need good tools.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:15 [If applied, strict service ori..] (2:3745-2:3903) (Super)**

If applied, strict service orientation is an excellent technique to achieve isolation; you come to a level of ownership and control that was not seen before.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:16 [it's not only the technology s..] (2:4435-2:4707) (Super)**

it's not only the technology side that was improved by using services. The development and operational process has greatly benefited from it as well. The services model has been a key enabler in creating teams that can innovate quickly with a strong customer focus.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:17 [Giving developers operational ..] (2:4932-2:5283) (Super)**

Giving developers operational responsibilities has greatly enhanced the quality of the services, both from a customer and a technology point of view. The traditional model is that you take your software to the wall that separates development and operations, and throw it over and then forget about it. Not at Amazon. You build it, you run it.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:18 [You've integrated with Sears, ..] (7:3870-7:3930) (Super)**

You've integrated with Sears, Nordstrom, Target, and

so on.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:19 [Behind Amazon's successful evo..] (1:617-1:827) (Super)**

Behind Amazon's successful evolution from retailer to technology platform is its SOA (service-oriented architecture), which broke new technological ground and proved that SOAs can deliver on their promises

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:20 [We went through a period of se..] (2:1214-2:1436) (Super)**

We went through a period of serious introspection and concluded that a service-oriented architecture would give us the level of isolation that would allow us to build many software

components rapidly and independently

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:21 [How do you make sure that deve..] (5:3017-5:3126)**

**(Super)**

How do you make sure that developers are productive in this large distributed service-oriented architecture?

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:22 [This fast response to new idea..] (6:1473-6:2157)**

**(Super)**

This fast response to new ideas is enabled through the loosely coupled services model, both in technology and at the developer and operations level. From the outside, the services in our platform may appear chaotic, but chaotic in a good sense—in that we try not to impose a rigid structure on the different functional pieces, but we expect there to be order when looking at it from a different dimension. Thinking about this whole system as a big deterministic system would be unrealistic. Life is not deterministic, and a large-scale distributed system such as Amazon has many organic and emerging properties that can come to life only if you do not constrain it.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:23 [I think part of the chaotic na..] (4:4759-4:5265) (Super)**

I think part of the chaotic nature—the emerging nature—of Amazon's platform is that there are many tools available, and we try not to impose too many constraints on our engineers. We provide incentives for some things, such as integration with the monitoring system and other infrastructure tools. But for the rest, we allow teams to function as independently as possible.

Developers are like artists; they produce their best work if they have the freedom to do so, but they need good tools.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:24 [There is quite a bit of develo..] (4:4017-4:4376) (Super)**

There is quite a bit of development happening in

Eclipse, but IntelliJ's IDEA is also popular for Java development. Some development happens in Visual Studio.

Developers of our services can use any tools they see fit to build their services. Developers themselves know best which tools make them most productive and which tools are right for the job.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:25 [The support environment around..] (5:86-5:198) (Super)**

The support environment

around the service development should never get in the way of the development itself.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:26 [If an idea is deemed worthy of..] (6:806-6:1118) (Super)**

If an idea is deemed worthy of investigation, we

exploit our service development approach to scope and prototype the idea quickly. With a new radical service, you try to go into prototype mode pretty quickly, and then you start iterating on that until you feel that you understand your business problem.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:27 [Different groups at Amazon int..] (8:1829-8:2062)**

**(Super)**

Different groups at Amazon interact with academia.

Often a service needs to develop new revolutionary technology from scratch, and they will look at who in the research world worked on these topics before and who can help out.

**P53: Werner\_Vogels\_2006\_05\_22\_acm.pdf - 53:28 [realize that it's hard in acad..] (8:3135-8:3467) (Super)**

I realize that it's hard in academia to do research at

the scale of operation that Amazon requires. So we don't look to academia to solve those challenges for us. We're building data sets here at Amazon, however, to provide to academics so that we can get interactions going on some of the issues where they can contribute.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:1 [Each service has a team associ..] (1:1965-1:2108) (Super)**

Each service has a

team associated with it that takes the reliability of that service and is responsible for the innovation of that service.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:2 [We first had to develop it for..] (2:198-2:555)**

**(Super)**

We first had to develop it for

ourselves in a way that those teams could focus on the innovation side and not become super app administrators and super operators, because there's no glory in that, although at Amazon-scale, all engineers need to be aware of scale, reliability, and be able to failover their services from one data center to another.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:3 [From an innovation point of vi..] (5:2923-6:249) (Super)**

From an

innovation point of view, quite a number of enterprises are considering moving some of their services into the cloud and then opening them up such that they can become part of the cloud ecosystem, making it easy for Company X to access their services in the cloud and third parties to extend the platform they're building.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:4 [Integration between these diff..] (6:677-6:759)**

**(Super)**

Integration between

these different platforms will become increasingly important.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:5 [Amazon is known as an open sou..] (2:1206-2:1244) (Super)**

**(Super)**

Amazon is known as an open source shop.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:6 [Around the time I joined, we a..] (1:1017-1:1534) (Super)**

**(Super)**

Around the time I joined, we already had established this large-scale

service-oriented architecture. The phase before that, Amazon was mainly databases and application servers. That had come to sort of an end of life as an architecture around 2000, 2001. We moved to this service-oriented architecture by taking individual pieces of business logic that sat in the application servers, looked for the data that they operated on, brought those together, and put an API on them, that's what we call a service.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:7 [One is isolation, driven by th..] (3:1942-3:2223)**

**(Super)**

One is isolation, driven

by the service-oriented architecture. There's no direct database access except for the pieces of software that run on the service, and the service has a hardened API. That is the only way that services or software pieces can interact with each other

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:8 [The second piece, and it's a m..] (3:2227-4:135)**

**(Super)**

The second piece, and it's a more fundamental architecture piece, is these

software components are loosely coupled, where the interaction between them is there's no tight connection or dependency between different pieces, which means if failure happen or if overload occurs, it's easy for software components to switch to other components that aren't faulty or provide better availability. We do that at a micro level and at a number of higher abstraction levels, even to the point our systems are designed to withstand complete data center failures. We have a rule internally in the e-commerce space that we

should be able to lose a complete data center without the SLA to the customer getting violated. So isolation and loosely coupled are the two building

principles that we

use to construct the overall architecture.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:9 [I think there are a number of ..] (7:106-7:516)**

**(Super)**

I think there are a number of standard principles

that we can apply in terms of hierarchies, of loose coupling, of probabilistic techniques that I'm confident will serve us for quite a bit of time. When we developed these services, we were looking ahead in terms of what kind of scale we could achieve, and we're not there yet. Even then, I'm confident that the choices we've made were the right ones.

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:10 [customer-oriented development]**

**(4:2743-4:2771) (Super)**

customer-oriented development

**P55: Werner\_Vogels\_2008-12-19\_informationweek.pdf - 55:11 [I've heard customers talk about..]**

**(6:1490-6:1702) (Super)**

- Family: What] [SeizeA: Redesign business model - Family: What]

I've heard customers talk about partner clouds,

where they may have an internal one for ease of development, maybe some shared services with partners and, after that, they move things into the public cloud.

**P56: Werner\_Vogels\_2008\_07\_31\_virtualization.pdf - 56:1 [Venture capitalists seem upset..] (1:1664-1:2031)**

**(Super)**

Venture capitalists seem upset about side effects, such as startup funding

independence, as these fast growing tech companies are no longer in need to burn lots of VC money on hardware platforms and technologies upfront. They can now scale their offering dynamically, driven by organic growth, while generating the necessary revenues to cover the extra cloud cost.

**P56: Werner\_Vogels\_2008\_07\_31\_virtualization.pdf - 56:2 [How hard was it to integrate t..] (2:1800-2:2313)**

**(Super)**

How hard was it to integrate the Xen hypervisor into your cloud platform?

"I think Xen is a great product. It is easy to use. But most importantly is the very active community around it. I would not say many 'issues' around using Xen, but 'challenges' are addressed there with the things every virtual machine has to deal with. Things such as: I/O issues, guaranteed scheduling issues, domain zero security concerns, ... The community out there is very helpful. That was a very big reason for us in selecting Xen."

**P56: Werner\_Vogels\_2008\_07\_31\_virtualization.pdf - 56:3 [It is remarkable to hear the C..] (1:685-1:929)**

**(Super)**

It is remarkable to hear the CTO of a multinational openly

thank the open source community for their active support on Xen and hear him claim this to be the main reason for having chosen Xen as a crucial Amazon cloud-enabling building block.

**P56: Werner\_Vogels\_2008\_07\_31\_virtualization.pdf - 56:4 [Let's first start of with the ..] (3:853-3:1122)**

**(Super)**

Let's first start of with the notion of vendor lockin. As I mentioned in my talk, I like to believe that Amazon works very hard to provide APIs, which are so simple that there is hardly any vendor lockin. We use standard techniques to give people access to our APIs.

**P57: Werner\_Vogels\_2009\_11\_27\_computerweekly.pdf - 57:1 [Commercial software can also b..]**

**(3:505-3:621) (Super)**

Commercial software can also be licensed to run on AWS, although each

software firm sets its own licensing policies.

