



Systems Integration and Cake

Iain Pritchard

11 December 2014

Adapta Consulting

We are:

- A specialist information systems consultancy
- We only work with membership organisations, charities, associations, trusts and others in the NfP sector
- We are completely supplier-independent
- Our consultants have held senior positions in a broad range of different organisations
- Our advice and guidance is based on practical experience gained over many years.

Programme

- 14.00 **Arrival and welcome**
Iain Pritchard – Adapta Consulting
Welcome to the event, introductions and overview of the agenda for the afternoon.
- 14:15 **The benefits of systems integration**
Iain Pritchard
Overview of the benefits of integrated systems, including the pre-requisites (and pitfalls) that can be encountered along the way.
- 15:00 **Case studies**
Rob Gethen Smith, The Southbank Centre and Andrew Brend, The Brooke
Short case studies from organisations that have tried to achieve systems integration
- 15:45 **Discussion and feedback**
All
A round table discussion and feedback.
- 16.30-
17.00 **Review and close**
Iain Pritchard – Adapta Consulting

Systems Integration

- Benefits
- Prerequisites
- Pitfalls



Case studies

The Brooke



Andrew Brend

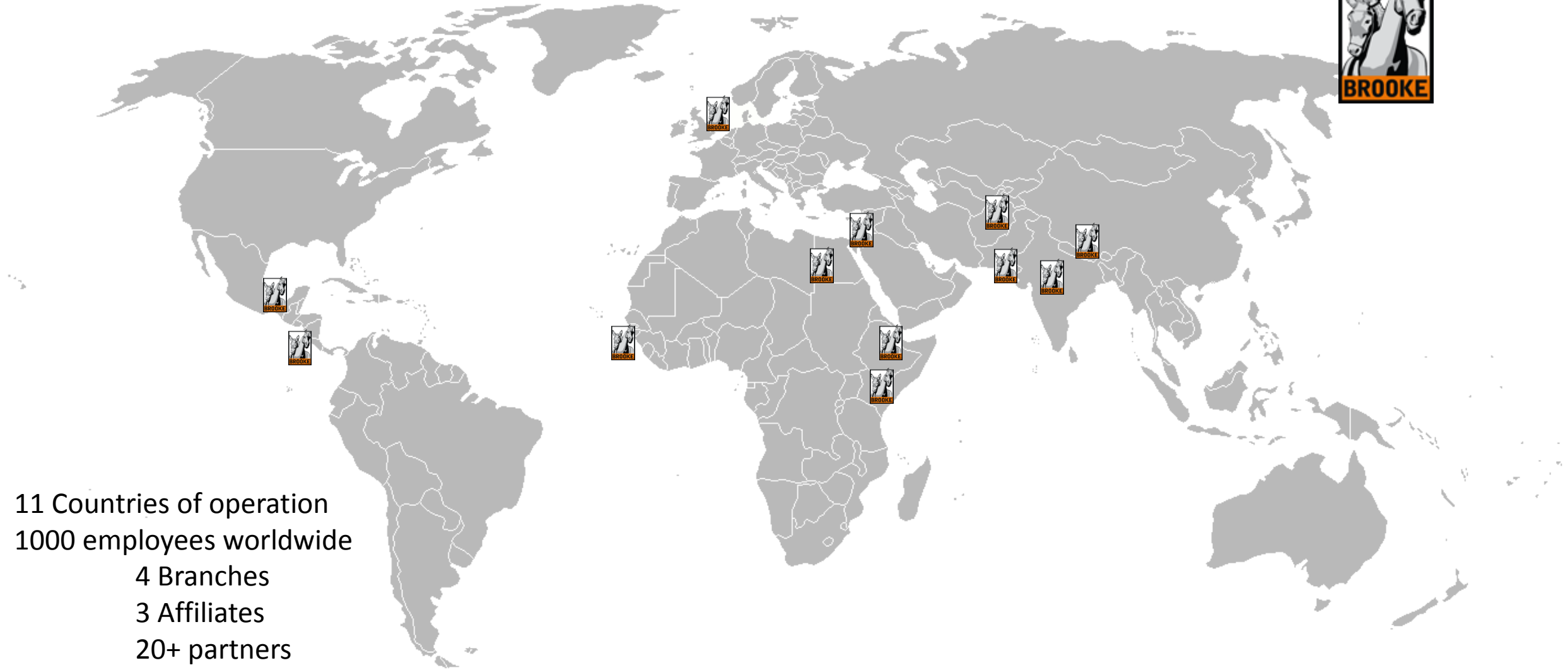
The Brooke..... helping equine animals for 80 years



- The Cairo Old War Horse Memorial Hospital opened 1934
- Traditional practise of treatment based support.
- Animals travel milesd to static Clinics again and again..



The Brooke 2014

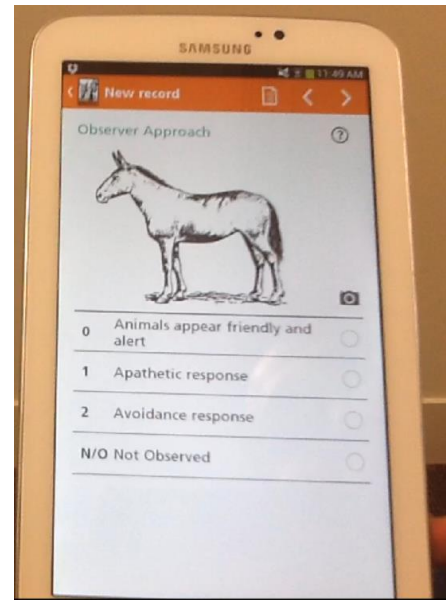


11 Countries of operation
1000 employees worldwide
4 Branches
3 Affiliates
20+ partners

Our Focus

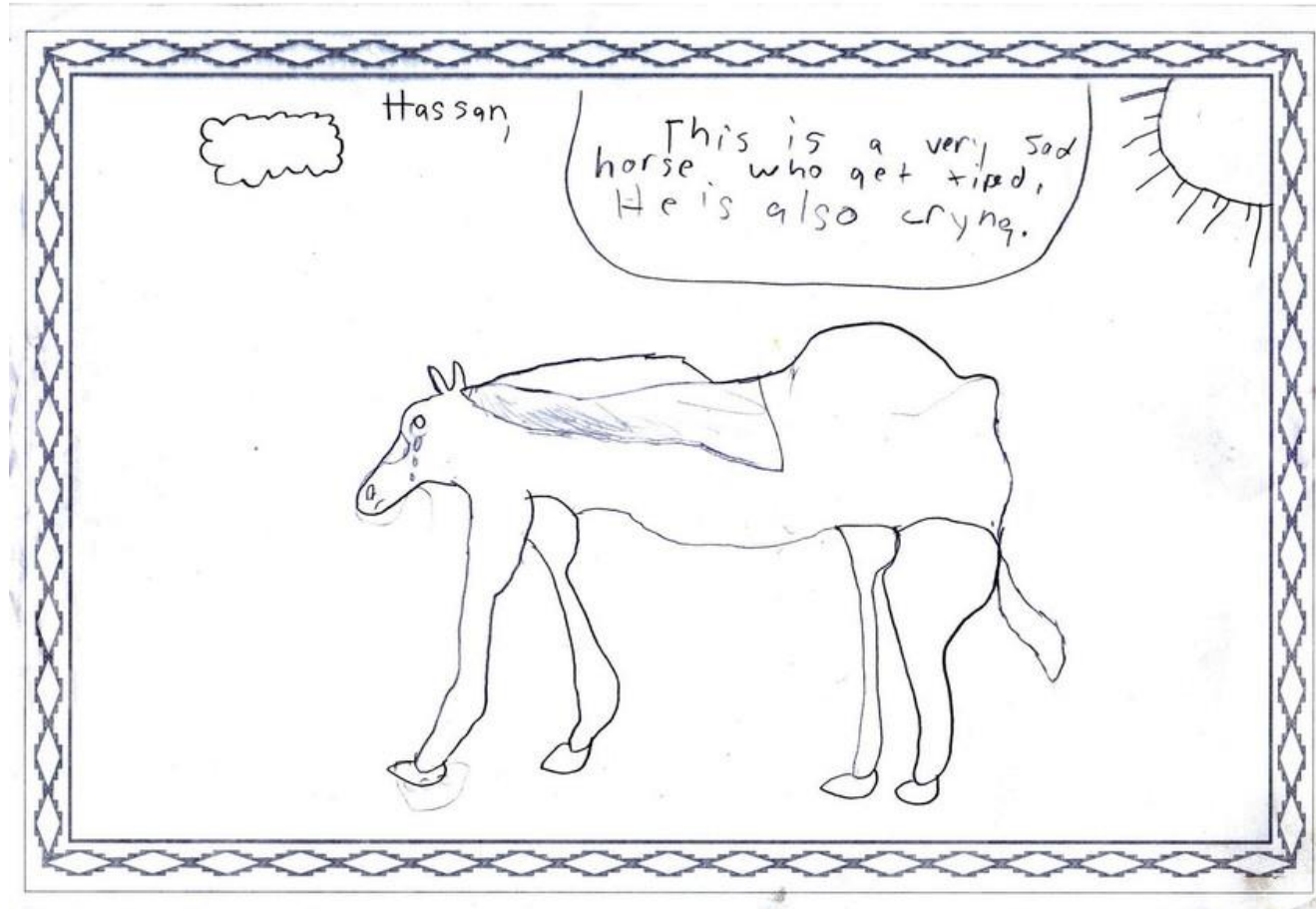
Four key strategic areas:

1. Direct veterinary intervention
2. Prevention of welfare problems
3. Influencing for animal welfare
4. Field Research into animal welfare



- Evidence
- Innovative Solutions
- Advocacy
- Building Animal Welfare Capacity

Effectiveness



- Data
- Scientific Research
- Collaboration
- Knowledge & Information Sharing



Documents by users
Email Traffic !!
Loss of Organisational
Memory
New Applications
unsupported
Video in Public domain
Data captured in country

Connect



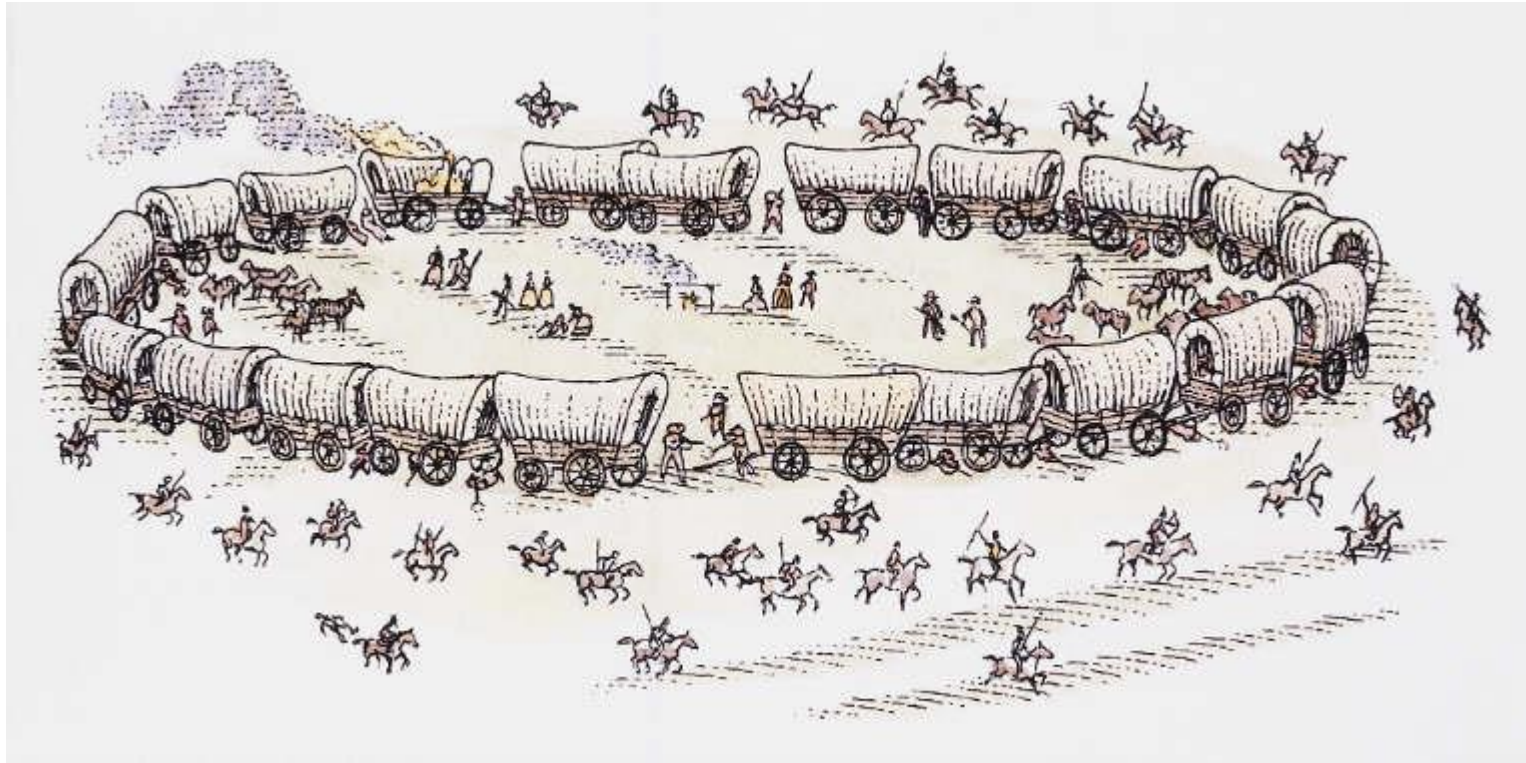
"User Lead" Project



TOR

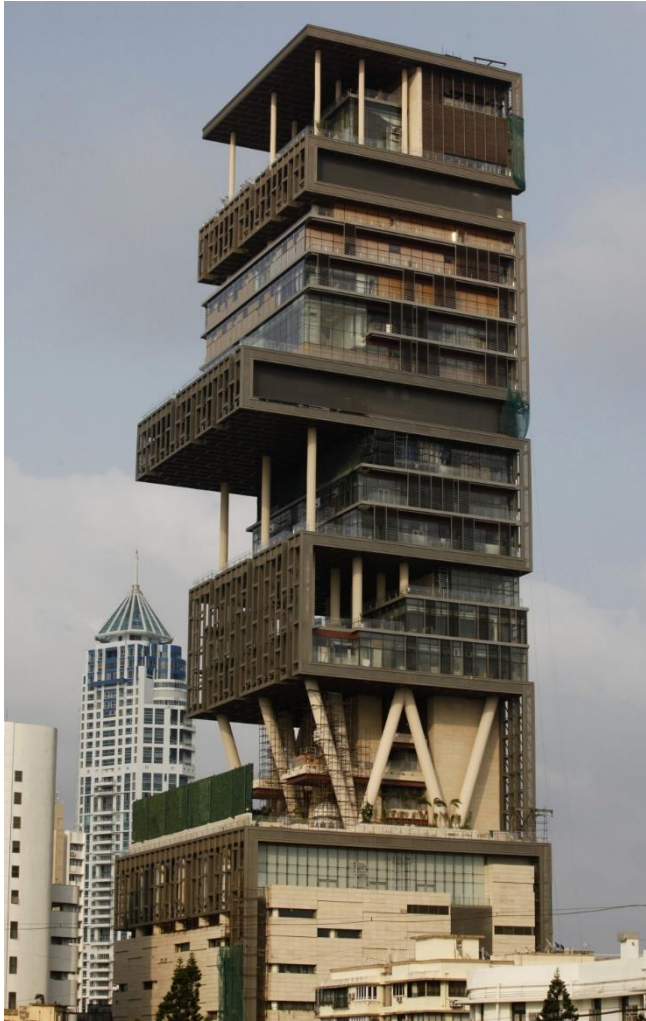
“Risk that people will not accept new ways of working: risk mitigated by ensuring that staff from all areas of the organisation are represented on the project and that other people are involved in specific activities to provide input and feedback”

