

RPC

Premium matters

Software, actuarial consulting and management consulting to the insurance industry



A message from the Managing Partner



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Welcome to RPC Consulting.

Despite the broad range of advisory businesses servicing the Insurance sector, our clients identified a major shortcoming in the provision of independent, fairly priced, integrated actuarial, management consultancy and software services. With this in mind we founded RPC Consulting in February 2015 and already our success has been recognised in the market, as we have been shortlisted for the Insurance start-up award at the 2016 British Insurance Awards.

RPC Consulting – part of the RPC family

RPC Consulting is proud to be a part of RPC, a leading international law firm with a well earned reputation for adding value to its clients combined with an enviable track record for innovation and award winning customer service.

RPC has a significant focus on the Insurance and broader Financial Services industry with leading insurance transaction services and insurance claims capability. Working in conjunction with the lawyers on transactions, regulatory and operational assignments is a very natural transition for actuaries and management consultants. In addition, the integrity and professionalism that exists in the legal world is a great environment in which to grow a broader actuarial, software and management consulting practice.

The right people and tools

A fundamental principle of our consulting model is that our clients require and deserve dedicated, industry expertise from their advisors as well as the best software tools available. All of our leaders and senior staff have practical hands-on experience in the specific areas in which we advise. Underpinning this is our software, Tyche. It is transforming how our clients utilise analytic tools for key business decisions.

Across our team we share a common goal to build a business that is sustainable and is recognised for going the extra mile to deliver to our clients. The market is responding positively to our ethos and both our team and our services are growing rapidly.

We look forward to working with you in the future.

Rory O'Brien
Managing Partner



“RPC Consulting offers independent, fairly priced, integrated actuarial, management consultancy and software services.”



Who we are

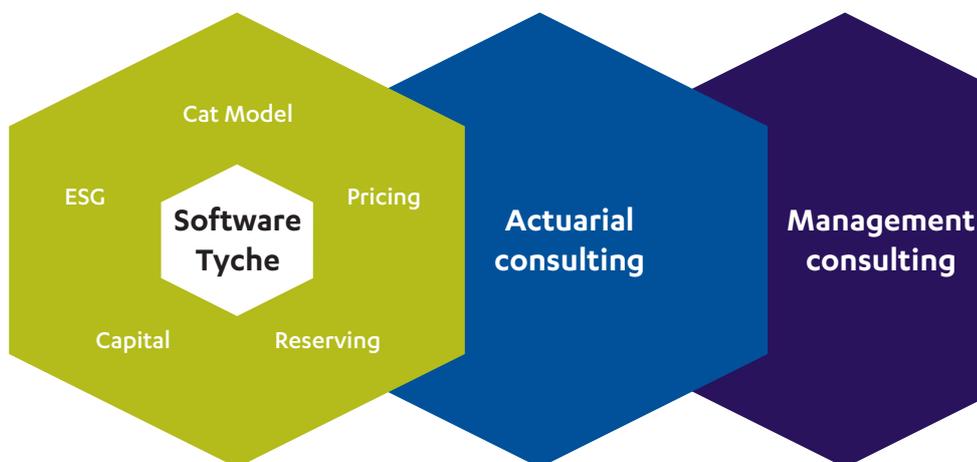
RPC Consulting

Insurance is a unique industry. It has unique challenges. And it is not easy for outsiders to understand the nuances within the market and how it works.

We understand insurance. We are part of the industry and insurance is what we do. We help insurers, brokers, MGAs and others improve their business performance. Our team includes actuaries, accountants, MBAs and PhDs. We deliver both insurance and consulting experience in teams tailored to our clients' needs. We help our clients with challenges unique to insurance: optimising capital, pricing risks, managing regulation and improving performance.