**P57: Werner\_Vogels\_2009\_11\_27\_computerweekly.pdf - 57:2 ["Eli Lilly is doing collaborat..] (2:1659-2:1773)**

**(Super)**

"Eli Lilly is doing collaborative drug research using external researchers who collaborate over AWS," says Vogels.

**P57: Werner\_Vogels\_2009\_11\_27\_computerweekly.pdf - 57:3 [People are using AMS not only ..] (2:684-2:876)**

**(Super)**

People are using AMS not only for software development, testing and prototyping new applications, but also to support collaboration using applications like Microsoft SharePoint hosted on AWS."

**P57: Werner\_Vogels\_2009\_11\_27\_computerweekly.pdf - 57:4 [Moving software development in..]**

**(2:1112-2:1254) (Super)**

Moving software development

into the cloud is a good way for users to understand how cloud computing can be used in a production environment,

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:1 [AWS customers are doing some r..] (2:1146-2:1597)**

**(Super)**

AWS customers are doing some really innovative things around dealing with Big

Data. For example digital advertising and marketing firm, Razorfish. Razorfish targets online adverts based on data from browsing sessions. A common issue Razorfish found was the need to process gigantic data sets. These large data sets are often the result of holiday shopping traffic on a retail website, or sudden dramatic growth on a media or social networking site

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:2 [Our pace of innovation has bee..] (2:2630-2:2708)**

**(Super)**

Our pace of innovation has been rapid because of our relentless customer focus.

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:3 [Third, we recognized that Hado..] (3:1203-3:1369)**

**(Super)**

Third, we recognized that Hadoop was gaining substantial popularity in the industry with multiple customers using Hadoop and many vendors innovating on top of Hadoop

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:4 [Big Data holds the promise of ..] (2:484-2:634) (Super)**

Big Data holds the promise of helping companies create a competitive advantage

as through data analysis they learn how to better serve their customers

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:5 [We chose Hadoop for several re..] (3:849-3:1369)**

**(Super)**

technology/feature and product/service architecture - Family: What] [SeizeA: Redesign business model - Family: What] [Sense 1:

Sensing external innovation - Family: What] [Sense 2: Sensing and direct internal innovation - Family: What] [Sense 3:

Encouraging open innovation focused on a broad external base - Family: What] [SenseA: Identify, target, select and exploit RDI -

Family: What] [TransformC: Support open innovation and modularity - Family: What]

We chose Hadoop for several reasons. First, it is the only available

framework that could scale to process 100s or even 1000s of terabytes of data and scale to installations of up to 4000 nodes. Second,

Hadoop is open source and we can innovate on top of the framework and inside it to help our customers develop more preformat

applications quicker. Third, we recognized that Hadoop was gaining

substantial popularity in the industry with multiple customers using Hadoop and many vendors innovating on top of Hadoop

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:6 [We've lowered our prices 12 ti..] (2:3196-2:3288)**

**(Super)**

We've lowered our prices 12 times in the past 5 years with no competitive pressure to do so.

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:7 [We also see that existing BI v..] (3:1428-3:1574)**

**(Super)**

We also see that existing BI

vendors such as Microstrategy are willing to work with us and integrate their solutions on top of Elastic MapReduce.

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:8 [There's really no substitute f..] (2:2935-2:3088)**

**(Super)**

There's really no substitute for the

accelerated learning we've had from working with hundreds of thousands of customers with every imaginable use case.

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:9 [We found, though, that there h..] (2:3984-2:4195)**

**(Super)**

We found, though, that there had been some struggles with applying the concepts so

we published the paper as feedback to the academic community about what one

needed to do to build realistic production systems.

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:10 [Why didn't you develop Open So..] (2:4275-2:4379)**

**(Super)**

Why didn't you develop Open Source data platforms from the start like for

example Facebook and LinkedIn?

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:11 [I believe anything we can do t..] (3:495-3:604)**

**(Super)**

I believe anything we can do to make AWS

lowercost and widely available will help the community tremendously

**P58: Werner\_Vogels\_2011\_11\_02\_odbms.pdf - 58:12 [We are also relentless about d..] (2:3091-2:3193)**

**(Super)**

We are also relentless about driving efficiencies and passing along the cost savings

to our customers.

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:1 [Hinzu kommt unser starker Foku..] (2:2899-2:2970) (Super)**

**(Super)**

Hinzu kommt unser starker Fokus auf Innovationen und Preisreduzierungen.

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:2 [Im Rahmen des AWS Partner Netw..] (3:2936-3:3105) (Super)**

**(Super)**

- Family: To whom] [Seize 6: Designing partnerships - Family: What] [SeizeA: Redesign business model - Family: What]

Im Rahmen des AWS Partner Network (APN) können sich Reseller als AWS-Partner qualifizieren und die AWS-Dienste,

für die

sie Boni erhalten, mit eigenen Services veredeln.

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:3 [Wir haben neben den großen Con..] (3:2147-3:2322) (Super)**

**(Super)**

19: Deciding and managing integration, outsourcing and insourcing - Family: What] [SeizeA: Redesign business model - Family:

What] [SeizeD: Select enterprise boundaries to manage complements and "control" platforms - Family: What] [Transform 7:

Developing integration, coordination and reconfiguration skills - Family: What] [TransformC: Support open innovation and

modularity - Family: What]

Wir haben neben den großen Consulting- und Integrationspartnern sehr viele neue Partnerschaften mit

Resellern geschlossen, die vom Start weg auf unsere Cloud-Angebote setzten.

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:4 [All unsere Dienste basieren au..] (2:3411-2:3804)**

**(Super)**

All unsere Dienste basieren auf offenen, standardisierten APIs - mehr Standardisierung geht nicht. Die Services

wurden von

Grund auf so entwickelt, dass Kunden sehr einfach von einer Umgebung zu einer anderen migrieren können.

Entsprechend sind auch

unsere Verträge so gestaltet, dass der Kunde beispielsweise jederzeit zu einem anderen Anbieter wechseln kann. Er behält die volle

Kontrolle.

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:5 [Obendrein investieren wir mass..] (1:2461-1:2567) (Super)**

**(Super)**

Obendrein investieren

wir massiv in neue Sicherheitstechnologien, beispielsweise bei der Verschlüsselung .

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:6 [Viele traditionelle Player ver..] (2:2587-2:2897)**

(Super)

Viele traditionelle Player verfolgten über viele Jahre hinweg die Strategie, Kunden an ihre Technologie zu binden. Die einzige

Möglichkeit für Kunden, den Preis für die Dienste und Ausstattung zu senken war es, langfristige Verpflichtungen einzugehen. AWS setzte

dagegen von Anfang an auf offene Technologien.

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:7 [Die höchste Priorität messen w..] (4:248-4:705)**

(Super)

Die höchste Priorität messen wir der Security und der Operational Excellence bei und in beide Themen werden wir entsprechend

investieren - das war schon immer so und daran werden wir festhalten. Zweitens werden wir die internationale Expansion weiter vorantreiben. Ein dritter Fokus wird auf der Weiterentwicklung der Management-Tools liegen, um es Kunden

einfacher zu machen,

unsere Dienste zu nutzen und diese in ihre bestehende Umgebung mit einzubinden

**P59: Werner\_Vogels\_2013\_09\_20\_channelpartner.pdf - 59:8 [Amazon will über Partner die U..] (1:397-1:448)**

(Super)

Amazon will über Partner die Unternehmens-IT erobern

**P61: Werner\_Vogels\_2014\_07\_19\_recode.pdf - 61:1 [Our customers set the roadmap...] (3:1860-3:1889)**

(Super)

Our customers set the roadmap.

**P63: Werner\_Vogels\_2015\_04\_29\_cnbc.pdf - 63:1 [""here"? ? difference be??een ..] (2:863-2:1096) (Super)**

"There's a difference between pricing, low pricing and commodity. If you look at sort of the wide range of services that we have available on AWS, if you look at the cloud in 2010, it's almost the bottom layer of what Amazon is now.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:1 [With recent investments for ad..] (4:568-4:1033)**

(Super)

With recent investments for

additional capacity and other innovations, we also expect AWS to become an increasingly positive gross margin contributor--the segment posted 23.6% segment operating income in 2015 and believe this segment can deliver 30%-plus margins over a longer horizon--because of its highly scalable nature and other services outside of cloud storage, including a network of third-party software providers selling on the AWS marketplace.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:2 [Other downside risks include e..] (6:25-6:233) (Super)**

Other downside risks include exposure to volatile discretionary spending

patterns and expansion into peripheral business lines, which could distract management or lead to poor capital-allocation decisions.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:3 [We believe the Fire Phone char..] (6:1770-6:2045)**

(Super)

We believe the Fire

Phone charges were a wake-up call for management's future capital decisions, as the company runs the risk of losing key personnel without stronger returns on invested capital, owing to the equity component of many employees' compensation structure.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:4 [In Amazon's case, we do not be..] (4:1309-4:1534)**

(Super)

In Amazon's case, we do not

believe traditional P/E and enterprise value/EBIT DA metrics are meaningful, given the impact that technology, content, and infrastructure investments are expected to have on near-term margins.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:5 [Bezos owns about 20% of the sh..] (6:664-6:943)**

(Super)

Bezos owns about 20% of the shares, takes no equity

compensation or bonus pay, and collects a paltry salary. Although the board is small, it is elected every year, receives no cash compensation, avoids insider relationships, and hasn't implemented antitakeover provisions.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:6 [Aided by the network effect in..] (1:666-1:981)**

(Super)

Aided by

the network effect inherent in 285 million global active users and recent fulfillment infrastructure, technology, and content investments, Amazon owns one of the wider economic moats in the consumer sector and is likely to remain a disruptive force in retail, digital media, and enterprise software.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:7 [continue to outpace global e-c..] (1:1222-1:1345)**

(Super)

continue to outpace global e-commerce trends, suggesting

that Amazon is gaining share while fortifying its network effect.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:8 [Its low-cost operations, netwo..] (2:1339-2:1582)**

(Super)

Its low-cost operations,

network effect, and laser focus on customer service provide it with sustainable competitive advantages that traditional retailers cannot match; this should yield additional market share gains in the years to come.