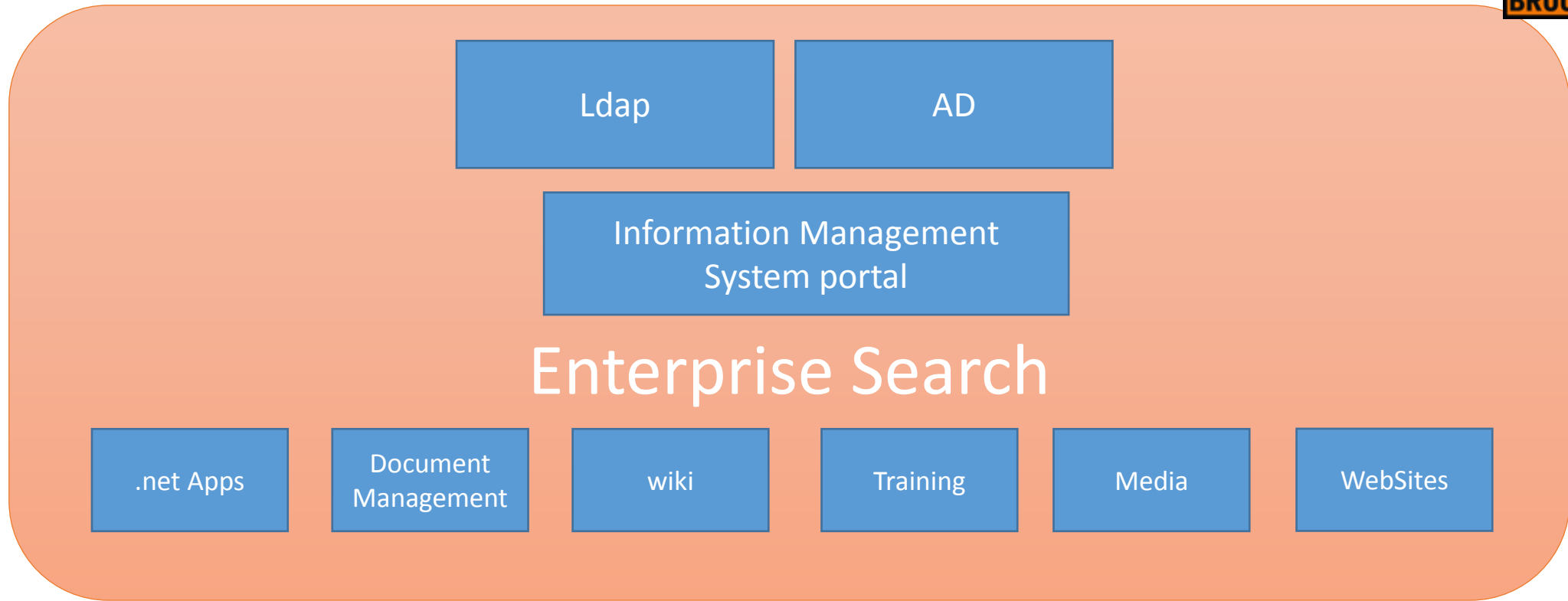
Challenges...



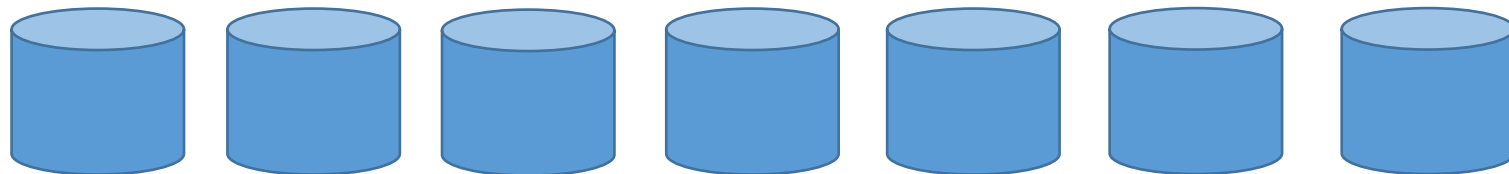
- Communication
- User Focused
- Champions
- Make Complexity simple

Architectural Choices





Allowing open access to information whilst maintaining permission based search?



Challenges going forward.....



- Remote areas of operation
- International Infrastructure
- Information Policy
- Embedding Phase 1



Thank you

Integration

Southbank Centre
Digital Transformation Programme

Rob Gethen Smith, CIO
Stephen Moffitt, Programme Manager
Aryaguna Watson, Database Development Manager

A bit about Southbank Centre

- Europe's largest Art Centre
- 21 Acres
- 5 venues
- 20m+ people
- 4000+ events
- 600 staff
- i.e. very few highly creative people do lots in not much time
- Also an awesome Digital Strategy

Why is integration important?

- Promote and get 20m people to our site, festivals and 4000 events - doing this efficiently and profitably requires seamless creation and movement of digital assets, content and data
- Create a new digital space for arts and learning - doing this requires us to be able to publish our content in discoverable and reusable formats bring together data from a range of sources, both internal and external

What data do we hold?

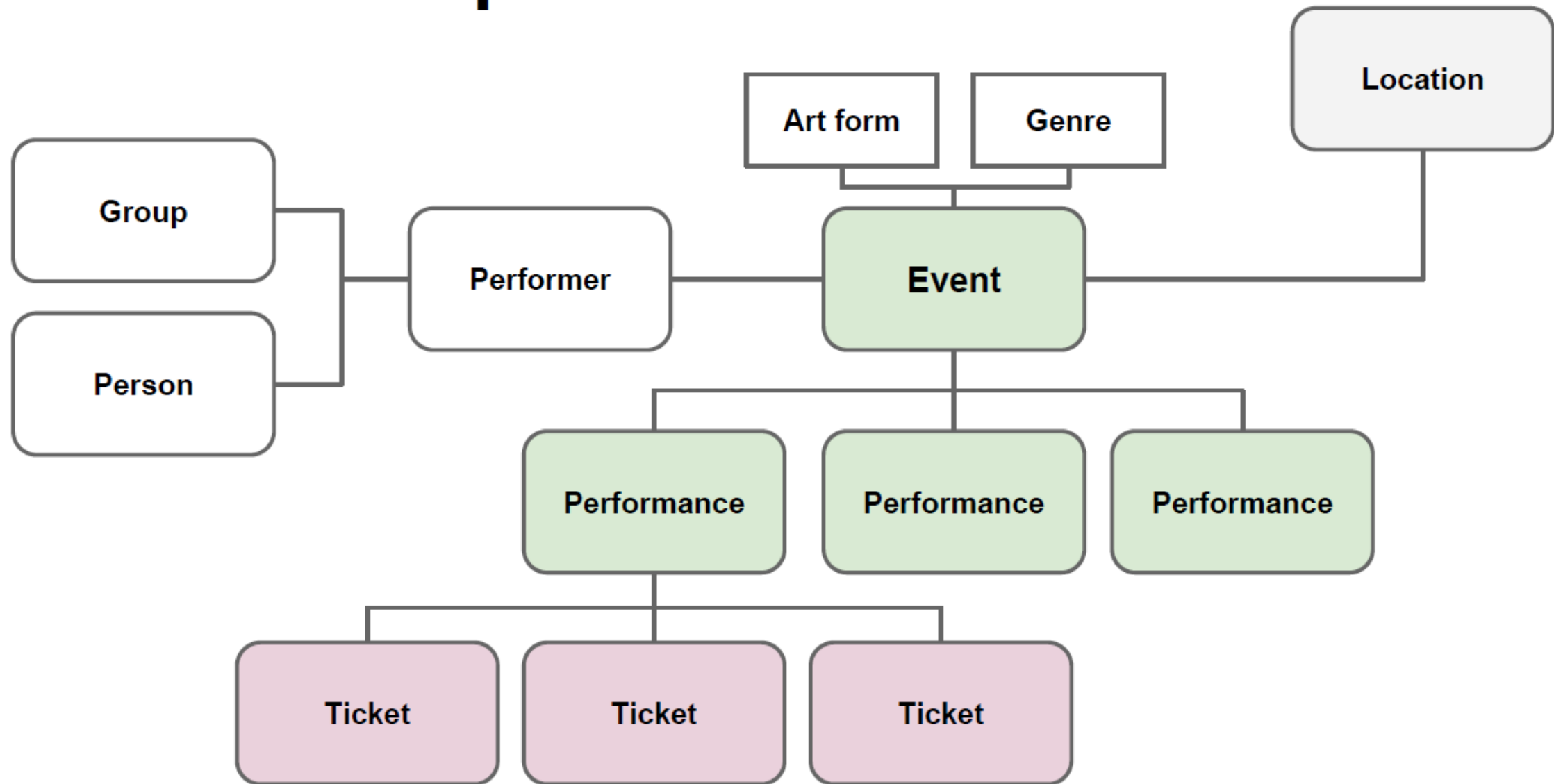
Data on:

- **Events** (all the concerts, activities and exhibitions at the SC)
- **People** (performers, audiences, artists)
- **Things** (tickets, food, drinks, recordings, playlists)
- **Locations** (venues, galleries, public spaces)

SC data model

- **What?**
An enterprise data framework that defines the key data we have and their relationships
- **Why?**
To help provide better customer experience and learning by creating a 'virtualised' enterprise architecture
- **How?**
3-level data model derived from workshops, systems analysis and user stories

ODM conceptual model



ODM logical and physical model

Event Logical-physical model ☆

File Edit View Insert Format Data Tools Add-ons Help Last edit was on November 20

Comments Share

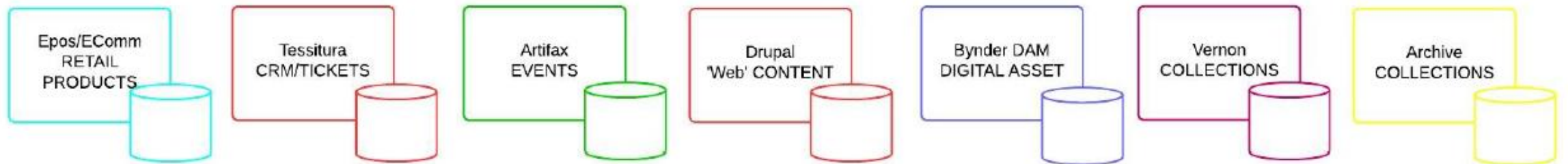
Stephen Moffitt

fx | Package

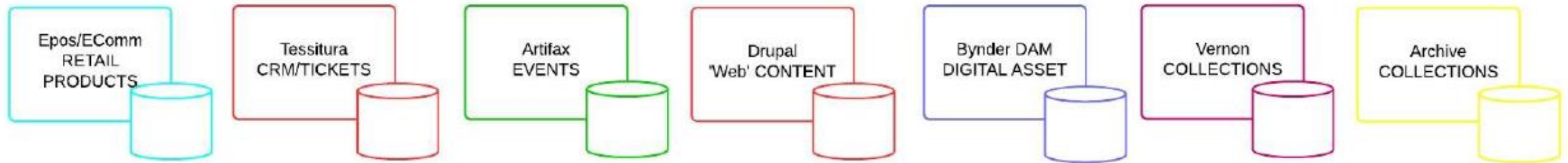
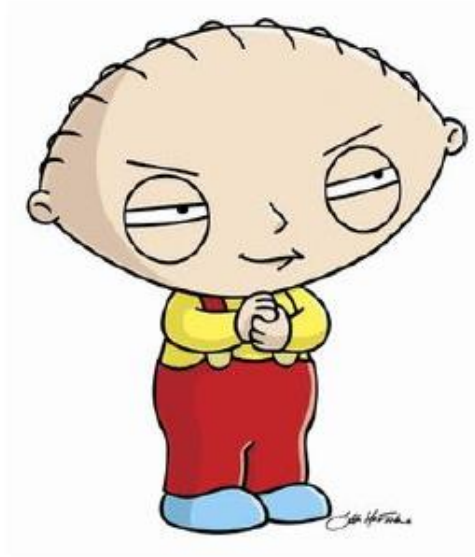
	A	B	C	D	E	F	G	H
1	Package	Event	Entity	Event				
2	<i>Logical</i>			<i>Physical- Master data</i>			<i>Application</i>	CMS
3	Attributes	Description	Controlled vocabulary (metaclass)	Application	Field name	Format	Field name	Schema.org
4	URL	Web URL for Event		Drupal	alias	String/URL		s:Event/uri (Thing)
5	EventSummary	Short summary of event suitable for web customers		Drupal	body	LongText		s:Event/description (Thing)
6	Age range	Suitable age range for event	Age ranges	Afx	field_age_recommended	String		s:Event/typicalAgeRange
7	MasterDataID	ID for Event in Master Data Application	Application name + Application ID	Afx	field_arrangement_id	Integer		N/A
8	Art form	Type of art form it is	Art form	Drupal	field_art_form	String/Taxonomy		sc:Event/artForm
9	Genre	Genre of art Event is	Art form>Genre					
10	Theme	Themes related to Event	Theme					
11	Web promo image	The primary promo image for event on the web		Drupal	field_image	Image		s:Event/image (Thing)
12				Drupal	field_performance	Relationship		s:Event/subEvent
13				Afx	field_prefix	String		sc:Event/namePrefix
14	Festival	What Festival, if any, the event is part of		Afx	field_series_heading	String		s:Event/superEvent
15		What Series, if any, the event is						

Event:Event Event:Performance Event:Ticket Event:Location

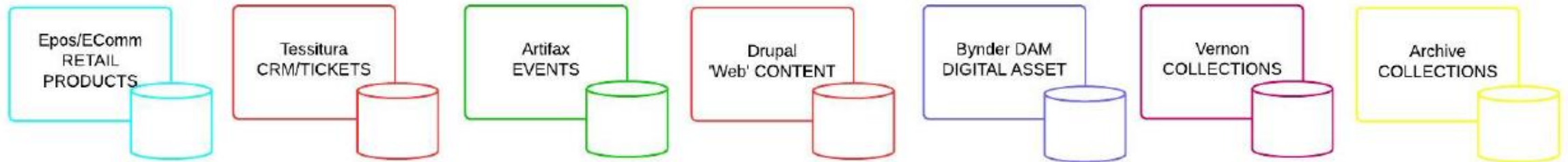
Where does this data reside?