Our insurance focus

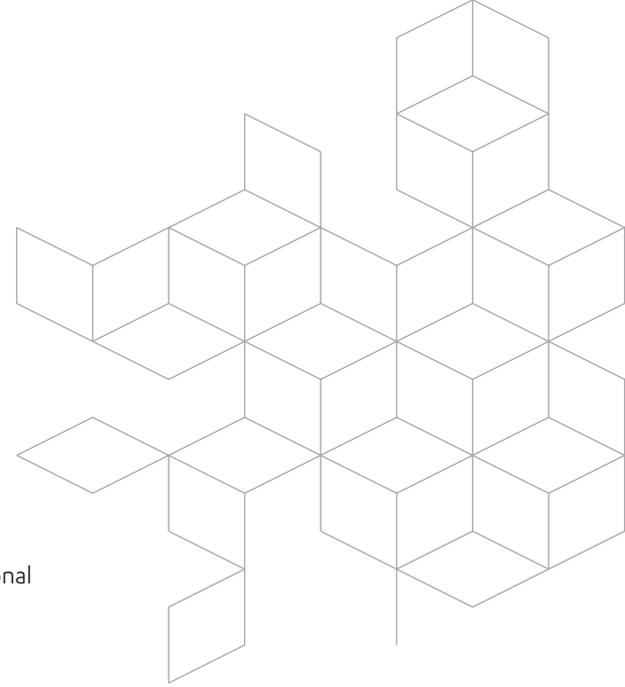
Our services to the insurance industry are focused in three key areas: software, actuarial consulting and management consulting.



Tyche, our world class actuarial software, is changing the game. It can reduce run times from hours to minutes. Complex models can be built in 10% of the time. Tyche is making models part of the daily executive discussion meaning it is not something done by actuaries for actuaries.

Our Actuarial and Management Consulting teams deliver results by improving performance in areas from capital management to price optimisation and from regulatory change to operational efficiency.

Our core services



We work across all areas of the industry including Lloyd's/London Market, Personal Lines, Commercial Lines and Life Assurance. Our expertise supports clients operating in the UK, across Europe and at a global level.

We have set out our underlying service offerings below including the list of our toolkits that support Tyche.

Software

- Capital Modelling
- Reserving
- Pricing
- Cat Modelling
- Economic Scenario Generation

Actuarial consulting

- Reserving
- Pricing
- Capital Modelling
- Legacy/Exit Solutions
- Risk
- Analytics
- Cat Modelling
- Bespoke Modelling
- Economic Scenario Generation

Management consulting

Governance, Risk and Compliance

- Regulatory Strategy
- Regulatory Remediation and Change Programmes
- Board Training

Insurance Operations

- Cost Management
- Operational Strategy – Target Operating Model (TOM) Review and Design
- Shared Service Reviews

Financial Advisory

- Finance Transformation
- MI Review and Design
- Review and Remediation
- Function Holder Review
- Internal Audit Support

Insurance strategy

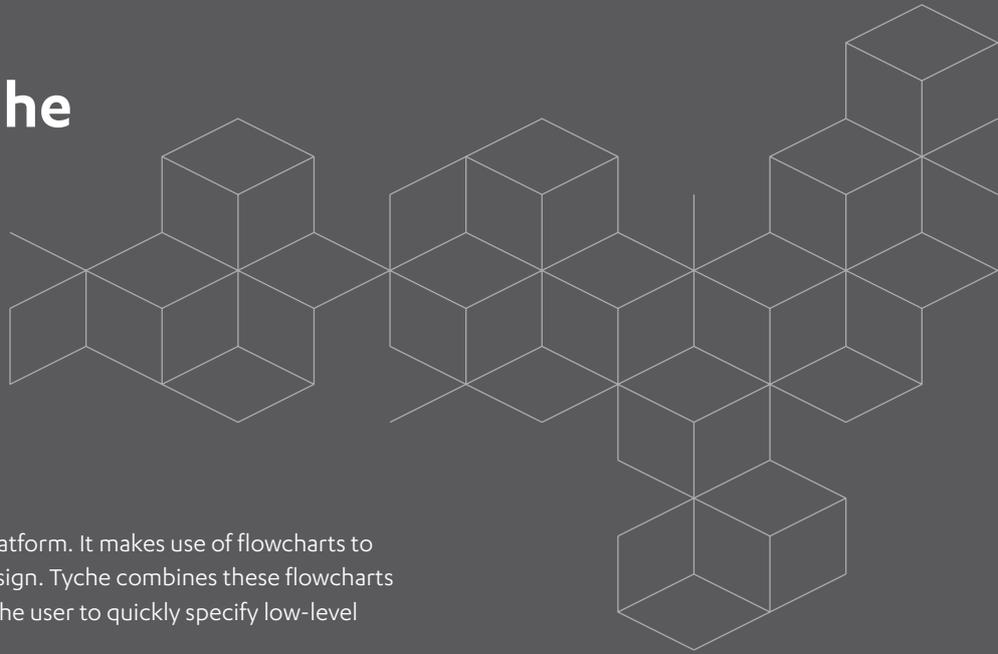
- Board Level Strategy
- Market, Channel and Product Strategy
- M&A Strategy

People & Change Management

- Organisational Design
- Programme Design & Management
- People and Culture Change
- Transformation

“We help the Insurance industry solve its most complex challenges”

Introducing Tyche



Our world class software solution

Tyche is a high-speed, flexible modelling platform. It makes use of flowcharts to allow fast and intuitive high-level model design. Tyche combines these flowcharts with its own language – T# – which allows the user to quickly specify low-level detailed calculations for use in models.