**P64: Hottovy\_2015\_10\_23\_analysisreport.pdf - 64:9 [We also believe Amazon Web Ser..] (3:2465-4:61)**

(Super)

We also believe Amazon Web Services has similarly developed cost advantage, intangible asset, and network effect moat sources.

**P65: Lopez\_2012\_04\_22\_gigaom.pdf - 65:1 [Once the network effects fully..] (2:2266-2:2679) (Super)**

Once the network

effects fully kick in, there will be even less incentive for application vendors to support other platforms.

The thought of a single player dominating an industry is always uncomfortable. However, unless its competitors get their act together soon, the dominance of Amazon in the cloud market will continue to grow; it's already starting to look eerily

similar to that of Microsoft in the 90s.

**P65: Lopez\_2012\_04\_22\_gigaom.pdf - 65:2 [These packages are availablef..] (2:871-2:1091) (Super)**

These packages are available free of charge, but no matter how much we try to simplify the experience, there is still significant friction in the process in terms of just making the decision to give an application a try.

**P65: Lopez\_2012\_04\_22\_gigaom.pdf - 65:3 [However, the initial version o..] (2:1598-2:1925) (Super)**

However, the initial version of the AWS Marketplace is not perfect and there are still issues that will need to get ironed out

around licensing, payment and support, including how to handle upgrades or integrating existing activation schemes with the one-click deployment model. But the first stake has been put in the ground.

**P65: Lopez\_2012\_04\_22\_gigaom.pdf - 65:4 [At BitNami.org, we package ope..] (2:742-2:869) (Super)**

At BitNami.org, we package open source applications so they are easy to install in any environment, including the Amazon cloud.

**P66: Morgan\_2015\_04\_09\_nex tplatform.pdf - 66:1 [These customers have toughprob..] (3:284-3:574) (Super)**

These customers have tough problems and they want to solve them and this drives

innovation that other customers benefit from. "There's a real network effect when you are AWS." Well, there is a network effect for all technology providers, so this is not actually unique to AWS

**P66: Morgan\_2015\_04\_09\_nex tplatform.pdf - 66:3 [What can be honestly said is tha..] (3:578-3:846) (Super)**

What can be honestly said is that the massive head start that AWS has after being in the field for

more than a decade and its relentless pursuit to innovate and radically upset the IT business as we know it is why customers are flocking to AWS with their workloads.

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:1 [There are two basic underlying..] (1:1276-1:1504) (Super)**

There are two basic underlying forces behind the network effects:

1. Code that works with large amounts of data needs to be close to the data (in the network topology sense).
2. Any processing that consumes data generates data.

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:2 [The network effect extends acr..] (1:2061-1:2302) (Super)**

The network effect extends across companies as well. Often data created by company A is consumed by company B. When

this "data interface" is voluminous, it makes economic sense for company B to move into the same utility cloud as company A.

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:3 [The network effects argument l..] (1:2706-1:3106) (Super)**

The network effects argument leads to the interesting possibility that cloud computing becomes a win-lose game,

like auctions; we might end up with one winner (maybe Amazon?) A more likely outcome is, we might end up with a couple of big general purpose clouds (Amazon and Google, perhaps?) and a few niche clouds optimized for different ecosystems (such as ad networks and social networks).

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:4 [There are some ecosystems wher..] (1:2304-1:2558) (Super)**

There are some ecosystems where utility computing players are already exploiting this trend; for example,

AppNexus is creating a utility cloud optimized for the use of ad networks and their associated ecosystem: analytics for publishers and advertisers.

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:5 [I think in many cases, the net..] (2:741-2:890) (Super)**

I think in many cases, the network bandwidth is not the bottleneck usually the data transformations and load process itself tend to be a bottleneck

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:6 [A high ranking Amazon executiv..] (1:453-1:894) (Super)**

A high ranking Amazon executive told me there are 60,000 different customers across the various Amazon Web Services, and most of them are not the startups that are normally associated with on-demand computing. Rather the biggest customers in both number and amount of computing resources consumed are divisions of banks, pharmaceuticals companies and other large corporations who try AWS once for a temporary project, and then get hooked.

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:7 [There are a large number of di..] (2:1010-2:1182) (Super)**

There are a large number of different data centers/hosting services out there today. If the network effects were so strong, I'd have

expected there to be far fewer of those

**P67: Schonfeld\_2008\_04\_21\_anand.pdf - 67:8 [Companies frequently need to m..] (2:593-2:1003) (Super)**

Companies frequently need to move data between different applications and end up doing this through a whole bunch of ways (ETL

tools for example). I think in many cases, the network bandwidth is not the bottleneck usually the data transformations and load process itself tend to be a bottleneck. So, it may be feasible for two different apps to be in two different data centers and consume each others data.

**P68: Golden\_2013.pdf - 68:1 [From the AWS perspective, the..] (36:1370-36:1546) (Super)**

From the AWS perspective, the network effect means that, if you're providing a new cloud-based service, it makes sense to offer it where lots of other cloud users are located

**P68: Golden\_2013.pdf - 68:2 [The technical aspects of AWS p..] (36:1923-36:1973) (Super)**

The technical aspects of AWS play a part as well.

**P68: Golden\_2013.pdf - 68:3 [If you're setting up a new ser..] (37:716-37:838) (Super)**

If you're setting up a

new service, you'll be attracted to AWS because lots of other services are already located there

**P68: Golden\_2013.pdf - 68:4 [The service is already up and..] (37:1583-37:1889) (Super)**

The service is already up and running within AWS. You don't have to

obtain the software, install it, configure it, test it, and then integrate it

into your application. Because it's already operational in the AWS environment, you can skip directly to the last step — perform the technical integration.

**P68: Golden\_2013.pdf - 68:5 [The services have a cloud-frie..] (37:1894-37:2353) (Super)**

The services have a cloud-friendly licensing model. Vendors have already figured out how to offer their software and charge for it in the

AWS environment. Vendors often align with the AWS billing methodology, charging per hour of use or offering a subscription for

monthly access. But one thing you don't have to do is approach a vendor that has a large, upfront license fee and negotiate to operate in the AWS environment — it's already taken care of.

**P68: Golden\_2013.pdf - 68:6 [Support is available for the s..] (37:2358-37:2683) (Super)**  
 Support is available for the service. You don't have to figure out why a software component you want to use doesn't work properly in the AWS environment — the vendor takes responsibility for it. In the parlance of the world of support, you have, as the technology industry rather indelicately puts it, a throat to choke.

**P68: Golden\_2013.pdf - 68:7 [Performance improves. Because ..] (38:41-38:213) (Super)**  
 Performance improves. Because the service operates in the same environment that your application runs in, it provides low latency and helps your application perform better

**P68: Golden\_2013.pdf - 68:8 [An interesting trend within AW..] (35:1961-35:2207) (Super)**  
 An interesting trend within AWS is the increasing move by traditional software vendors to migrate their applications to AWS and provide them as SaaS offerings rather than as applications that users install from a CD or DVD on their own machines.

**P68: Golden\_2013.pdf - 68:9 [The reason the AWS ecosystem h..] (36:519-36:772) (Super)**  
 The reason the AWS ecosystem has become the computing marketplace for all and sundry can be captured in the phrase network effect, which can be thought of as the value derived from a network because other network participants are part of the network.

**P68: Golden\_2013.pdf - 68:10 [In fact, one key Amazon strate..] (113:1501-113:1708) (Super)**  
 In fact, one key Amazon strategy is to offer a rich set of complementary services that support and reinforce one another, all with the goal of making it easier to develop and deploy applications on AWS.

**P68: Golden\_2013.pdf - 68:11 [AWS environment acts as an int..] (41:206-41:370) (Super)**  
 - Family: What] [TransformC: Support open innovation and modularity - Family: What] AWS environment acts as an integrated collection of hardware and software services designed to enable the easy, quick, and inexpensive use of computing resources

**P68: Golden\_2013.pdf - 68:12 [Netflix created its own AWS ma..] (50:1726-50:1940) (Super)**  
 Netflix created its own AWS management tools to manage any of its applications running in AWS. Netflix even offers the tools under open source licenses so that other AWS users can take advantage of its work.

**P68: Golden\_2013.pdf - 68:13 [All of the incumbent technolog..] (351:1592-351:1813) (Super)**  
 All of the incumbent technology market leaders had no incentive to change the way they did business. It took an outsider like Amazon, which had no legacy business to protect, to rethink the way technology is delivered.