Integration level 1a

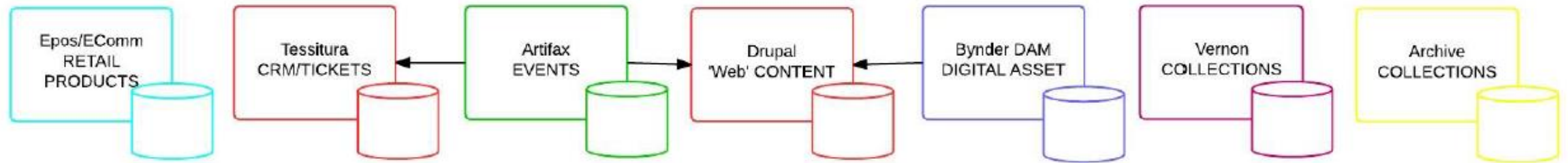


Integration level 1-robot

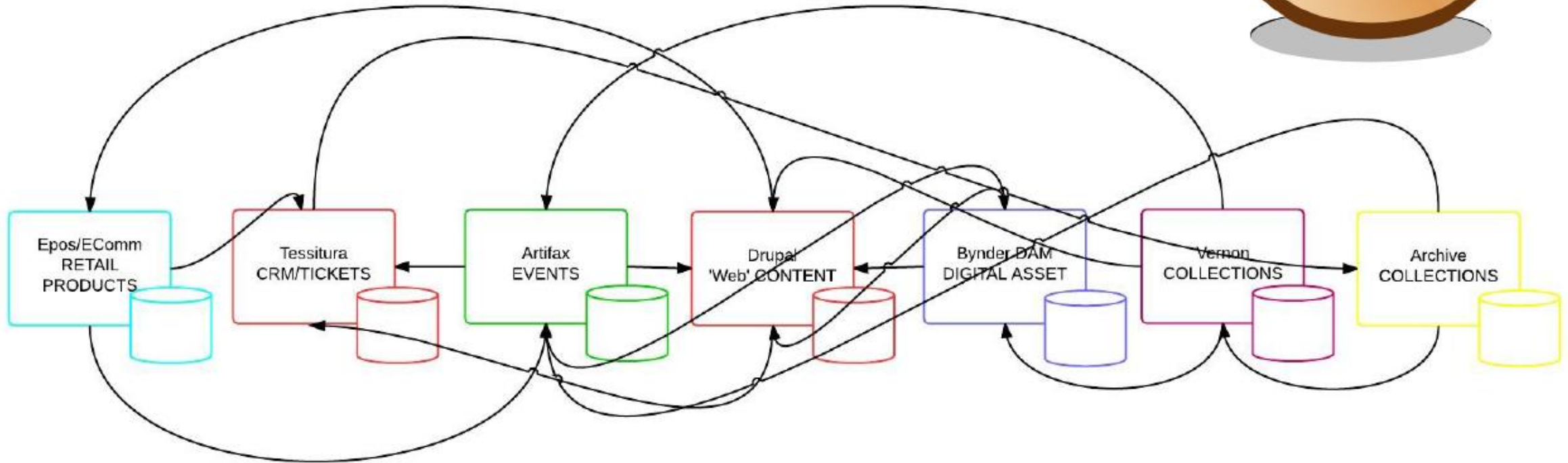


Integration level 2a

Point to point bespoke connections
Based on sound business analysis

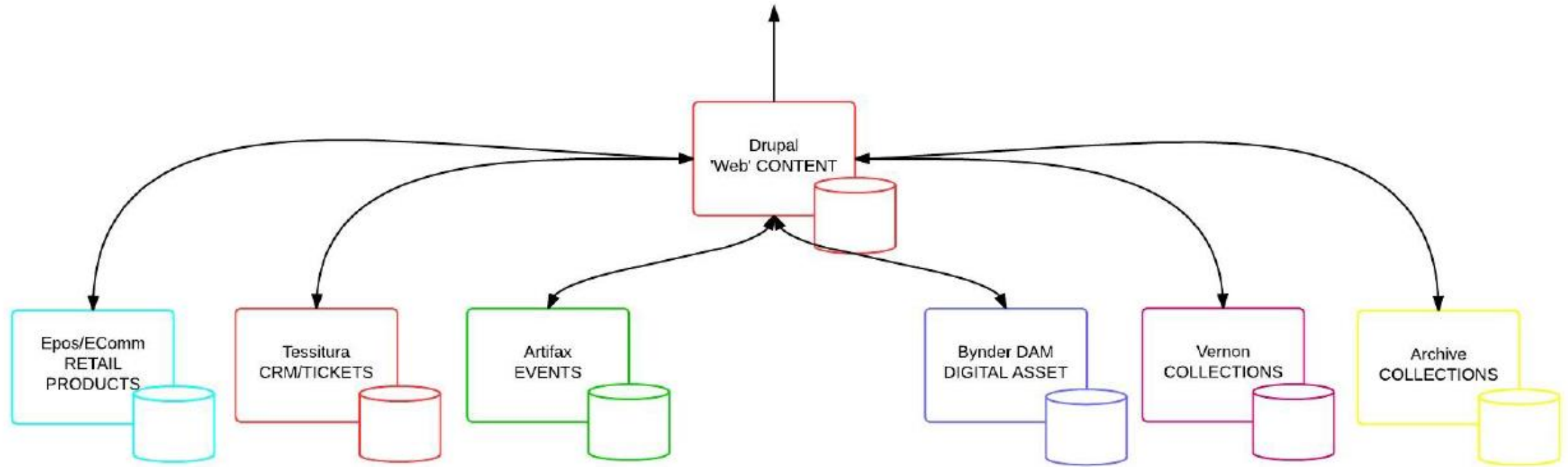


Integration level 2zzz



Integration level 3

Embedded service layer - use existing system eg. enterprise CMS to 'translate' data from one system to another



Victorian sponge cake layers approach

Front ends

API (cream)

Drupal CMS

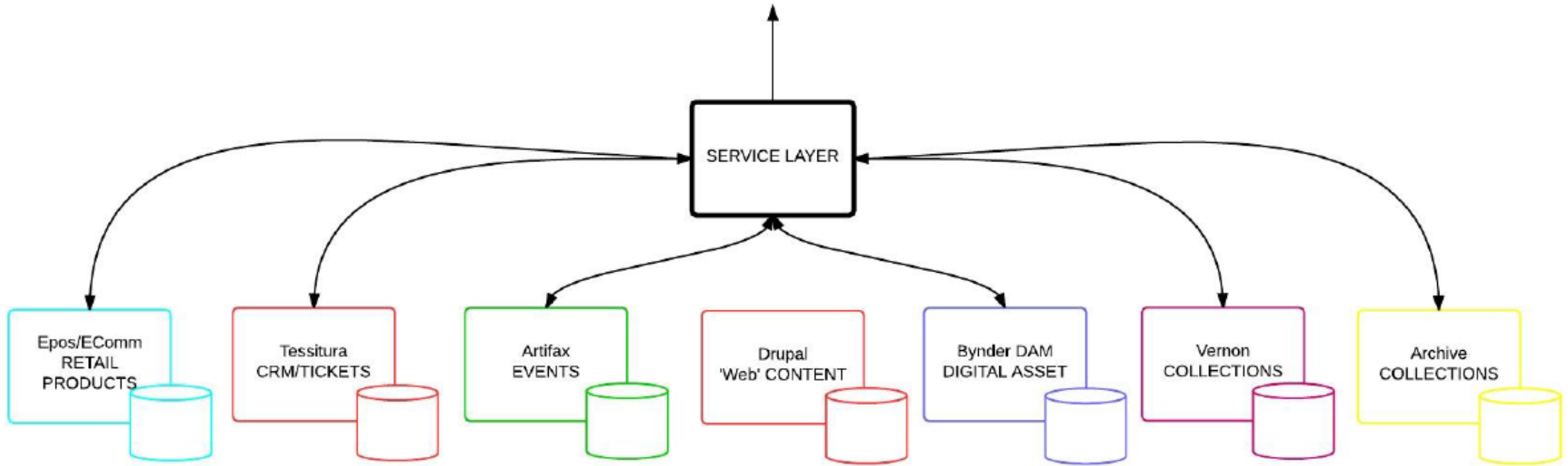
API (jam)