In addition to T#, Tyche provides a suite of modelling nodes providing diverse functionality such as optimisation, equation solving, advanced simulation, Excel and database interaction, and the ability to write sections of models directly in standard programming languages such as C#.

The low-level computational algorithms have been written to make direct use of massively parallel Single Instruction Multiple Data (SIMD) architectures leading to significantly reduced run-time.

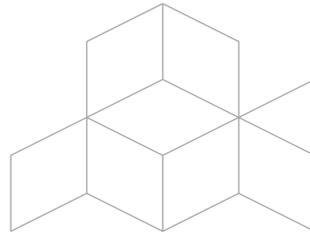
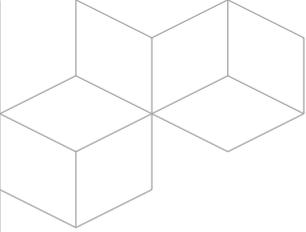
The screenshot displays the Tyche software interface. On the left, there is a sidebar with various settings and a 'Properties' panel for the 'VaR VaR Inspection' node. The main workspace is divided into three sections:

- Top Left:** A 3D surface plot titled 'VaR'. The vertical axis represents VaR values, and the horizontal axes represent 'assetIndex' and 'Scenario'. The surface is colored with a gradient from blue (low) to red (high).
- Bottom Left:** A 3D surface plot titled 'TVaR'. Similar to the VaR plot, it shows TVaR values across different assets and scenarios.
- Right Side:** Two data tables showing the underlying data for the plots. Each table has columns for 'assetIndex' (0-4) and rows for 'Scenario' (0-24).

The data tables are as follows:

Scenario	assetIndex 0	assetIndex 1	assetIndex 2	assetIndex 3	assetIndex 4
0	6648.2923464075	6644.2202651194	6629.9026547269	6635.8220997116	6631.723222474
1	6644.23164249163	6639.7351056589	6635.38834581317	6631.3697313289	6627.45009926709
2	6639.79488163704	6635.36843067732	6631.0912673602	6627.04218208134	6623.14403011657
3	6635.54480175494	6631.10334031507	6626.8601939098	6622.74889575688	6618.95536832012
4	6631.40822845436	6626.95550457982	6622.6592915281	6618.5107290288	6614.85368384781
5	6627.3108243008	6622.84242046997	6618.49918097944	6614.50349818865	6610.1816474643
6	6623.2629454444	6618.7303735573	6614.4446257321	6610.5659910785	6606.34747477939
7	6618.3793818174	6614.77146910308	6610.5892330659	6606.66149472674	6602.51262584449
8	6615.53453080027	6611.13732300367	6606.9783330827	6602.9881187896	6599.2395840531
9	6611.85493531908	6607.72823785954	6603.69922770507	6599.78736333845	6595.95091725791
10	6608.5863356018	6604.57292584149	6600.592898586	6596.69059918381	6592.94772743682
11	6605.63296627783	6601.79340118462	6597.9672720103	6594.15102825134	6590.469931274
12	6603.1202122839	6599.2924613834	6595.4697431372	6591.69322146404	6588.0637619562
13	6600.6707090125	6596.802307043	6592.948180352	6589.2781659281	6585.8681876851
14	6598.426689576	6594.4359879281	6590.6094296243	6588.3231820585	6583.3468326696
15	6596.24105843409	6592.19526073884	6588.4076707161	6586.72924923667	6581.1457770337
16	6594.1436738991	6590.01581976146	6586.210775357	6584.5699533056	6579.08145250529
17	6592.12050926042	6587.9554651255	6584.1233607571	6580.55611850216	6577.04549756215
18	6590.13208992157	6585.9555676815	6582.1576967824	6578.59436648432	6575.08068175244
19	6588.163077017	6584.0044153183	6580.2616707188	6576.69377325763	6573.30200292222
20	6586.37061029721	6582.3338833378	6578.49248348558	6574.92504472265	6571.4058224188
21	6584.65025308764	6580.9554052083	6576.6790747772	6573.18074321196	6569.42147688499