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:1 [When things get complicated, w..] (4:377-4:940) (Super)**  
 When things get complicated, we simplify by saying what's best for the customer? And then we take it as an article of faith if we do that, it'll work out the long term. So we can never prove that. In fact, sometimes we've done a price elasticity studies, and the answer is always we should raise prices. And we don't do that because we believe—and again, we have to take this as an article of faith—we believe by keeping our prices very, very low, we earn trust with customers over time, and that that actually does maximize free cash flow over the long term

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:2 [Percentage margins are not one..] (3:1921-3:2132) (Super)**  
 Percentage margins are not one of the things we are seeking to optimize. It's the absolute dollar-free cash flow per share that you want to maximize, and if you can do that by lowering margins, we would do that.

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:3 [And if you get here, and you ?..] (4:2198-5:122) (Super)**  
 And if you get here, and you find that you get your motivation from having a more competitive-focused culture, you might find our culture dull. We don't. We find a culture intensely fun.

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:4 [I do know of companies, and th..] (3:1036-3:1361) (Super)**  
 I do know of companies, and their annual planning process starts with the list of their three top enemies, and they work from there. They get motivation from the competitive zeal. Our approach is not to start with that list. We do look at other companies, and so we pay attention, but it's not where we get our energy from.

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:5 [When they wake up and are thin..] (4:2017-5:122) (Super)**  
 When they wake up and are thinking in the shower in the morning, they're thinking about customers, and thinking about how to invent on behalf of customers, and they find that fun. And if you get here, and you find that you get your motivation from having a more competitive-focused culture, you might find our culture dull. We don't. We find a culture intensely fun.

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:6 [And the people who like our me..] (5:254-5:394) (Super)**  
 And the people who like our mentality of exploration and pioneering, they tend to stay here, and have fun here, and that's self-reinforcing.

**P69: Jeff\_Bezos\_2013\_01\_hbr.pdf - 69:7 [sometimes we've done a price e..] (4:585-4:941) (Super)**  
 sometimes we've done a price elasticity studies, and the answer is always we should raise prices. And we don't do that because we believe—and again, we have to take this as an article of faith—we believe by keeping our prices very, very low, we earn trust with customers over time, and that that actually does maximize free cash flow over the long term.

**P70: Subramanian\_2011\_02\_23\_cloudave.pdf - 70:1 [He pointed out to how Amazon i..] (1:1971-1:2222) (Super)**  
 He pointed out to how Amazon is already living in peace with competing third party merchants on their ecommerce platform. He even highlighted the fact that Amazon has a history of cannibalizing their own business to support a customer oriented view.

**P70: Subramanian\_2011\_02\_23\_cloudave.pdf - 70:2 [Remeber, in spite of the openn..] (1:1260-1:1550) (Super)**  
 Remeber, in spite of the openness we tout in the cloud world, the cost of moving the infrastructure away from Amazon will be prohibitive for Netflix.

Will Amazon play dirty games to kick a competitor away from the market or will it play straight and protect their booming cloud business.

**P71: Rossmann\_2015.pdf - 71:1 [Amazon's leaders define their ..] (2:32-2:518) (Super)**

Amazon's leaders define their goals clearly and then use metrics to establish whether they are right. They don't make the same mistakes over and over. There is an implicit understanding that Amazon's leaders will be right far more often than they are wrong. If they do fail at anything, they are expected to learn from their mistakes, develop insights from those mistakes and share them with the rest of the company so the same mistake doesn't get recycled over and over.

**P71: Rossmann\_2015.pdf - 71:2 [PowerPoints are not allowed at..] (2:521-2:1117) (Super)**

PowerPoints are not allowed at Amazon management meetings. Instead, leaders are required to write out their ideas in a two-page narrative. Then, at the beginning of the meeting, that two-page document is handed out and everyone sits quietly reading it before discussing the idea.

"When you have to write your ideas out in complete sentences and complete paragraphs, it forces a deeper clarity of thinking. By contrast, in the typical PowerPoint show, you get very little information, you get bullet points. This is easy for the presenter, but difficult for the audience."

**P71: Rossmann\_2015.pdf - 71:3 [To further clarify an idea, Am..] (2:1139-2:1626) (Super)**

To further clarify an idea, Amazon leaders also develop and articulate project vision statements in the form of "future press releases."

A future press release is a short, simple and clear statement of how the project will be viewed if it achieves its aims and objectives. It is imagined this is what will be written once the project has come to fruition and as such will describe what was developed, why this is important to customers and what goals were achieved.

**P77: Haug, Kretschmer and Strobel\_2016.pdf - 77:1 [Cloud enablers or complementor..] (4:1369-4:1461) (Super)**

Cloud enablers or complementors are auditors, brokers, or additional-value service providers.

**P77: Haug, Kretschmer and Strobel\_2016.pdf - 77:2 [This cost advantage could orig..] (4:3912-4:4050) (Super)**

This cost advantage could originate from a specialized cloud computing vendor reaping economies of scale vis-à-vis an in-house IT solution

**P78: Isckia and Lescop\_2009.pdf - 78:1 [The case shows that by using W..] (2:1380-2:1880) (Super)**

The case shows that by using

Web services to enhance collaboration in business ecosystems, some companies could support open innovation and expand the value of the goods and services they deliver to customers. It sheds light on the role of ICTs in sustaining Amazon's approach to open innovation. Platform strategy and web services are the cornerstone of Amazon's open innovation model since they allow and foster application-to-application interactions within its business ecosystem.

**P78: Isckia and Lescop\_2009.pdf - 78:2 [Amazon Web Services (AWS) have..] (2:1881-2:2168) (Super)**

Amazon Web Services (AWS) have helped achieve

loosely-coupled networks that support collaboration between business partners. Even if we cannot generalize the findings of the case study, lessons can be drawn about open innovation in the context of an ICT-based business ecosystem.

**P78: Isckia and Lescop\_2009.pdf - 78:3 [Today, many firms, independent..] (9:962-9:1157) (Super)**

Today, many firms, independent developers and middleware integrators use these Web services to interact with Amazon's platform, creating a business ecosystem very suitable for open innovation.

**P78: Isckia and Lescop\_2009.pdf - 78:4 [Three layers appear in theope..] (10:389-10:810) (Super)**

Three layers appear in the open innovation strategy of Amazon. First,

Amazon opened up its platform and ICT infrastructure through Web services. Secondly, it acts as an incubator for e-business.

Thirdly, the company expands the use and finally the reputation of its platform thanks to Amazon certified integrators. This enhances the attractiveness of the whole platform and hence value creation opportunities.

**P78: Isckia and Lescop\_2009.pdf - 78:5 [Until now, open innovation suc..] (14:2026-14:2404) (Super)**

Until now, open innovation success

stories generally refer to large companies with market power, trust and success. Of course, it doesn't mean that SMEs or even start-ups cannot achieve an open innovation strategy but it seems easier when carried out by established companies with well-known brands and a robust knowledge base from which they can build a value network.

**P78: Isckia and Lescop\_2009.pdf - 78:6 [network externalities are at t..] (15:648-15:943) (Super)**

network externalities are at the very core of the open innovation

dynamic. Platforms combine software stacks that can be used by other companies to innovate their business that in turn will bolster Amazon's platform in a self-reinforcing cycle, spreading its knowledge into its ecosystem.

**P78: Isckia and Lescop\_2009.pdf - 78:7 [AWS are used by independent de..] (15:1622-15:1908) (Super)**

AWS are used by independent developers to explore new services

while they are used by certified integrators to exploit existing services. This duality is an important dimension of Amazon's open innovation strategy: platform as repository of knowledge, AWS as vectors of innovation.

**P78: Isckia and Lescop\_2009.pdf - 78:8 [platforms become open architec..] (6:1170-6:1847) (Super)**

platforms become

open architectures enabling members of an ecosystem to access and use resources to develop new services that may interact and enhance those already available on the platform. This approach gives incentives for some firms to explore new strategic options and implement very innovative business models. Thus, shifting the focus from ownership to the concept of openness requires a special attention to the technological devices such as platform in coordinating partners' relationships within business ecosystems. All these arguments tend to show that a business ecosystem managed by a keystone player is well-fitted for open innovation purposes.

**P78: Isckia and Lescop\_2009.pdf - 78:9 [The global value of the platfo..] (8:450-8:1285) (Super)**

The global value of the platform

depends on positive network externalities which offer incentives for the leader to expose its most valuable services in order to seduce more complementors and partners. Thus, the leader doesn't only shape the global value network; he also reduces uncertainty in the ecosystem standardizing its partners' business models. In addition, since the growth of the periphery relies on a decentralised process, the more the leader will facilitate openness and access and the more he will explore and exploit the knowledge landscape. If the leader builds and clearly communicates methods or techniques (such as APIs) by which other partners can access modules and operate services via the platform, he will have the opportunity to become a hub supporting open innovation and value creation.

**P78: Isckia and Lescop\_2009.pdf - 78:10 [the ecosystem-based view offer..] (16:481-16:746) (Super)**  
the ecosystem-based view offers a complementary framework to better appreciate how value is created and shared amongst ecosystem members. It also helps better understand each partner's incentives to join the network and choices regarding their business models.