Backend
(Tessitura,
Artifax, DAMS)



Integration level 4

Centralised/Abstracted service layer - separate dedicated application that all applications plug into to get data from each other

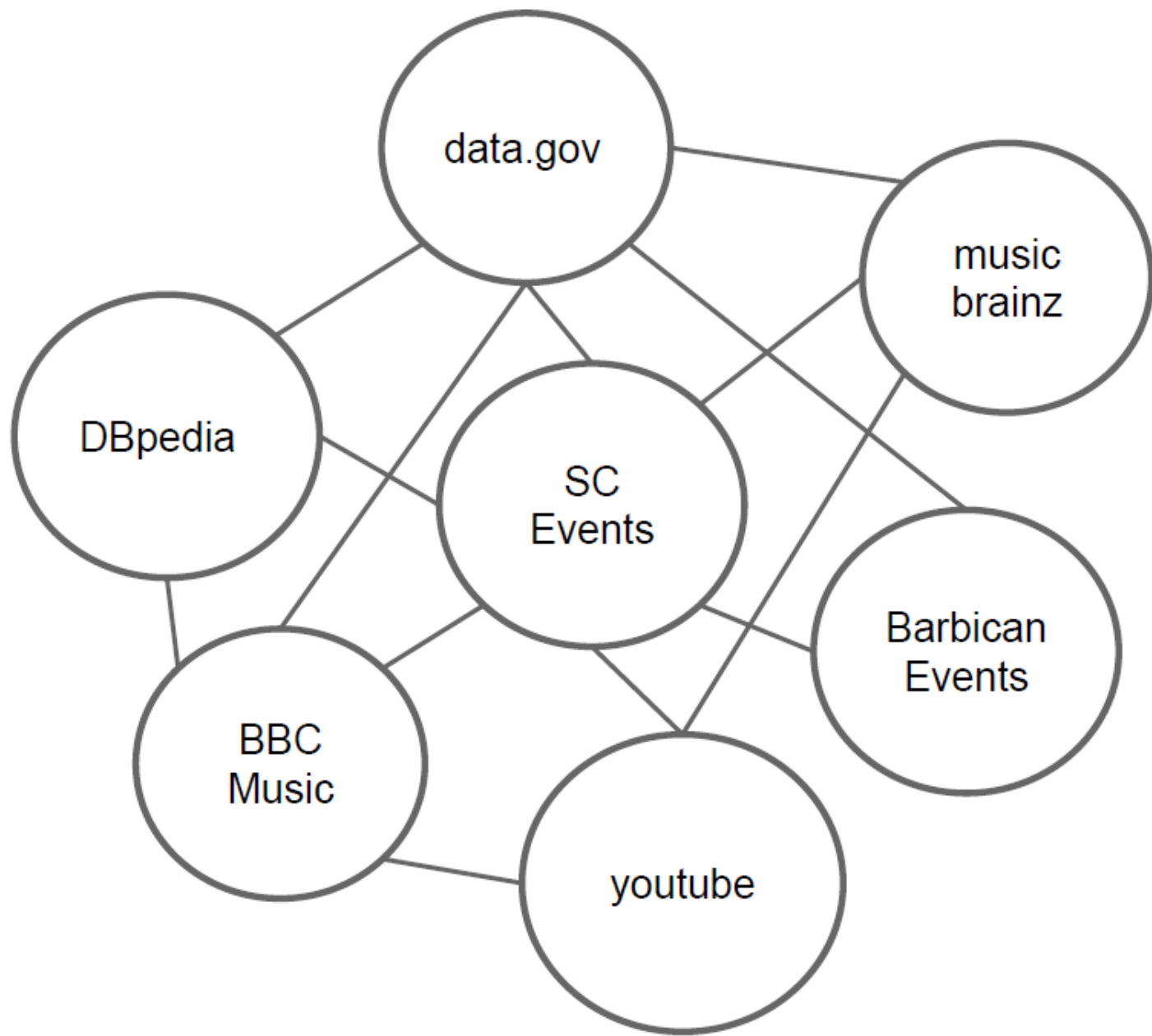


KEY QUESTION - when do you invest in a service layer?

So where does Linked Open Data come in to this?

We are overlaying our system architecture with our linked open data model to :

1. Link up data internally - creating efficiency
2. Link up data to external data sources - enriching our content
3. Make our content more discoverable (schema.org)
4. Make our content re-usable (open API)



The hardest thing about
LOD is

1. explaining what it is

2. why it is important

So we built a POC

Southbank Center ODM PoC

HOME

**Sunday 16 June 2013****Immortal Technique + support**

Yoko Ono's Meltdown

Royal Festival Hall

Rapper and activist Immortal Technique comes to Meltdown following his sold out show at The Electric in Brixton, London last year. Born in Lima, Peru and raised in Harlem, New York, his

Tuesday 18 June 2013**Reggie Watts + Mac Lethal**

Yoko Ono's Meltdown

Royal Festival Hall

Reggie Watts, internationally renowned vocalist/ beatboxer/

13:32
09/12/2014

The two headed beast - adn



ODM Artifax Search and Ir x Sc Events < Southbank Cer x

← → ↻ 83.244.193.56/scevent/wp-admin/admin.php?page=sbodm_search

Southbank Center ODM PoC 8 + New

Dashboard

SC Admin

SC Admin

Artifax Search and Importation

Commercial Partners' Report

Settings

Sc Events

Media

Pages

Comments

Appearance

Plugins 4

Users

Tools

WordPress 4.0.1 is available! [Please update now.](#)

Artifax Search and Importation Tool

POST: eventid= festival= date from to performer= free event=0

EventID:

Festival:

Date from: For single day searches just enter from date

Date to:

Performer:

Filter on free event:

Free event:

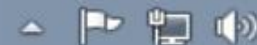
No events available



Import Events

Toggle Selection

Import	Event ID	Festival	Festival Heading	Headline	Date Time	Venue	Performers	Free Event
<input checked="" type="checkbox"/>	257593	Meltdown	Yoko Ono's Meltdown	Siouxsie	2013-06-17 T19:30:00	Royal Festival Hall	Andy Morgan,Siouxsie,Viv Albertine	no
<input type="checkbox"/>	401237			Alternative Guide to the Universe	2013-06-17 T12:00:00	Hayward Gallery		no
<input type="checkbox"/>	401238			Alternative Guide to the Universe	2013-06-17 T12:00:00	Hayward Gallery 1		no
<input type="checkbox"/>	401239			Alternative Guide to the Universe	2013-06-17 T12:00:00	Hayward Gallery 2		no
<input type="checkbox"/>	401240			Alternative Guide to the Universe	2013-06-17 T12:00:00	Hayward Gallery 3		no
<input type="checkbox"/>	401241			Alternative Guide to the Universe	2013-06-17 T12:00:00	Hayward Gallery 4		no
<input type="checkbox"/>	401242			Alternative Guide to the Universe	2013-06-17 T12:00:00	Hayward Gallery 5		no
<input type="checkbox"/>	417520		E4 Udderbelly Festival at Southbank Centre	Comedy in the Dark	2013-06-17 T21:00:00	Udderbelly		no



- Dashboard
- SC Admin**
- SC Admin
- Artifax Search and Importation**
- Commercial Partners' Report
- Settings
- Sc Events
- Media
- Pages
- Comments
- Appearance
- Plugins 4
- Users
- Tools

WordPress 4.0.1 is available! [Please update now.](#)

Now Importing Selected Event

Starting import procedure

Import: 257593 . Meltdown . Siouxsie - Importation: successful

Finished import procedure

Successful Imports: 1

Use site navigation to choose next activity

[WordPress 4.0.1](#) is available! [Please update now.](#)

Sc Events [New Sc Event](#) Search results for "siouxsie"

All (17) | [Published \(16\)](#) | [Draft \(1\)](#)

Bulk Actions ▾ All dates ▾

 2 items

<input type="checkbox"/>	Title	Date
<input checked="" type="checkbox"/>	Siouxsie - Draft	1 hour ago Last Modified
<input type="checkbox"/>	Iggy & the Stooges + Savages	2014/07/25 Published
<input type="checkbox"/>	Title	Date

Bulk Actions ▾

 2 items

Thank you for creating with WordPress.