Scenario	assetIndex 0	assetIndex 1	assetIndex 2	assetIndex 3	assetIndex 4
0	6524.20674204872	6521.43111209445	6515.36774014306	6507.44359611665	6499.4241429772
1	6521.05494681779	6522.25968682927	6514.8339283065	6504.4212757507	6493.96557555559
2	6522.63065074768	6522.08820156498	6515.51817175739	6508.1130466244	6497.68082040819
3	6526.60882857395	6523.87933893283	6521.0903019743	6517.79395437374	6501.3882823276
4	6527.3837414989	6524.65425350877	6521.91857043225	6515.47477032308	6505.08909317209
5	6526.42514634915	6525.4291680847	6522.69967844358	6515.1563512742	6508.7495802143
6	6522.50152639044	6523.52544537234	6522.2361031752	6520.7451033784	6512.4308287077
7	6512.80452996832	6513.4296994728	6514.83357920624	6513.678099866319	6518.08954304911
8	6502.6959493426	6503.76054560282	6504.83013628737	6505.8465081217	6505.62360797752
9	6513.690222053	6493.946487608	6494.92700141866	6495.8395151554	6488.4281194607
10	6513.60295161588	6492.09342157481	6484.911148125	6483.87165807877	6471.226990403
11	6496.9403460718	6490.55003104201	6474.89528820634	6466.66620384213	6453.9633350512
12	6480.23580060132	6473.8510694668	6464.9337398841	6449.413057324	6436.6903729178
13	6463.53126605146	6457.15210795135	6450.8462028223	6444.50667039762	6426.989717759
14	6451.012522069	6443.52050597692	6436.12848187765	6428.69715450646	6421.61570146114
15	6435.8363283222	6434.0351335735	6428.8480309315	6423.592328919	6418.2546627284
16	6423.2310072393	6424.2089340495	6425.18686083697	6424.7007294893	6419.41145778348
17	6413.26176709235	6414.35497701395	6415.3564811457	6416.3340831659	6417.31233511861
18	6403.25467176193	6404.34788163534	6405.44109160254	6406.5042899419	6407.48195579621
19	6395.8050233942	6396.72264658827	6395.4399962472	6396.5270619633	6397.62041611792
20	6399.0549662141	6397.23263946281	6395.4118260421	6397.50286148883	6402.05296739218
21	6399.62669628423	6397.8052414263	6395.88784946702	6394.16232770842	6395.26530820776



“Tyche’s speed and optimisation algorithms allow us to rapidly assess alternative strategies. It is very exciting for us and we look forward to exploring other ways that we can make use of the Tyche platform in our business”

Marcus Foley, Aspen

Tyche does not require specific hardware, running seamlessly on grid, cloud, server, desktop, laptop or hosted environments. The Tyche engine and toolkits host statistical modelling applications focusing on actuarial and financial analytics (life and non-life, reserving, pricing and capital modelling), econometrics and areas further afield.

Tyche can replicate existing models with significant speed functionality improvements. Models are then refined to make optimum use of the parallelisation Tyche offers.

Tyche is lightning fast - Models run in seconds and minutes - not hours or days, and although speed is not everything, it is a critical factor in effective model development and use.

Further, the Tyche platform itself is open to all, giving clients a renewed flexibility in choosing who to work with - ie teams that best fit their needs.

Our business layer Toolkits, and the Tyche platform itself, are each available separately and are priced competitively. When coupled with lower hardware costs - model and platform change becomes a cost effective proposition with transformational results.



Client	Type	Platform	Model	Old time	Tyche
1	Regional insurer	C	Capital model	5 hrs	2 mins
2	Top 20 Lloyd’s	A	LCM	9 hrs	3.5 mins
3A	Top 10 Lloyd’s	A	Gross U/W	90 mins	30 secs
3B			Gross U/W + Exports	2.5 hrs	1.5 mins
4	Top 5 Lloyd’s	A	Gross + Net U/W	2 hrs 15 mins	4 mins
5	Broker	B	Aggregate RI pricing	15 mins	2 secs
6	Top 20 Lloyd’s	D	Capital model	1 hr 15 mins	4 mins

Tyche is quickly becoming the new standard for actuarial software. The feedback from our clients and our growing list of successful proof of concept studies (as shown in the table above) underlines this point. Tyche has to be seen and experienced to be appreciated fully and we welcome the opportunity to demonstrate or run a proof of concept using your models and data.

Our partner team



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