**P78: Isckia and Lescop\_2009.pdf - 78:11 ["these initiatives are advanta..] (14:1487-14:1927) (Super)**  
What [Transform 1: Learning - Family: What] [Transform 9: Embracing open innovation - Family: What] [TransformA: Manage knowledge - Family: What] [TransformC: Support open innovation and modularity - Family: What]  
"these initiatives are advantages not only because they drive the firm up the learning curve in the activity but also because the path dependent resources created over time, organizational experience and understanding of e-commerce markets, are likely to provide the firm competitive advantage in future periods" (SUBRAMANI & WALDEN, 1999). In this sense, these investments capture the dynamic capabilities of Amazon's platform.

**P78: Isckia and Lescop\_2009.pdf - 78:13 [value capture imposes a constr..] (15:2236-15:2301) (Super)**  
value capture imposes a constraint on the openness of the system

**P78: Isckia and Lescop\_2009.pdf - 78:14 [While pursuing its historical ..] (9:697-9:957) (Super)**  
While pursuing its historical E-retailer business, Amazon transformed itself into a true application service provider and decided to make its knowledge in the development of e-commerce services available to its partners, opening up his innovation process.

**P78: Isckia and Lescop\_2009.pdf - 78:15 [Web services: A bridge between..] (10:814-10:861) (Super)**  
Web services: A bridge between business partners

**P78: Isckia and Lescop\_2009.pdf - 78:16 [Finally, the project was appro..] (11:681-11:978) (Super)**  
Finally, the project was approved and the generalised use of XML allowed Amazon to launch its first Web service in early 2002: Amazon E-Commerce Service (ECS). This Web service is win-win for both the affiliates and Amazon, but it is also an interesting solution for other Amazon partners.

**P78: Isckia and Lescop\_2009.pdf - 78:17 [the impact of Web services is..] (11:2360-11:2695) (Super)**  
the impact of Web services is not only limited to the syndication of content and the creation of a network of partners. Opening up its platform has also enabled Amazon to tap into new value deposits: the innovative applications dreamed up by external developers. Today, these applications have vastly increased Amazon's reach.

**P78: Isckia and Lescop\_2009.pdf - 78:18 [The most salient feature illus..] (13:333-13:718) (Super)**  
The most salient feature illustrated by these examples is the creativity expressed by Amazon Light and ScoutPal and their experimentation with new services based on AWS. With this approach, Amazon fosters cocreation of new services and encourages innovative effort by independent developers, demonstrating its commitment to delivering innovation to its partners and customers.

**P78: Isckia and Lescop\_2009.pdf - 78:19 [Amazon has delivered aboutten..] (13:1372-13:1542) (Super)**  
Amazon has delivered about ten different Web services that have created significant opportunities for their business partners, and offer customers real business value.

**P78: Isckia and Lescop\_2009.pdf - 78:20 [Moreover, since they helpothe..] (14:988-14:1224) (Super)**  
Moreover, since they help other companies to build their own value proposition based on Amazon technology, they potentially create opportunities for these partners to innovate their business models in search for new value deposits.

**P78: Isckia and Lescop\_2009.pdf - 78:21 [The development of platform s..] (15:239-15:627) (Super)**  
The development of platforms shapes the nature of relationships between partners engaged in an open innovation process. The more the platform is open, the more it will enhance collaboration between business partners. These platforms generate more innovative opportunities for the business ecosystem when they rely on open and modular architecture rather than on a monolithic one.

**P79: Kolakowski\_2009.pdf - 79:1 [The major risk in the use of S..] (1:3116-1:3278) (Super)**  
The major risk in the use of SaaS platforms for complementors is related to platform lock-in. This is highest for Force.com, and lowest for Amazon Web Services

**P79: Kolakowski\_2009.pdf - 79:2 [Higher level services, facilit..] (5:3633-5:3874) (Super)**  
Higher level services, facilitating configuration, management and monitoring are instead provided by complementors. As for example by Rightscale, which offers tools for automation, control and portability for applications deployed on EC2.

**P79: Kolakowski\_2009.pdf - 79:3 [Amazon needs to build trust am..] (5:3876-5:4313) (Super)**  
Amazon needs to build trust among such complementors, as they may fear that it would incorporate their products into the platform. To do this the company announces new features before they are released and discusses the roadmap with complementing firms. As the Amazon CTO, Werner Vogels, said: "We wanted to make sure people had a look at our roadmap, our goal is to be very respectful and recognize the value of the ecosystem".

**P79: Kolakowski\_2009.pdf - 79:4 [Costs of owning more than one ..] (9:1170-9:1207) (Super)**  
Costs of owning more than one platform

**P79: Kolakowski\_2009.pdf - 79:5 [Better opportunities in reachi..] (10:5648-10:5800) (Super)**  
Better opportunities in reaching the market increase incentives for start-ups, without established reputations and existing customer base, to innovate.

**P79: Kolakowski\_2009.pdf - 79:6 [Activities in this area includ..] (5:4642-5:4829) (Super)**  
business model - Family: What  
Activities in this area include the Co-Marketing program and partnership arrangements allowing to use the AWS trademark, as well as organising conferences for investors and entrepreneurs.

**P79: Kolakowski\_2009.pdf - 79:7 [Currently server costs dominat..] (9:4554-9:4681) (Super)**  
Currently server costs dominate, but as computer prices fall and power becomes more expensive, the latter may become dominant.

**P79: Kolakowski\_2009.pdf - 79:8 [Thesoftware industry is chara..] (10:71-10:602) (Super)**

The software industry is characterised by high costs in the development process. For this reason, the first unit is very expensive in traditional software, but the marginal cost of producing subsequent units is very low. One can argue that, despite the elimination of infrastructure capital expenses, SaaS providers still have high fixed costs of development. However, SaaS platforms facilitate component suppliers in building applications as well, by reducing time and lowering the technical expertise required to do this.

**P79: Kolakowski\_2009.pdf - 79:9 [Platforms reduce transaction c..] (10:4499-10:4631) (Super)**

Platforms reduce transaction costs that different parties in the ecosystem would need to incur to get together (Evans, et al. 2006)

**P79: Kolakowski\_2009.pdf - 79:11 [Amazon Web Services permit dev..] (11:1792-11:2576) (Super)**

Amazon Web Services permit developers to run standard programming

language applications, which can theoretically be ported out. This is, however, more difficult when those applications use platform-specific APIs. In fact platform APIs comply with standards in terms of the protocol (e.g. SOAP), however, there are no industry standards, as to how they define operations related to SaaS platform utilisation. There are no standard APIs either, for data portability, so the two platforms have their own proprietary storage interfaces. Nevertheless, Amazon permits any database server to run on EC2, which guarantees portability. Summarising, moving applications from App Engine and AWS is possible but, since it depends on the use of specific APIs, it is not always easy.

**P79: Kolakowski\_2009.pdf - 79:12 [Namely, it is possible to diff..] (1:2058-1:2200) (Super)**

Namely, it is possible to differentiate

among the PaaS-type platforms and there are not strong enough network effects for IaaS-type platforms.

**P79: Kolakowski\_2009.pdf - 79:13 [In the case of AWS, there are ..] (8:3164-8:3341) (Super)**

In the case of AWS, there are no network effects

between the end users and the complementors, because there is no core application, such as Salesforce.com CRM or Google Apps.

**P79: Kolakowski\_2009.pdf - 79:14 [in the case of the low-level p..] (9:1657-9:1793) (Super)**

in the case of the low-level platforms (IaaS),

such as AWS, the network effects are not strong enough for a platform leader to emerge.

**P79: Kolakowski\_2009.pdf - 79:15 [lowest degree of platformlock..] (13:1677-13:1777) (Super)**

lowest degree of platform lock-in is

associated with low-level virtualisation platforms, such as AW

**P80: Duryee\_2015\_05\_19\_geekwire.pdf - 80:1 [Cloud wars: Amazon is the clea..] (1:358-1:429) (Super)**

Cloud wars: Amazon is the clear leader, with

Microsoft a distant second

**P81: Brachmann\_2015\_05\_01\_ipwatchdogs.pdf - 81:1 [Amazon is currently disputing ..] (3:522-3:863) (Super)**

(Super)

Amazon is currently disputing two

allegations of wrongful patent infringement filed in U.S. district courts over its AWS business. St. Louis-based cloud computing

startup Appistry is accusing Amazon of infringing two patents which were the topic of discussions

between Appistry and Amazon officials between August and September of 2004.

**P81: Brachmann\_2015\_05\_01\_ipwatchdogs.pdf - 81:2 [Also of interest is the fact t..] (4:245-4:513) (Super)**

Also of interest is the fact that, on first glance, Amazon doesn't seem to have the strongest

IP portfolio in the world of cloud computing. A search of cloud computing technologies using Innography's patent analysis tools

turns up 55 U.S. patents held by the company.

**P81: Brachmann\_2015\_05\_01\_ipwatchdogs.pdf - 81:3 [Importantly, Amazon Web Servic..] (1:943-1:1204) (Super)**

(Super)

Importantly, Amazon Web Services isn't just making money, it's also generating a healthy

profit for the company. Barron's has reported that, although AWS only produces about 7 percent of Amazon's revenues, it was the source of 37 percent of Amazon's total profit.