[Get Version 4.0.1](#)



13:40
09/12/2014

[WordPress 4.0.1](#) is available! [Please update now.](#)

Edit Sc Event New Sc Event

Siouxsie

Permalink: http://83.244.193.56/scevent/sc_event/test_post_title-2/ Edit View Sc Event

Get Shortlink

Add Media

Visual Text

b i link b-quote del ins img ul ol li code more close tags

Due to **rather high** public demand, we're happy to announce an extra ~~Siouxsie~~ show. ; ; Yoko Ono's Meltdown marks the return of Siouxsie and her band - her first live outing for five years and the only UK shows this year. ; ; You Might Also Like: ; ; Earl Slick - Guitarist has performed with the likes of David Bowie, New York Dolls and on John & Yoko's final album *Double Fantasy* ; Body/Head - Kim Gordon and Bill Nace with Japanese drummer Ikue Mori ; Peaches - electro-rock goddess performs from her back catalogue

Publish

Save Draft

Preview

Status: Draft Edit

Visibility: Public Edit

Publish on: Dec 9, 2014 @ 12:36 Edit

Move to Trash

Publish

Attributes

Order

0

Southbank Center ODM PoC

HOME

**Sunday 16 June 2013****Immortal Technique + support**

Yoko Ono's Meltdown

Royal Festival Hall

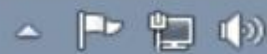
Rapper and activist Immortal Technique comes to Meltdown following his sold out show at The Electric in Brixton, London last year. Born in Lima, Peru and raised in Harlem, New York, his

Monday 17 June 2013**Siouxsie + Viv Albertine**

Yoko Ono's Meltdown

Royal Festival Hall

Due to truly awesome public demand, we're happy to announce an extra Siouxsie show. ; ; Yoko Ono's Meltdown marks the return of



Southbank Center ODM PoC

HOME

Search ...

CATEGORIES

Uncategorized

ARCHIVES

April 2014

SIOUXSIE

2013-06-17 19:30:00

Siouxsie

Yoko Ono's Meltdown

Royal Festival Hall

*Debugging Eventid=257593 Free= no Ticket required= no***Book Now** Nearly sold out book soon!

Tickets: £30.00 £35.00 £40.00

Booking Fee: £1.75 (Members £0)

Concessions: 50% off (limited availability)~|Expected

Interval~=2010 - 20:40~|Expected End Time~=20:40 - 22:20

Siouxsie

Debugging Tickets sold: 2443 Venue capacity: 2574 TRIGGER: 85 Sold out:95

Due to truly awesome public demand, we're happy to announce an extra Siouxsie show. ; ; Yoko Ono's Meltdown marks the return of Siouxsie and her band - her first live outing for five years and the



Southbank Center ODM PoC

HOME



only UK shows this year. ; ; You Might Also Like: ; ; Earl Slick -
Guitarist has performed with the likes of David Bowie, New York
Dolls and on John & Yoko's final album *Double Fantasy* ; Body/Head
- Kim Gordon and Bill Nace with Japanese drummer Ikue Mori ;
Peaches - electro-rock goddess performs from her back catalogue

Andy Morgan

Siouxsie

Viv Albertine

Tweets

meltdownfest: RT @kingofmoke: Almost time for a rag doll dance at Siouxsie
tonight @meltdownfest
Monday Jun 17 - 8:59pm, 2013

meltdownfest: More photos from the @ImmortalTech gig along with @viv_albertine
@CiboMattoCiboMa and @yokoono #flickr <http://t.co/wDOWPCy6Wb>
Sunday Jun 16 - 11:32pm, 2013

meltdownfest: Check out this @boningenuk video - then come along and see them
for FREE on 20 June as part of #meltdownfest <http://t.co/OhPccEFPJB>
Thursday Jun 6 - 1:56pm, 2013

meltdownfest: A few tickets left for @SiouxsieHQ tonight at #meltdownfest

13:44
09/12/2014

Southbank Center ODM PoC

HOME



MELTDOWN UPDATE
BIX WEIR:
THE JP MORGAN
DERIVATIVES BOOK
IS BLOWING UP

MELTDOWN
UPDATE: The JP
Morgan Derivatives
Book is Blowing Up -

1 2 3 4 5 - 99 100 next >

Andy Morgan



PTech
9/11, Global
Warming Meltdown,
Crashing Morgan -
Sunday Update



**Hagmann
& Podcast**
Steve Quayle and
Metals Guru David
Morgan on Hagmann
& Hagmann Report



Siouxsie MELTDOWN
Royal Festival Hall
2013



Siouxsie - Happy
House



Siouxsie Sioux -
Spellbound -
Meltdown 2013
FANTASTIC!!

1 2 3 4 5 - 99 100 next >

Southbank Center ODM PoC

HOME

Meltdown Southbank



Dj Harvey @ Meltdown Southbank Centre London 19/06/2014



Goldie x Heritage Orchestra southbank centre Meltdown Festi



Reggie Watts highlights - part of Yoko Ono's Meltdown

1 2 3 4 5 - 99 100 next >

Flickr



Proudly powered by WordPress



Southbank Center ODM PoC

HOME



only UK shows this year. ; ; You Might Also Like: ; ; Earl Slick -
Guitarist has performed with the likes of David Bowie, New York
Dolls and on John & Yoko's final album *Double Fantasy* ; Body/Head
- Kim Gordon and Bill Nace with Japanese drummer Ikue Mori ;
Peaches - electro-rock goddess performs from her back catalogue

Andy Morgan

Siouxsie

Viv Albertine

Tweets

meltdownfest: RT @kingofmoke: Almost time for a rag doll dance at Siouxsie
tonight @meltdownfest

Monday Jun 17 - 8:59pm, 2013

meltdownfest: More photos from the @ImmortalTech gig along with @viv_albertine
@CiboMattoCiboMa and @yokoono #flickr <http://t.co/wDOWPCy6Wb>

Sunday Jun 16 - 11:32pm, 2013

meltdownfest: Check out this @boningenuk video - then come along and see them
for FREE on 20 June as part of #meltdownfest <http://t.co/OhPccEFPJB>

Thursday Jun 6 - 1:56pm, 2013

meltdownfest: A few tickets left for @SiouxsieHQ tonight at #meltdownfest





WIKIPEDIA
The Free Encyclopedia

[Main page](#)
[Contents](#)
[Featured content](#)
[Current events](#)
[Random article](#)
[Donate to Wikipedia](#)
[Wikimedia Shop](#)

Interaction

[Help](#)
[About Wikipedia](#)
[Community portal](#)
[Recent changes](#)
[Contact page](#)

Tools

Article

Talk

Read

Edit

View history



Siouxsie Sioux

From Wikipedia, the free encyclopedia
(Redirected from [Siouxsie](#))

This article is about the rock singer and lead vocalist for the Banshees and the Creatures. For the Korean-American alternative folk singer, see [Susie Suh](#).