**P81: Brachmann\_2015\_05\_01\_ipwatchdogs.pdf - 81:4 [What makes cloud computing so ..] (2:526-2:710) (Super)**

(Super)

What makes cloud computing so valuable is the way that it can be scaled effectively to a

customer's needs, allowing Amazon to make a profit on small businesses and big corporate alike.

**P82: Delaney\_2012\_08\_06\_morrisonfoerster.pdf - 82:1 [Read literally, this language ..] (1:2115-1:2438) (Super)**

(Super)

- Family: What] [TransformA: Manage knowledge - Family: What]

Read literally, this language would appear to impose a covenant on AWS customers not to sue AWS—or its

affiliates, customers, vendors, business partners or licensors—for patent, copyright or other intellectual property infringement in connection with web services made available not only by AWS but also by its affiliates.

**P83: Darrow\_2015\_01\_22\_gigaom.pdf - 83:1 [The contract's Section 8.5 on..] (1:1205-1:1471) (Super)**

- Family: What] [TransformA: Manage knowledge - Family: What]

The contract's Section 8.5 on license restrictions includes the usual restrictions that customers or their

end users cannot modify, tamper with, reverse-engineer or create derivative works of the AWS service offerings, or use them in a way to avoid paying for them.

**P83: Darrow\_2015\_01\_22\_gigaom.pdf - 83:2 [During and after the Term, you..] (2:226-2:558) (Super)**

- Family: What] [TransformA: Manage knowledge - Family: What]

During and after the Term, you will not assert, nor will you authorize, assist, or encourage any

third party to assert, against us or any of our affiliates, customers, vendors, business partners, or licensors, any patent infringement or other intellectual property infringement claim regarding any Service Offerings you have used.

**P83: Darrow\_2015\_01\_22\_gigaom.pdf - 83:3 [Basically, AWS is invoking its..] (2:577-2:764) (Super)**

Basically, AWS is invoking its rights not to be sued for patent infringement by its customers not only for the time you're

using its service, but going forward — in theory — in perpetuity

**P83: Darrow\_2015\_01\_22\_gigaom.pdf - 83:4 [“So once a user agrees to thes..] (2:1539-2:1854) (Super)**

“ So once a user agrees to these terms, they can never assert a patent or other IP infringement claim against Amazon or

any other customer or user of AWS, against an AWS Service offering,” the attorney said via email. “ This is even true if Amazon first sues the user for patent infringement on anything else.” Hmmm.

**P83: Darrow\_2015\_01\_22\_gigaom.pdf - 83:5 [What's interesting here is tha..] (3:371-3:553) (Super)**  
 What's interesting here is that, in theory, this 8.5 provision could allow Amazon to defend itself against customers (or former customers) if it ends up using their IP down the road.

**P85: Miniman\_2013\_12\_16\_wikibon.pdf - 85:1 [Amazon is a large consumer ofO..] (2:3188-2:3275) (Super)**  
 Amazon is a large consumer of Open Source Software (OSS) but is not a public contributor

**P85: Miniman\_2013\_12\_16\_wikibon.pdf - 85:2 [Amazon is not content to simpl..] (2:3914-2:4158) (Super)**  
 Amazon is not content to simply take components off the shelf; Hamilton stated that it has two engineers working solely on server power supplies where redesigns that are pennies cheaper or a fraction more efficient translates into huge savings.

**P85: Miniman\_2013\_12\_16\_wikibon.pdf - 85:3 [said that 10 years ago he beli..] (2:1641-2:2007) (Super)**  
 said that 10 years ago he believed that architecture should be a giant collection of commodity gear where software provides most of the value. He now believes that this thinking is wrong and that it is through hyperspecialization that Amazon can continue to deliver innovation. The scale of AWS S3 is trillions of objects delivering over 1.5M requests per second.

**P85: Miniman\_2013\_12\_16\_wikibon.pdf - 85:4 [When building any infrastructu..] (3:1998-3:2380) (Super)**  
 When building any infrastructure, you pay for the peak but only monetize the average. In a typical data center, even with a heavily virtualized environment, getting 30% utilization is great. Cloud methodology is to combine noncorrelated workloads over infrastructure at scale so that the law of large numbers allows the difference between the peak and average workloads to shrink.

**P86: Schrage\_2014\_04\_30\_hbr.pdf - 86:1 ["Innovation Partnerships."Loo..] (2:237-2:346) (Super)**  
 "Innovation Partnerships." Look at Amazon Web Services, GitHub, Toyota and YouTube's investments in suppliers

**P88: Woods\_2013\_11\_06\_thenex\_tweb.pdf - 88:1 [At Amazon, we're quite differe..] (2:1177-2:1490) (Super)**  
 At Amazon, we're quite different from other companies. We do not have an R&D department, we do not have an IT department, all our engineering and business are deeply intertwined with each other. There is no VP of Innovation. Every team is charged with innovating, and that's what the whole company drives on.

**P88: Woods\_2013\_11\_06\_thenex\_tweb.pdf - 88:2 [Speaking about Amazon's own in..] (2:863-2:1174) (Super)**  
 Speaking about Amazon's own internal innovation, which includes diversification into a number of different markets and verticals, Vogels revealed that the retailing and cloud giant doesn't have an R&D department, or an IT department. Instead, innovation is expected to come from every team in the business.

**P88: Woods\_2013\_11\_06\_thenex\_tweb.pdf - 88:3 [However, Vogels cautioned that..] (2:1493-2:1802) (Super)**  
 However, Vogels cautioned that it's easy to dampen innovation and support for new ideas with entrenched norms and that naysayers are often the winners of the war. At Amazon, however, if an employee wants to put stop to a new idea they have to fill out a full report outlining exactly why they think that.

**P88: Woods\_2013\_11\_06\_thenextweb.pdf - 88:4 [If you want to block innovatio..] (2:1805-2:2146) (Super)**  
 If you want to block innovation and new ideas, you have to do the work. If you are the one that say 'this is not going to work' then you'll have to write a four or six page report [explaining] why absolutely you think the company should not be doing this. Believe me, this kills about 99 percent of all the objections to any innovation.

**P88: Woods\_2013\_11\_06\_thenextweb.pdf - 88:5 [While this will occasionally l..] (2:2149-2:2360) (Super)**  
 While this will occasionally lead to a dead-end, product-wise, Vogels said it has also allowed the company to diversify its business successfully in a way it would have not if it had listened to the naysayers.

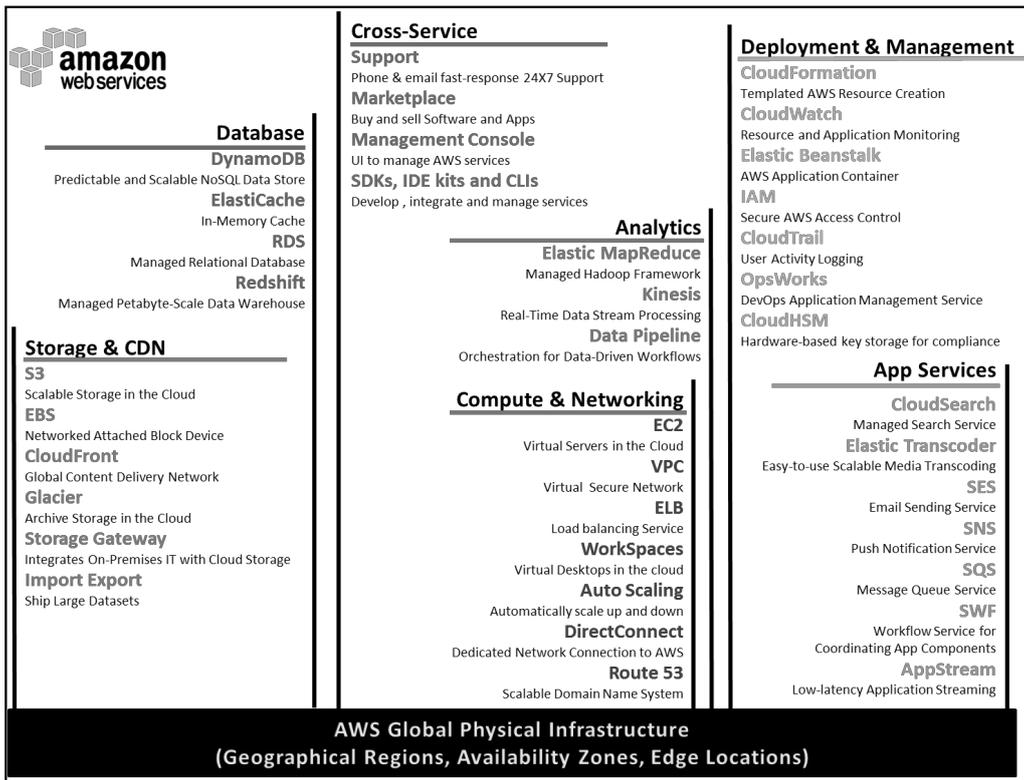
**P89: Writer\_2015\_03\_10\_itnews.pdf - 89:1 [turning internal innovation ar..] (2:940-2:1023) (Super)**  
 turning internal innovation around 180 degrees and exposing it directly to customers