Siouxsie Sioux (/ˈsuːziːˈsuː/, born **Susan Janet Ballion**,^[1] 27 May 1957) is an English singer, songwriter, musician and producer. She is best known as the lead singer of rock band [Siouxsie and the Banshees](#) (1976–1996) and its side project [The Creatures](#) (1981–2005). Siouxsie and the Banshees released 11 studio albums and several UK Top 20 singles including "[Hong Kong Garden](#)", "[Happy House](#)", "[Peek-a-Boo](#)" plus a Billboard Top 25 hit "[Kiss Them for Me](#)". With The Creatures, Siouxsie recorded four studio

Siouxsie Sioux



14:21
09/12/2014

WIKIPEDIA
The Free Encyclopedia

[Main page](#)
[Contents](#)
[Featured content](#)
[Current events](#)
[Random article](#)
[Donate to Wikipedia](#)
[Wikimedia Shop](#)

Interaction

[Help](#)
[About Wikipedia](#)
[Community portal](#)
[Recent changes](#)
[Contact page](#)

Tools

[What links here](#)
[Related changes](#)

Viv Albertine

From Wikipedia, the free encyclopedia

Viviane Katrina Louise "Viv" Albertine (born 1 December 1954, [Australia](#)^[1]) is a [British](#) singer and songwriter, best known as the [guitarist](#) for the all-female [English punk group](#) [The Slits](#). She lives in [Hackney](#), [London](#).

Contents [hide]

- [Early life](#)
- [Music career](#)
- [Film career](#)
- [References](#)
- [External links](#)

Early life [edit]

Viv Albertine





WIKIPEDIA
The Free Encyclopedia

[Main page](#)
[Contents](#)
[Featured content](#)
[Current events](#)
[Random article](#)
[Donate to Wikipedia](#)
[Wikimedia Shop](#)

Interaction
[Help](#)
[About Wikipedia](#)
[Community portal](#)
[Recent changes](#)

[Create account](#) [Log in](#)

Article [Talk](#)

Read [Edit](#) [View history](#)



The Slits

From Wikipedia, the free encyclopedia

The Slits were a British [punk](#) and [post-punk](#) band. The quartet was formed in 1976 by members of the bands [The Flowers of Romance](#) and [The Castrators](#). The members were [Ari Up](#) (Ariane Forster) and [Palmolive](#) (Paloma Romero, who later left to join [The Raincoats](#)), with [Viv Albertine](#) and [Tessa Pollitt](#) replacing founding members [Kate Korus](#) and [Suzy Gutsy](#).^[1] Palmolive was replaced by the drummer [Budgie](#) (Peter Clarke), formerly of [The Spitfire Boys](#) and later of [Siouxsie and the Banshees](#).^[1] Although not all line-ups were exclusively female, the three main female members

The Slits



The Slits in New York City, 2007

Background information



14:26
09/12/2014



WIKIPEDIA
The Free Encyclopedia

[Main page](#)
[Contents](#)
[Featured content](#)
[Current events](#)
[Random article](#)
[Donate to Wikipedia](#)
[Wikimedia Shop](#)

[Interaction](#)
[Help](#)
[About Wikipedia](#)
[Community portal](#)
[Recent changes](#)

Article [Talk](#)

[Read](#) [Edit](#) [View history](#)



Andy Morgan

From Wikipedia, the free encyclopedia

Andy Morgan is a Pro fisherman from [Dayton, Tennessee](#). Has a career winnings of \$1,254,424. Has won 6 pro tournaments, and has competed in 192 tournaments since 1995. This includes winning the [FLW Outdoors Major Tour Walmart Open at Beaver Lake](#) in 2007 with \$200,000 in prize money.^[1]

References [\[edit\]](#)

- ↑ "Morgan gets 'poetic justice' at Beaver Lake" [↗](#). FLW Outdoors.

External links [\[edit\]](#)

- "Andy Morgan" [↗](#). Bassmaster. Retrieved July 19, 2011.



Disambiguation

Who is the *real* Andy Morgan

view-source:83.244.193.56/sc_event/test_post_title-2/



```

93         </label>
94         <input type="submit" class="search-submit" value="Search" />
95     </form>
96 </div>
97 </header><!-- #masthead -->
98
99 <div id="main" class="site-main">
100 <div id="primary" class="content-area">
101     <div id="content" class="site-content" role="main">
102         <article id="post-344" class="post-344 sc_event type-sc_event status-publish hentry">
103             <header class="entry-header">
104
105                 <style>
106                     #tweets
107                     { font-size:small; }
108                 </style>
109                 <center><h4 class="entry-title">Siouxsie</h4></center><div class="hatom-extra" style="display:none;visibility:hidden;">
110                 <span class="entry-title">Siouxsie</span> was last modified: <span class="updated"> December 9th, 2014</span> by <span class="author vcard"><span
111                 class="fn">Southbank Center Curation</span></span></div>
112
113                 <!-- main content -->
114
115                 <div itemscope itemtype="http://schema.org/Event">
116                     <center><span itemprop="startDate">2013-06-17 </span><span itemprop="doorTime"> 19:30:00</br></span><span
117                     itemprop="name"><b>Siouxsie</b></br></span><meta itemprop="performer" content="Andy Morgan" /><span itemprop="superevent">Yoko Ono's Meltdown</br>
118                     </span><span itemprop="location">Royal Festival Hall</br></span><i>Debugging Eventid=257593 Free= no Ticket required= no</i></br><b><a
119                     href="http://www.php.net/manual/en/" target="_blank">Book Now</b></a> Nearly sold out book soon!</br>Tickets:
120                     <span itemprop="offers"
121                     itemscope itemtype="http://schema.org/Offer">
122                         <meta itemprop="name" content=Cheap Ticket />
123                         <a itemprop="url" href=http://www.php.net/manual/en/ target="_blank">
124                             <meta itemprop="priceCurrency" content="GBP" />£<span itemprop="price">30.00</span></a>
125                     </span>
126                     <span itemprop="offers" itemscope itemtype="http://schema.org/Offer">
127                         <meta itemprop="name" content=Reasonable Ticket />
128                         <a itemprop="url" href=http://www.php.net/manual/en/ target="_blank">
129                             <meta itemprop="priceCurrency" content="GBP" />£<span itemprop="price">35.00</span></a>
130                     </span>
131                     <span itemprop="offers" itemscope itemtype="http://schema.org/Offer">
132                         <meta itemprop="name" content=Extravagant Ticket />
133                         <a itemprop="url" href=http://www.php.net/manual/en/ target="_blank">
134                             <meta itemprop="priceCurrency" content="GBP" />£<span itemprop="price">40.00</span></a>
135                     </span>
136                 </div>
137             </header>
138         </article>
139     </div>
140 </div>
141 </div>

```

1 of 4



Preview

Siouxsie | Southbank Center ODM PoC

www.example.com/

Jun 17, 2013 - Royal Festival Hall

The excerpt from the page will show up here. The reason we can't show text from your webpage is because the text depends on the query the user types.

Extracted structured data

hatom-feed

hatom-entry:

entry-title:	Siouxsie
updated:	December 9th, 2014
author:	
fn:	Southbank Center Queen



13:55
09/12/2014

Item

type: http://schema.org/event

property:

startdate: 2013-06-17

doortime: 19:30:00

name: Siouxsie

performer: Andy Morgan

superevent: Yoko Ono's Meltdown

location: Royal Festival Hall

offers: *Item 1*

offers: *Item 2*

offers: *Item 3*

description: Due to truly awesome public demand, we're happy to
Yoko Ono's Meltdown marks the return of Siouxsie &
five...

Item 1

type:	http://schema.org/offer
property:	
name:	Cheap
url:	£30.00
pricecurrency:	GBP
price:	30.00

Item 2

type:	http://schema.org/offer
property:	
name:	Reasonable
url:	£35.00
pricecurrency:	GBP
price:	35.00



Linked Open Data or APIs ?

Nearest we got to full Linked Open Data was using schema.org markup for Google rich snippets -

Microtagging ?

RDFa ?

<http://json-ld.org/> ?

HAL JSON ?

SPARQL EndPoints ?

Beyond all the technical stuff...

Technical design principles

Information governance

Business change

Thank you