## 10.2. Appendix B: Extracts

Appendix B1 : Website links to cloud platform ecosystem actors

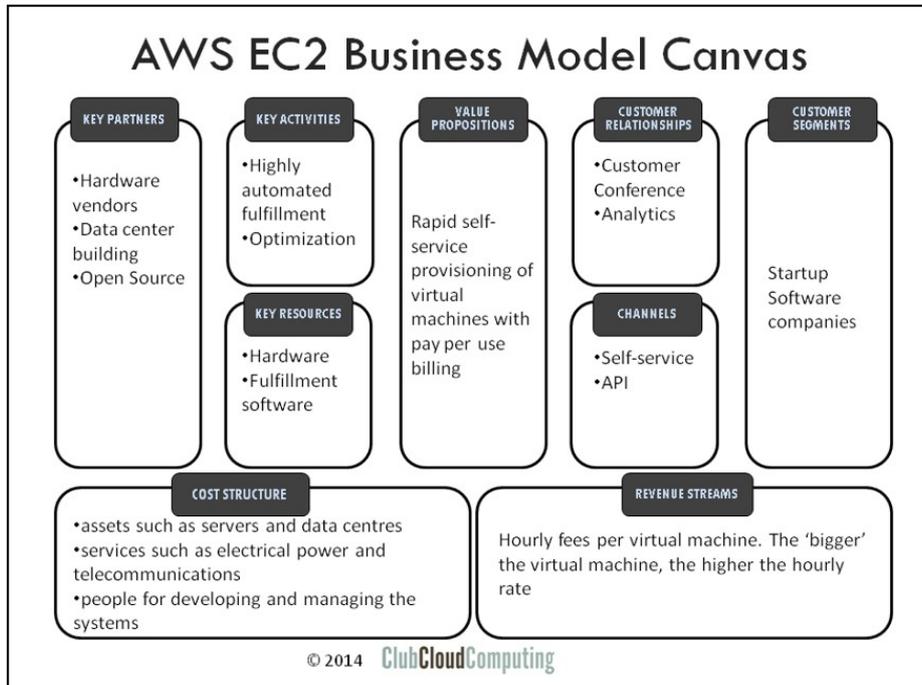
Actor name	Level I group	Level II group	Level III group	Level IV group	Website address
Salesforce.com	Cloud partner ecosystem	Cloud service provider	Software-asS	-	<a href="http://www.salesforce.com">http://www.salesforce.com</a>
GitHub	Cloud partner ecosystem	Cloud service provider	Software-asS	-	<a href="http://github.com/">http://github.com/</a>
Gmail (Google Inc.)	Cloud partner ecosystem	Cloud service provider	Software-asS	-	<a href="https://mail.google.com">https://mail.google.com</a>
Drop box, Inc.	Cloud partner ecosystem	Cloud service provider	Software-asS	-	<a href="https://mail.google.com">https://mail.google.com</a>
Google Cloud Platform	Cloud partner ecosystem	Cloud service provider	Platform-asS / Infrastructure-asS	-	<a href="http://cloud.google.com">http://cloud.google.com</a>
Amazon Web Services	Cloud partner ecosystem	Cloud service provider	Platform-asS / Infrastructure-asS	-	<a href="http://aws.amazon.com">http://aws.amazon.com</a>
AT&T Inc.	Cloud partner ecosystem	Cloud service provider	Infrastructure-asS	-	<a href="http://www.att.com">http://www.att.com</a>
EMC Corporation	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud architects	<a href="http://www.emc.com">www.emc.com</a>
Deloitte Touche Tohmatsu Limited	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud auditors	<a href="http://www2.deloitte.com">http://www2.deloitte.com</a>
KPMG	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud auditors	<a href="http://home.kpmg.com">http://home.kpmg.com</a>
CSS Corp	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud integrators (SIs + MSPs)	<a href="http://www.csscorp.com">http://www.csscorp.com</a>
Capgemini S.A.	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud integrators (SIs + MSPs)	<a href="https://www.capgemini.com">https://www.capgemini.com</a>
Informatica	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud software vendors (ISVs)	<a href="http://www.informatica.com">http://www.informatica.com</a>
Software AG	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud software vendors (ISVs)	<a href="http://www.softwareag.com">www.softwareag.com</a>
Texas Instruments Inc.	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud hardware vendors	<a href="http://www.ti.com">www.ti.com</a>
Intel	Cloud partner ecosystem	Complementors/ Partners	Cloud service support provider	Cloud hardware vendors	<a href="http://www.intel.com">www.intel.com</a>
Blue Wolf Group LLC	Cloud partner ecosystem	Complementors/ Partners	Cloud service brokerage	Service aggregators	<a href="http://www.bluewolf.com">www.bluewolf.com</a>
Appirio Inc.	Cloud partner ecosystem	Complementors/ Partners	Cloud service brokerage	Service aggregators	<a href="https://appirio.com">https://appirio.com</a>
Bitnami (Bitrock Inc.)	Cloud partner ecosystem	Complementors/ Partners	Cloud service brokerage	Resellers (VARs)	<a href="https://bitnami.com">https://bitnami.com</a>
Capgemini Consulting (Capgemini S.A.)	Cloud partner ecosystem	Complementors/ Partners	Cloud service brokerage	Strategy/Management Consultancies	<a href="http://www.capgemini-consulting.com">http://www.capgemini-consulting.com</a>
Accenture Strategy	Cloud partner ecosystem	Complementors/ Partners	Cloud service brokerage	Strategy/Management Consultancies	<a href="http://www.accenture.com/us-en/strategy-index">http://www.accenture.com/us-en/strategy-index</a>
ETSI (European Telecommunications Standards Institute)	Governmental Bureaucrats / Policy Makers / Regulators	-	-	-	<a href="http://www.etsi.org">www.etsi.org</a>
CSA (Cloud Security Alliance)	Governmental Bureaucrats / Policy Makers / Regulators	-	-	-	<a href="http://cloudsecurityalliance.org">http://cloudsecurityalliance.org</a>
NIST (National Institute of Standards and Technology)	Governmental Bureaucrats / Policy Makers / Regulators	-	-	-	<a href="http://www.nist.gov">http://www.nist.gov</a>
cit (European Institute of Innovation & Technology)	Outside innovators / Research institutes	-	-	-	<a href="http://cit.europa.eu">http://cit.europa.eu</a>
Digital Institute (Newcastle University)	Outside innovators / Research institutes	-	-	-	<a href="http://www.cloudinnovationcentre.com/">http://www.cloudinnovationcentre.com/</a>
Telekom Innovation Laboratories	Outside innovators / Research institutes	-	-	-	<a href="http://www.laboratories.telekom.com">www.laboratories.telekom.com</a>
IC4 (Dublin City University)	Outside innovators / Research institutes	-	-	-	<a href="http://www.ic4.ie/">http://www.ic4.ie/</a>
Fraunhofer	Outside innovators / Research institutes	-	-	-	<a href="http://www.ip.fraunhofer.de/en/cloud_platforms.html">www.ip.fraunhofer.de/en/cloud_platforms.html</a>
Cloud Apps Capital Partners	Entrepreneurs / Investors	-	-	-	<a href="http://www.cloudappscapital.com">www.cloudappscapital.com</a>
AME Cloud Ventures	Entrepreneurs / Investors	-	-	-	<a href="http://www.amecloudventures.com">www.amecloudventures.com</a>
Notion Capital Ltd.	Entrepreneurs / Investors	-	-	-	<a href="http://www.notioncapital.com">www.notioncapital.com</a>
Blue Cloud Ventures	Entrepreneurs / Investors	-	-	-	<a href="http://www.bluecloudventures.com">www.bluecloudventures.com</a>
Cloud Capital Partners	Entrepreneurs / Investors	-	-	-	<a href="http://www.cloudcapitalpartners.net">www.cloudcapitalpartners.net</a>

Appendix B2: AWS service overview



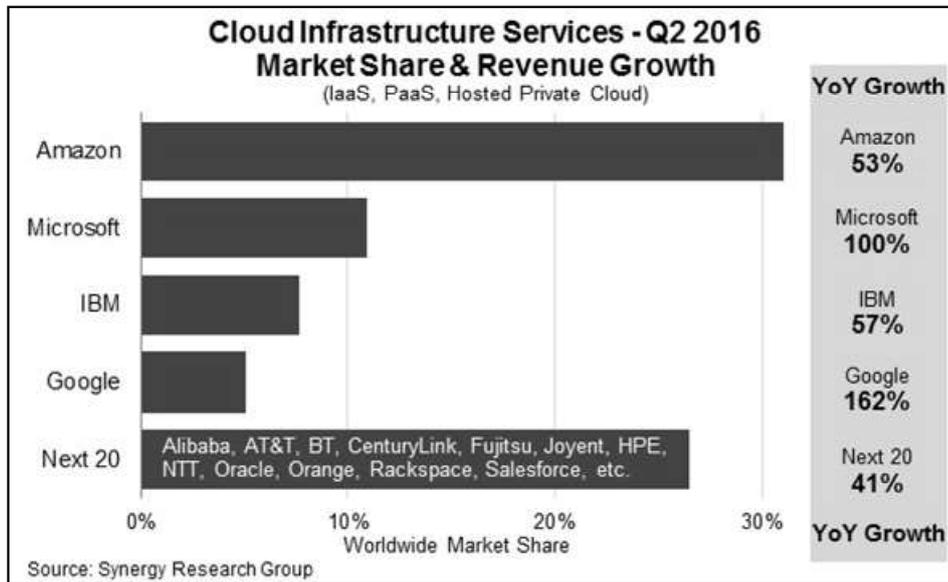
(Varia and Mathew, 2013)

Appendix B3: AWS's business model



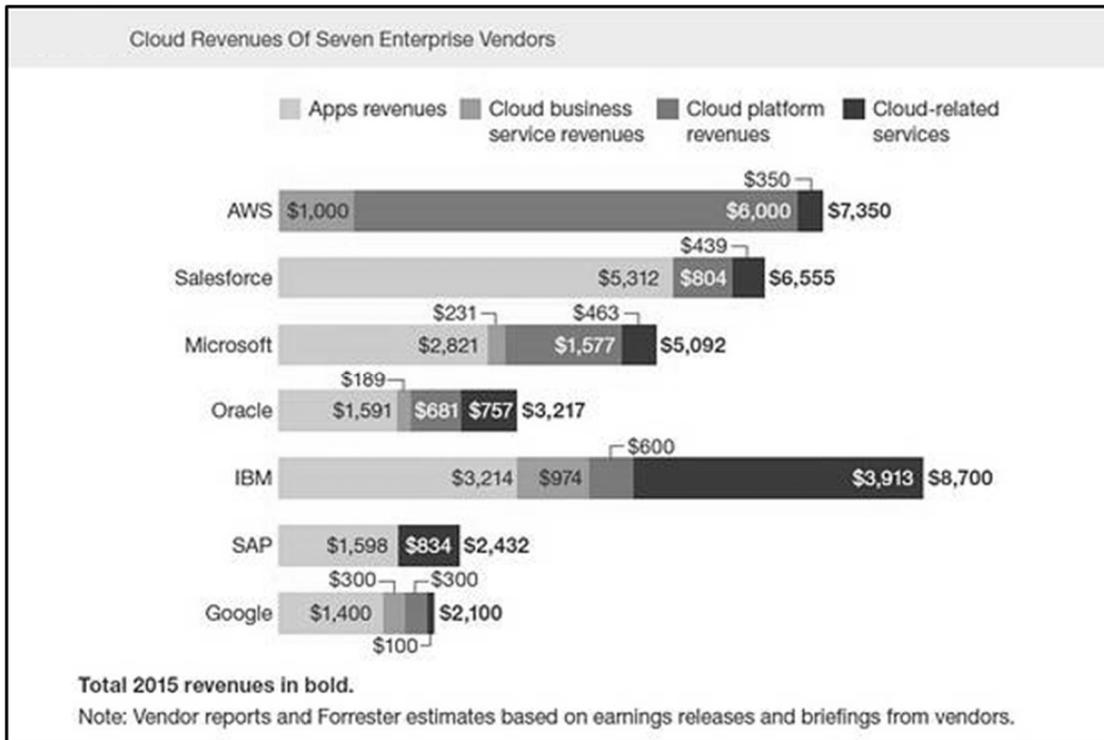
(Peter van Eijk, 2014)

Appendix B4: Market share and revenue growth of the cloud infrastructure services market



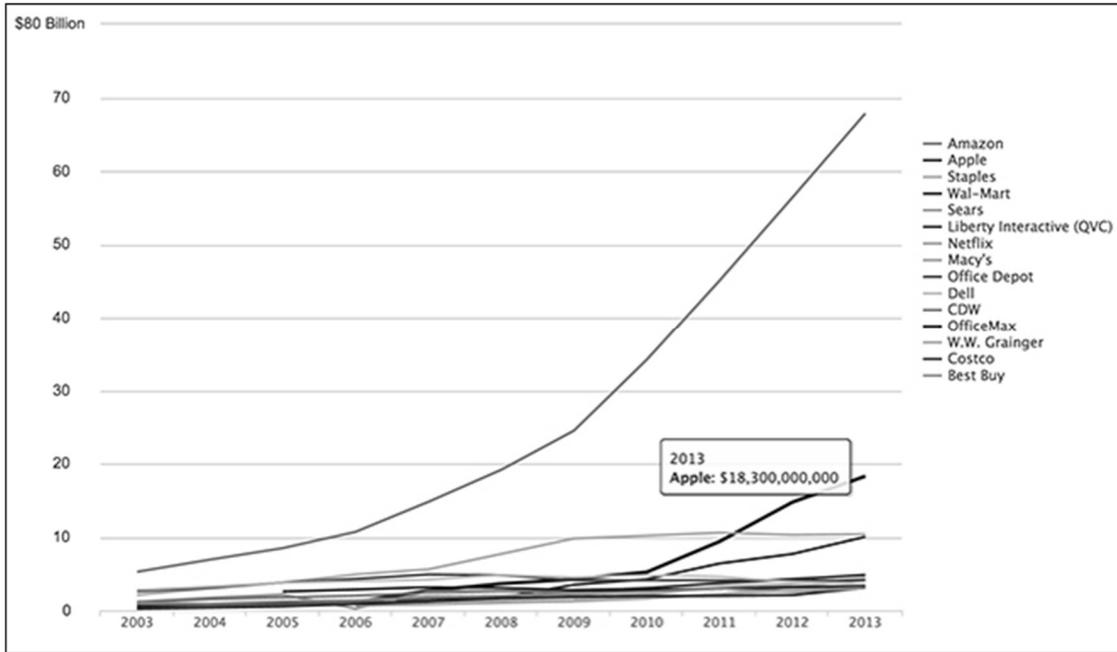
(Synergy Research Group, 2016)

Appendix B5: Cloud revenues of seven enterprise vendors



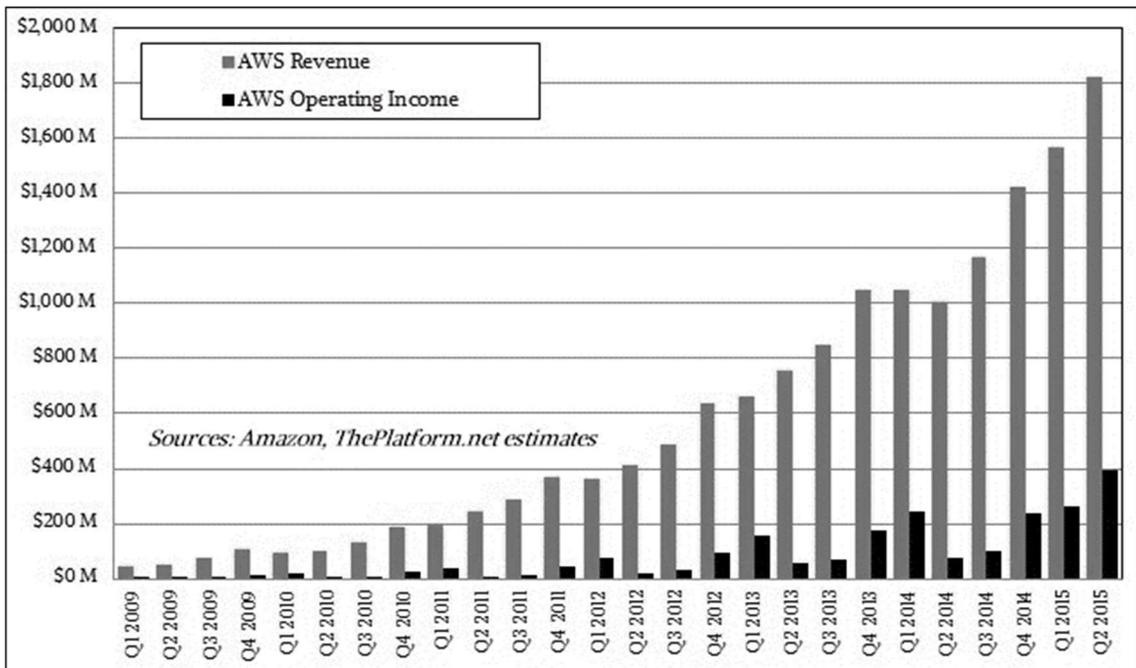
(John R. Rymer, 2015)

Appendix B6: Platform revenues



(<http://1u88jj3r4db2x4txp44yqfj1.wpengine.netdna-cdn.com/wp-content/uploads/2014/05/screen-shot-2014-05-07-at-12-41-31-pm1.png>)  
(accessed at 17 September 2016)

Appendix B7: AWS revenue and operating income



(<http://www.nextplatform.com/wp-content/uploads/2015/04/aws-financials-q1-2015.jpg>)  
(accessed at 17 September 2016)

*Appendix B8: Case study database and thesis source files*

Please find all files for this thesis available on the attached DVD or available for download via the following link:

**Link:**

[https://www.dropbox.com/s/9i7zt1v6ggwevrz/MS%20Thesis\\_Rudolph\\_Kevin\\_355081\\_20092016.zip?dl=0](https://www.dropbox.com/s/9i7zt1v6ggwevrz/MS%20Thesis_Rudolph_Kevin_355081_20092016.zip?dl=0)

**Password:**

rSc3ZmCM!h

**Content:**

- Case study database and analysis
  - Case study codes and quotations
  - Case study data sources
  - Case study database (ATLAS.ti copy bundle)
  - Case study figures and analysis
- Case study thesis
  - Files for thesis creation
  - Files for thesis writing
    - Citavi files
    - Appendix
  - Final thesis documents